Usenet Newsgroup Archive: rec.radio.amateur.antenna

2002-01 - 2002-03

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Date span: 2002-01-01 through 2002-03-31

Source text: rec.radio.amateur.antenna.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 5,917

Message records with no readable body available in the source text: 3

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 00:12:38 UTC
From: "J. David Schronce" <david.nospam@schronce.f2s.com>
Message-ID: <3C310118.6030709@schronce.f2s.com>
Source record: 151793

You might want to think about a W9INN - Hand built and individually
tuned to your location for 80, 40, 20, 15, and 10M - No tuner required -
87 ft long - Mount flat top or Inverted V - I like mine...

http://www.cableone.net/ctj92/index.html?row1col2=w9inn.html

ris3 wrote:

>I can't quite fit a 80/40 120 foot dipole. (450 ohm Ladder line)
>
>Is there a commercial one available that is less than about 100
>feet? Or is there some way I could shorten it without traps?
>
>thanks
>
>

2. Re: 6 Meters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 00:44:18 UTC
From: ve7poi <ve7poi@arrl.net>
Message-ID: <3C310662.4CD0E3B@arrl.net>
Source record: 151788

I'm using a Cushcraft 617-6b and it performs well for me M2 makes a 6 ele that is in some ways better and cheaper
Happy new Year all
Rod
VE7POI / VE8EE

3. Re: Which is a quiet antenna rotor?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 01:12:56 UTC
From: dan <danlx@execpc.com>
Message-ID: <3c310cc3$0$1611$272ea4a1@news.execpc.com>
Source record: 151789

Hi, I live in an area where the term "Quiet rotor" is referred to in the zoning ord. It's a quiet suburban subdivision. A guy in the neighborhood mentioned he could hear my rotor "clank" on warm nights when the windows were open. He said it in a real nasty tone (this was in front of others). I asked if it made any more noise than his kids car door slamming at 2:30 PM, loud car stereo (the kind that rattles the windows), or his own car alarm that went off so often the police had to threaten to cite him for it. It seems that the rotor brake creates much less noise that most areas have going on. BTW, the rest of the group let this guy know who was creating the real problem and he left. I'll take mine with a break.

On Mon, 31 Dec 2001 10:42:10 -0800, ris3 <eeee@spiritone.com> wrote:

>Which is a quiet antenna rotor?
>
>I want to get a light/med rotor that the neighbors won't complain
>about.
>
>I used to have a Ham 2 and when the brake released it was
>pretty loud.
>
>Are the Yaesu rotors quiet? Like the 800?
>
>thanks
>

Dan

I've rambled enough, back to the rocking chair. ZZZZZZZZZ

Remove left x for a direct reply.

4. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 02:05:25 UTC
From: Mike <km6ab@pacbell.net>
Message-ID: <3C311965.ADB45532@pacbell.net>
Source record: 151790

Alpha Delta has a shortened 80-10m dipole that has loading coils for 80m only, no traps. I have one but never used it so I can't vouch for any performance.

5. Re: Water in coax

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 02:37:23 UTC
From: Mike <km6ab@pacbell.net>
Message-ID: <3C3120E3.BBE8A2D9@pacbell.net>
Source record: 151791

If you use similar methods that Andrew suggests for their hard-line connectors you will have dry connectors for life. Cover the connector and several inches of cable on each side with a single layer of good electrical tape like Scotch 33+. Cover with a layer of Andrew or equivalent sticky sheet tar stuff. This usually comes in rolls 1 to 4" wide with a wax paper backing. Cover everything with several tight layers of Scotch 33+. The result will look like a black football covering the connector and cable. I have cut open many connections that were over 20yrs that have spent much of the time under water and the connectors look shiny and new. I used to skip the first layer of tape before the sticky stuff until I had to remove a connection and the sheet tar would not let go of anything. With a layer of tape under the tar you can slit the "football" with a razor knife and everything will remove easily. Look at any commercial tower or cell site and you should see nothing but footballs where cables terminate, unless hams have been there.....

6. Re: Balun/isolator for end-fed half-wave wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 03:23:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C312BA1.5A733303@eznec.com>
Source record: 151792

New Years eve seems like a good time to reminisce. . .

In about 1960 I lived in a very small duplex in Douglas, Alaska near Juneau. My room, an 8 X 12 foot bedroom shared with my older brother, was on the upper floor. (This period is immortalized in "A Ham Dirge", by John Lewallen, in August 1961 CQ Magazine.) My principal 20 meter antenna for some time was a piece of #22 enamel wire about a half wavelength long which was slammed in the window and ran out to a clothesline pole in the back. The ground sloped upward away from the house, so it was about 15 feet off the ground at one end and 5 at the other. The insulator at the far end was a plastic curtain ring. Worked a lot of stations with that wire. Anyhow, it was fed using a method similar to the one George describes. The biggest rig I had at the time had a 6146, and when the transformer blew, I used a homebrew 6AG7-6L6 rig with oh, I don't know, maybe 15 watts or so output. (For all the junk I had, I was never able to score a decent meter to monitor the plate current.) Obviously I couldn't afford to use up the 15 watts lighting a fluorescent tube, so I just used an NE-2 at the transmitter end of the wire for tuning. Because of the cramped quarters, the rig was on a wooden bookshelf next to the window, with the homebrew breadboard style tuner on top. Once when a friend was over, I was chatting with someone on the radio, and he was looking out the window and leaning on the bookcase. Somewhere during the conversation, he sniffed a couple of times, and said, "Hmm. I think I smell something burn. . ." He turned his head to look at me, and then he saw the white smoke curling upward from his thumb, which had been resting on the tuner. Pretty nasty burn.

Just think of the tales you'll be able to tell the newcomers about the good ole days and the cool things you used to do with your Icom, MFJ tuner, and Gap antenna, when you get to be an OF like me!

Roy Lewallen, W7EL

"George, W5YR" wrote:
>
> As I recall, feeding a half-wave (or odd multiple thereof) with a
> parallel-resonant circuit results is what at one time was known as the
> Fuchs Antenna. Seems that all antennas must have a name, or they don't
> work! <:}
>
> In the late 40's I used a 260 ft wire end-fed with a tuned circuit inside
> the shack by the window where the wire came in. The tank coil was
> center-link coupled to the "swinging link" on the final amp tank coil. The
> other end of the coil was floating.
>

> I would tune the circuit for maximum brilliance of a 40 watt fluorescent
> lamp tied on the far end of the antenna. That worked well at night. For
> daytime tuning - remember now that I was just a teenager! - I would tune
> for maximum arcs drawn with a wooden/lead pencil off the other end of the
> coil. The transmitter tank was resonated using a 250-watt incandescent lamp
> as a dummy load and then left alone with all further tuning being done at
> the antenna tuner circuit and loading adjusted with the swinging link. Real
> high-tech stuff for around 1947!
>
> This antenna worked well on 80 - 20 meters and was especially effective on
> 20 DX, even though fairly low to the ground.
>
> Many antenna configurations have evolved over the years that amount to a
> parallel-tuned circuit feeding one end of a half-wave, or longer, antenna.
> Fuchs must have know what he was doing, but probably not what he was
> starting.
>
> 72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
> Fairview, TX 30 mi NE of Dallas in Collin county EM13qe SOC 262 COG 8
> Amateur Radio W5YR, in the 56th year and it just keeps getting better!
> Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437
>
> All incoming and outgoing email virus-checked by Norton Anti-Virus 2002
>
> Tom W8JI wrote:
> >
> > On 30 Dec 2001 15:13:44 GMT, k1bqt@aol.com (Rick Littlefield) wrote:
> >
> > >>An end-fed Zepp might work.<
> > >
> > >If you must use a coaxial feed, try installing a resonant parallel-tuned
> > >circuit at the feedpoint end. Connect the 1/2-wave wire off the top (or "hot")
> > >end of the tuned circuit. Then, either tap the center conductor of your coax to
> > >a 50-ohm point on the L side of the tank or create an appropriate capacitive
> > >divider on the C side. Finally, install your common-mode choke (ferrites) on
> > >the coax just below the network where they can do some good. This "voltage
> > >feed" matching circuit is used by a number of "ground-independent" commercial
> > >antennas for VHF service and wire antennas for HF.
> >
> > Cecil is right Rick.
> >
> > Those who "think" a choke isolator is effective for making the shield
> > become the other half of an 'end-fed dipole" are having some sort of
> > wild antenna fantasy. They have not bothered to look at impedance
> > limits.
> >
> > While a parallel resonant circuit would work on one narrow range of
> > frequencies near resonance, the components would have to be very good
> > even at modest amounts of power. It would be much more simple to just
> > feed the thing the normal way, or to make a decoupling cage that

> > skirts the wire (although it would likely have to have an additional
> > choke).
> >
> > I'm afraid this is another one of those things that slips by everyone
> > because no one bothers to consider how the system really works, or
> > make any measurements.
> >
> > 73 Tom

7. Re: Balun/isolator for end-fed half-wave wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 04:16:47 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0rd7elua2@knossos.btinternet.com>
Source record: 151795

Roy, thanks for an insight into your past. There must be much more. Please let's have it. We're curious to say the least.

Reg

8. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 04:16:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0rd7flua3@knossos.btinternet.com>
Source record: 151794

Roy,

B, L and E's observations apply only to their test frequencies and local
soil constants. Unfortunately they forgot to measure and record the local
soil constants at their test frequencies.

Their broad conclusions were predictable even if their tests had never been
made.

I am not decrying their efforts. But we should not attempt to apply the
results of their MF measurements to the whole RF spectrum.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Roy Lewallen <w7el@eznec.com> wrote in message
news:3C30C647.14DEAC10@eznec.com...
> The only problem with this simplified analysis is that can produce
> conclusions that don't agree with experimental measurements. At least
> one problem is that it doesn't account for the considerable coupling
> among radials that takes place. It does, however, reach the right
> conclusion if there aren't a large number of radials.
>
> Brown, Lewis, and Epstein showed measurements of radial currents in
> their 1937 paper. While the current drops fairly rapidly when there
> aren't many radials, the measurement of current with 113 radials (the
> largest number they used, because they ran out of wire) shows the
> following: The current is very nearly constant out to a distance of
> about 0.125 wavelength (all values are in free-space wavelengths), then
> drops to about 60% at 0.25 wavelength, rises again to about 85% at 0.32
> wavelength, drops again to about 65% at 0.375 wavelength. So there's
> very significant current flowing at a distance of around 0.4 free-space
> wavelength when a large number of radials are used. With 60 radials, the
> current hits a minimum of about 25% at about 0.23 wavelength, then rises
> to about 35% at 0.375 wavelength, then drops again. These are from their
> Fig. 42 on p. 781. NEC-4, which is able to model buried conductors,
> gives results reasonably similar to Brown, Lewis, and Epstein's for
> field strength and impedance, and shows a similar current distribution
> along the radials.
>
> A simplified, but reasonably accurate, summary of Brown, Lewis, and
> Epstein's conclusions is that if the radials are short, adding more
> radials doesn't help a whole lot. And if there are only a few radials,

> making them longer doesn't help a whole lot.
>
> In practice, it's seldom useful for an amateur installation to have a
> large number of radials. While a few percent additional coverage area,
> and stabilized feedpoint impedance, are important and very worthwhile to
> broadcasters (who don't base their radial system designs on old wives'
> tales, but on sound economics), the difference in field strength is
> generally negligible for long range communications.
>
> Roy Lewallen, W7EL
>
> Reg Edwards wrote:
> >
> > Richard Harrison, KB5WZI wrote -
> >
> > > Radials reduce losses when they are only a fraction of a wavelength
> > > because the cross-section of earth engaged in carrying the signal
grows
> > > large at the far end of the radial. It`s just geometry. It`s the large
> > > area which produces high conductance and high capacitance in the soil.
> > > Though the characteristics of the soil may be unchanged, there is a
lot
> > > more of it "in parallel" far from the antenna. That is why radials
don`t
> > > have to be infinitely long to do a good job. In many situations, you
> > > would do as well with twice as many radials of half the prescribed
> > > length.
> > ============================
> >
> > Very true Richard.
> >
> > It is interesting to look at the same 'problem' from another aspect.
> > Consider a buried radial wire to be a very lossy transmission line with
a
> > loss of the order of 40 dB per wavelength.
> >
> > Such a wire also has a very low propagation velocity, VF = 0.25 down to
0.1
> > depending on soil permittivity and moisture content.
> >
> > So the physical length of a 1/4-wave of buried wire is a small fraction
of
> > the free-space value. Not that a 1/4-wavelength has any special
significance
> > because attenuation is high enough to suppress resonant effects.
> >
> > There's little to be gained by lengthening a buried radial wire beyond,
say,
> > 1/10th or 1/20th of a free-space wavelength when there's hardly any
current

> > current flowing in it at that distance from the focal point. If you
have
> > more wire to bury then bury it where it can be more useful - increase
the
> > number of short radials. And it will be OK to stop long before reaching
> > Marzipan's magic number of 120.
> >
> > By the way, a wire just lying on the soil surface has a propagation
velocity
> > about half of the free space value. However loss is only of the order
of,
> > say, 10 dB per wavelength, again depending on soil characteristics.
Weakened
> > resonant effects will be present and the optimum length of radials is
> > crudely 1/8 of the free-space wavelength.
> > ----
> > Reg, G4FGQ

9. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 05:50:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C314E20.3FBF6051@eznec.com>
Source record: 151796

It's interesting you should say that. My posting was in response to a generalization that didn't include any allowance for frequency or ground condition at all. Surely we should apply the same cautions to your generalizations as to BL&E's.

You're absolutely correct about the soil conditions. However, it's still difficult to make a decent measurement of soil conductivity and permittivity at radio frequencies, let alone measure it to the depth in which significant currents flow at 3 MHz. There's no reason to believe that a low frequency surface measurement bears any relationship at all to the conditions at 3 MHz and depths of ten or twenty feet. So I think we should forgive them for not making a measurement that would likely prove to be wildly inaccurate anyway.

Today there are tools like NEC-4 that can do a reasonable job of modeling an idealized system at least. As I mentioned, NEC-4 results are reasonably close to BL&E's if you assume ground conditions appropriate for the rural setting where the tests were made. (The pictures also indicate that they were made in the winter, when the soil was likely to be reasonably wet, although there's no way of knowing to what depth except perhaps researching the precipitation data for that period.) The general trends and conclusions BL&E saw are seen also by the program. That makes it possible to extend their results to other frequencies and ground conditions. From NEC-4 analysis, and what you'd expect from the setting, the ground was pretty decent for BL&E's tests. In poorer ground, we would expect the current to decay even more slowly along the radial wires.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Roy,
>
> B, L and E's observations apply only to their test frequencies and local
> soil constants. Unfortunately they forgot to measure and record the local
> soil constants at their test frequencies.
>
> Their broad conclusions were predictable even if their tests had never been
> made.
>
> I am not decrying their efforts. But we should not attempt to apply the
> results of their MF measurements to the whole RF spectrum.
> ---
> **************************

> Regards, Reg G4FGQ
> Free Radio Modelling Programs
> Http://www.g4fgq.com
> **********

10. Re: Balun/isolator for end-fed half-wave wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 06:02:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C3150E4.F316CFCD@eznec.com>
Source record: 151797

Nah. Except for a few really hair-raising times on (or off) the Norton (and Lucas, Prince of Darkness, diabolically springing from the same country as the magnetron), and well, maybe the time the bear took a leak on the side of the cabin. . .then there was the time in New Orleans, but that's pretty murky. . . actually, a lot of it is pretty murky. . .it's all really dull. You wouldn't really want to know.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Roy, thanks for an insight into your past. There must be much more. Please
> let's have it. We're curious to say the least.
> ---
> Reg

11. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 07:01:18 UTC
From: Ralph Minuet <rjm@dps.org>
Message-ID: <6hn23u0ncprofdf8a2lv54nl6mqto6m19v@4ax.com>
Source record: 151798

On Tue, 01 Jan 2002 00:43:23 +0400, RayOfLight
<kelon100<NOSPAM>@yahoo.com> wrote:

>I am new to radio/TV reception and i use a 'flying saucer' antenna for
>TV reception. But in the tropical country i live in we get heavy rains
>with lightning and thunder and it is quite common to get TV's burnt up
>because of that.
>
>The precaution i take is to disconnect the antenna from the TV each
>time such conditions are present. But i am looking for the best way to
>protect the antenna from such weather conditions and also much of the
>time i am not at home so i cannot disconnect the antenna and the TV
>may blow up anytime.
>
>Thanks for helping me out :)
>
>Regards,
>
>RayOfLight
No biggie.....unplug the TV from power, and unplug the
antenna EVERYTIME you leave home which is much of the time per your
post. Nothing to it.

12. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 07:19:47 UTC
From: YIU CHAN <ykchan@worldnet.att.net>
Message-ID: <nqdY7.318520$W8.12053846@bgtnsc04-news.ops.worldnet.att.net>
Source record: 151799

Have we thought about FCC violation regarding modify of approved RF
equipment and the use of un-approved antenna?
-ykchan

Bob Miller <bamiller@texas.net> wrote in message
news:FSsiPNIAE4lRYIqSacbgSYzxCFRM@4ax.com...
| As an early Xmas gift, I have been given a little cell-phone antenna
that lights
| up and blinks when there is an incoming call.
|
| So, what I'm trying to do is remove the original antenna from my cell
phone, and
| then stick in the new antenna.
|
| Question: how do you remove the standard antenna from a Nokia cell
phone? Just
| pull the little bugger out? I don't want to damage anything.
|
| Bob
| k5qwg

13. Re: Discone HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 07:33:39 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <nDdY7.87$5d.14901@newshog.newsread.com>
Source record: 151800

"Bob Miller" <bamiller@texas.net> wrote in message
news:p5wwPOx4Y9DA914HM1oyBW7th3el@4ax.com...
> rsmtmn@aol.com (RSMTMN) wrote:
>
> >Years ago I saw a detailed article on how to build a HF discone antenna
that
> >used a 40' mast as a center point, but I can nolonger figure out where I
saw
> >the article.. Does anyone know where a person could find information for
> >building a HF Discone?
> >
> >Thanks,
> >Dan
> >
> >rsmtmn@aol.com
>
> My 19th edition ARRL Antenna Book describes an HF discone antenna with a
40 foot
> A-frame wood mast as the center point. The article gives theory and
detailed
> construction info. The chapter also references QST, July 1975 for an HF
discone
> article by J.S. Belrose.

That's the one of which I was thinking.

--
Roger (K8RI - EN73)
WWW.RogerHalstead.com
N833R World's oldest Debonair? (S#CD-2)

>
> Bob
> k5qwg
>

14. Re: Heighth restrictions near an airport

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 07:35:11 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <PEdY7.88$5d.14845@newshog.newsread.com>
Source record: 151801

```
"Ed Cregger" <nm2k@arrl.net> wrote in message
news:u31jn6i4d0v0f3@corp.supernews.com...
> I make a mistake and someone else gets the credit for it.
> Nice! <G>

You are quite welcome <:-))

--
Roger (K8RI - EN73)
WWW.RogerHalstead.com
N833R World's oldest Debonair? (S#CD-2)

>
> Ed Cregger
> nm2k@adoublerl.net
>
>
> "Your Friend Bill" <"Remove The NO In The Reply
> Address"@coqui.net> wrote in message
> news:3C300485.1FC29286@coqui.net...
> > Roger Halstead wrote:
> > >
> > > "Ed Cregger" <nm2k@arrl.net> wrote in message
> > > news:u2n3v09l537j71@corp.supernews.com...
> > > > There is no such word as heighth. It is height. No
> "th"
> > > > needed.
> > > >
> > > There is if you are from the UK <:-))
> > >
> > > --
> > > Roger (K8RI - EN73)
> > > WWW.RogerHalstead.com
> > > N833R World's oldest Debonair? (S#CD-2)
> >
> > mr. Debonair...
> > I checked with some of the Queen's closest and most
> learned subjects and
> > they all agree that heighth without the 'th' becomes heigh
> which has no
> > meaning in their language. The M'cayube in what is now
> Rwanda use a
> > gutteral sound at the end of their word that means 'tall'
> ..myanybth.
> > Maybe thats where your confusion lies.
```

> > -ex
> >
>
>

15. Re: Water in coax

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 07:39:08 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <wIdY7.89$5d.14799@newshog.newsread.com>
Source record: 151802

"Mike" <km6ab@pacbell.net> wrote in message
news:3C3120E3.BBE8A2D9@pacbell.net...
> If you use similar methods that Andrew suggests for their hard-line
> connectors you will have dry connectors for life.

Or until it gets hit by lightening.
We had a direct hit which removed every bit of tape and coax seal. The stuff
came down looking like a piece of expanded metal.

It even removed the silver plating from the PL-259s on the other coax up
there. (after removing the tape and coax seal as well)

There wasn't one bit of any seal left on the 7/8 Andrews connectors and
they looked like they'd been burnt over most of the surface.

The antenna looked like an exploded cigar up near the timp. It ended about 6
inches sooner than it had before.

--
Roger (K8RI - EN73)
WWW.RogerHalstead.com
N833R World's oldest Debonair? (S#CD-2)

> Cover the connector
> and several inches of cable on each side with a single layer of good
> electrical tape like Scotch 33+. Cover with a layer of Andrew or
> equivalent sticky sheet tar stuff. This usually comes in rolls 1 to 4"
> wide with a wax paper backing. Cover everything with several tight
> layers of Scotch 33+. The result will look like a black football
> covering the connector and cable. I have cut open many connections that
> were over 20yrs that have spent much of the time under water and the
> connectors look shiny and new. I used to skip the first layer of tape
> before the sticky stuff until I had to remove a connection and the sheet
> tar would not let go of anything. With a layer of tape under the tar you
> can slit the "football" with a razor knife and everything will remove
> easily. Look at any commercial tower or cell site and you should see
> nothing but footballs where cables terminate, unless hams have been
> there.....
>

16. Re: Which is a quiet antenna rotor?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 08:02:58 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <S2eY7.406$856.2519365@paloalto-snr2.gtei.net>
Source record: 151803

If it is in an ordinance it should be defined in db/distance and possibly time periods. If you get a cheap Rat Shack db meter and actually measure the noise at your antenna base I'll bet it is way lower than almost any of the ambient noises in the neighborhood.

What you should do is stand outside your neighbor's house on "a warm night with the windows open" and measure his ambient noises - like when he flushes the toilet or sneezes, etc. - it will be way louder than your rotor brake. That should shut him up... >:)

73 and Happy New Year,

<<< Dan >>>

"dan" <danlx@execpc.com> wrote in message
news:3c310cc3$0$1611$272ea4a1@news.execpc.com...
> Hi, I live in an area where the term "Quiet rotor" is referred to in
> the zoning ord. It's a quiet suburban subdivision. A guy in the
> neighborhood mentioned he could hear my rotor "clank" on warm nights
> when the windows were open. He said it in a real nasty tone (this was
> in front of others). I asked if it made any more noise than his kids
> car door slamming at 2:30 PM, loud car stereo (the kind that rattles
> the windows), or his own car alarm that went off so often the police
> had to threaten to cite him for it. It seems that the rotor brake
> creates much less noise that most areas have going on. BTW, the rest
> of the group let this guy know who was creating the real problem and
> he left. I'll take mine with a break.
>
> On Mon, 31 Dec 2001 10:42:10 -0800, ris3 <eeee@spiritone.com> wrote:
>
> >Which is a quiet antenna rotor?
> >
> >I want to get a light/med rotor that the neighbors won't complain
> >about.
> >
> >I used to have a Ham 2 and when the brake released it was
> >pretty loud.
> >
> >Are the Yaesu rotors quiet? Like the 800?
> >
> >thanks
> >
>
> Dan
>

> I've rambled enough, back to the rocking chair. ZZZZZZZZZ
>
> Remove left x for a direct reply.

17. Re: OT

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 08:09:30 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a0rqrpdto5@quark.scn.rain.com>
Source record: 151804

N4IXT <n4ixt@arrl.net> wrote:
> Go to zonelabs.com and download ZoneAlarm. It is a software firewall that
> will keep others from hacking into your pc.

This is a forged post. Leland did not write or post it.

I suspect that he will disappear shortly.

--
Bill Nelson (billn@peak.org)

18. Re: NEC 2 program

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 08:54:47 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a0rtgmdto6@quark.scn.rain.com>
Source record: 151806

wa2elz <wa2elz@nospamworldnet.att.net> wrote:
> I am wanting to scale the 22 element yagi design found in the ARRL handbook
> for UHF TV channel 43 (647 mhz). Some modifications are required for a 75
> ohm match. I have used the NEC 2 (numeric electric code) program to predict
> the gain, impedance and antenna pattern. So far I am able to predict 17.5
> dbi gain, need about 20+ dbi gain. Probably need a longer boom. Any one have
> experience with the NEC program ?

> Any suggestions or comments are greatly appreciated.

Hi, Robert. Rather than increasing the boom length, consider stacking
two in the horizontal plane. This will narrow the beamwidth. At UHF,
such stacking is fairly trivial.

Once you get past 5 or 6 elements, you are looking at fractions of a
dB improvement for each additional element. Sometimes it is better to
just do a bit of stacking, where you gain approximately 3 dB each time
you double the number of stacked antennas.

Let us say that you stack 4 identical antennas:

Assuming you get the theoretical improvement, then that 20+ dBi gain
necessary suddenly becomes only 14+ dBi for each antenna. Or, if you
stacked 4 of the 17.5 dBi antennas, you get a theoretical gain of
23+ dBi.

All antenna modeling software gives approximations - sometimes good and
sometimes rather marginal. All they do is reduce the "cut and try" that
is necessary to optimize the system. You still have to get out there
take measurements.

That hill could be a real problem. Do you get any signal at all now?
Have you tried moving all over, up and down, with a test antenna.
Sometimes just moving a foot or two can make a large difference in
signal strength.

--
Bill Nelson (billn@peak.org)

19. happy newyear!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 13:17:00 UTC
From: johan <j.blaak@home.nl>
Message-ID: <CGiY7.172744$Ox2.15807290@zwoll1.home.nl>
Source record: 151807

I wish everyone a happy newyear (and a "radioactiv" one) pd1aqg

20. Re: GAP Super C

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 13:44:09 UTC
From: n6nko <ensixenkayoh@ayareareell.net>
Message-ID: <3c31bd4d$0$1611$272ea4a1@news.execpc.com>
Source record: 151809

I went and looked at the GAP antennas website at this Super C antenna. Based on the description of the circuit and the design, this appears to be a version of the EH antenna (info on this design can be found by doing a search, like on Google, using "EH antenna" as the criteria). One article that I read describes the antenna as a open plate capacitor built on a pvc tube with phasing coils and a capacitor. There is also another page out there that has on it a description of an EH-style antenna that uses a flat plate and an inverted cone. I see this cone being analogous to the cubical basket on the Super C.

GAP's website says that the antenna "Efficiency approaches 100%" (found on page http://www.gapantenna.com/superc.htm). What is the definition of efficiency here? My dummy load is almost 100% efficient - it's a resistor. Having a 1:1 match does not imply that you are radiating 100% of your energy applied.

I did not find any specifications as to antenna gain related to a reference radiator, either isotropic or dipole. All that is there is "Primarily a vertical = Omni- Directional - Low angle coverage". I would love to see an independent testing lab range test this antenna and see what its capabilities and patterns are.

I suggest reading the pages found by the search and make up your mind. Until I see verified testing, I myself am witholding judgement on this design.

--
Richard E. Polivka, N6NKO
ARRL WI Section TS, OES, OO
All comments are all of my own humble opinion

--
Richard E. Polivka, N6NKO
ARRL WI Section TS, OES, OO

"Art Czepczynski" <NH7FL@hawaii.rr.com> wrote in message
news:3BFCAE4B.8040205@hawaii.rr.com...
> Hello All,
> I'm curious if anyone has any rewiews..opinions on the new gap super C.
> Now I know that technological advancements have progressed, but
> does this antenna really perform as advertised. 3 feet seems a bit
> "short", but I guess some things defy MY logic. Thank you for your
comments
>
> Aloha from Hawaii - NH7FL
>

21. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 13:47:19 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0sel6$2n8$1@helle.btinternet.com>
Source record: 151808

The conductivity of copper (for example) is independent of the skin depth in copper. It is a property of the material itself.

The conductivity and permittivity of soil are also properties of the soil itself and independent of the depth to which 3 MHz radio frequency currents penetrate into it.

Conductivity and permittivity can be measured, indeed SHOULD be measured, on small soil samples with dimensions ideally much less than a wavelength at the test frequency and also much less than skin depth in the soil.

Such measurements can be made in a laboratory or on the shack bench with an Autek or MFJ antenna analyser. Problems lie only in the soil container.

That BL&E did not make any measurements of soil characteristics, not even at DC or 60 Hz, indicates a considerable lack of appreciation of the fundamentals of groundwave propagation which had been fully analysed and made available by Sommerfeld and others about 20 years before.

I repeat, I have no wish to decry BL&E's work which was essentially practical and appears to have been instrumental in adoption of the 120-radials standard.

But I cannot rid myself of the thought that if BL&E had become fresh-out of wire after laying 63 radials instead of 118.5 the world would have adopted a 64-radial standard. And everybody would have been just as happy without ever realising the enormous saving which had been made in shallow-buried copper wire.

Regards, Reg G4FGQ
==========

Roy Lewallen wrote -
> It's interesting you should say that. My posting was in response to a
> generalization that didn't include any allowance for frequency or ground
> condition at all. Surely we should apply the same cautions to your
> generalizations as to BL&E's.
>
> You're absolutely correct about the soil conditions. However, it's still
> difficult to make a decent measurement of soil conductivity and
> permittivity at radio frequencies, let alone measure it to the depth in
> which significant currents flow at 3 MHz. There's no reason to believe
> that a low frequency surface measurement bears any relationship at all
> to the conditions at 3 MHz and depths of ten or twenty feet. So I think
> we should forgive them for not making a measurement that would likely
> prove to be wildly inaccurate anyway.

>
> Today there are tools like NEC-4 that can do a reasonable job of
> modeling an idealized system at least. As I mentioned, NEC-4 results are
> reasonably close to BL&E's if you assume ground conditions appropriate
> for the rural setting where the tests were made. (The pictures also
> indicate that they were made in the winter, when the soil was likely to
> be reasonably wet, although there's no way of knowing to what depth
> except perhaps researching the precipitation data for that period.) The
> general trends and conclusions BL&E saw are seen also by the program.
> That makes it possible to extend their results to other frequencies and
> ground conditions. From NEC-4 analysis, and what you'd expect from the
> setting, the ground was pretty decent for BL&E's tests. In poorer
> ground, we would expect the current to decay even more slowly along the
> radial wires.
>
> Roy Lewallen, W7EL
>
> Reg Edwards wrote:
> >
> > Roy,
> >
> > B, L and E's observations apply only to their test frequencies and local
> > soil constants. Unfortunately they forgot to measure and record the
local
> > soil constants at their test frequencies.
> >
> > Their broad conclusions were predictable even if their tests had never
been
> > made.
> >
> > I am not decrying their efforts. But we should not attempt to apply the
> > results of their MF measurements to the whole RF spectrum.
> > ---
> > **************************
> > Regards, Reg G4FGQ
> > Free Radio Modelling Programs
> > Http://www.g4fgq.com
> > **************************

22. Re: happy newyear!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 14:46:35 UTC
From: raiar@slacc.com.nospam
Message-ID: <3c31cbc9.85836791@news.galilei.com>
Source record: 151810

Hi Johan

I reciprocate!

TTUL - 73+ de Gary - KG&#65533;ZP

23. Re: Water in coax

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 15:57:47 UTC
From: Mark <mark_II@nospam.com>
Message-ID: <3C31DC87.35E1A192@nospam.com>
Source record: 151811

Hi,
the plastic cup will not last too long up there in the sun and break down.

Try using a pvc pipe cap (.5 to 4" sizes) instead of the cup.
East to drill holes in it and you can paint it if you want to.
find it at any home depot plumbing dept.

73 markII

Just wondering if I need to protect the feedpoint from getting rained
on? Maybe I will build a little cover for it out of a plastic cup
that I could suspend from the rope holding the antenna up.
Any comments?

24. Re: Which is a quiet antenna rotor?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 16:00:49 UTC
From: Mark <mark_ll@nospam.com>
Message-ID: <3C31DD3E.D390671D@nospam.com>
Source record: 151812

or get a reading while he is in bed with his wife !

W6DKN wrote:

> What you should do is stand outside your neighbor's house on "a warm night
> with the windows open" and measure his ambient noises - like when he
> flushes the toilet or sneezes, etc. - it will be way louder than your rotor
> brake. That should shut him up... >:)
>
> 73 and Happy New Year,
>
> <<< Dan >>>
>
> "dan" <danlx@execpc.com> wrote in message
> news:3c310cc3$0$1611$272ea4a1@news.execpc.com...
> > Hi, I live in an area where the term "Quiet rotor" is referred to in
> > the zoning ord. It's a quiet suburban subdivision. A guy in the
> > neighborhood mentioned he could hear my rotor "clank" on warm nights
> > when the windows were open. He said it in a real nasty tone (this was
> > in front of others). I asked if it made any more noise than his kids
> > car door slamming at 2:30 PM, loud car stereo (the kind that rattles
> > the windows), or his own car alarm that went off so often the police
> > had to threaten to cite him for it. It seems that the rotor brake
> > creates much less noise that most areas have going on. BTW, the rest
> > of the group let this guy know who was creating the real problem and
> > he left. I'll take mine with a break.
> >
> > On Mon, 31 Dec 2001 10:42:10 -0800, ris3 <eeee@spiritone.com> wrote:
> >
> > >Which is a quiet antenna rotor?
> > >
> > >I want to get a light/med rotor that the neighbors won't complain
> > >about.
> > >
> > >I used to have a Ham 2 and when the brake released it was
> > >pretty loud.
> > >
> > >Are the Yaesu rotors quiet? Like the 800?
> > >
> > >thanks
> > >
> >
> > Dan
> >
> > I've rambled enough, back to the rocking chair. ZZZZZZZZZ

> >
> > Remove left x for a direct reply.

25. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 16:01:14 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c31dd64_3@news.iglou.com>
Source record: 151813

A friend of mine got one of those cell phone antenna boosters that you stick behind your battery. He reports a huge improvement with many dead zones being eliminated. It may not blink like your gadget but it does help communication.

--
Steve Ellington
N4LQ
"YIU CHAN" <ykchan@worldnet.att.net> wrote in message
news:nqdY7.318520$W8.12053846@bgtnsc04-news.ops.worldnet.att.net...
> Have we thought about FCC violation regarding modify of approved RF
> equipment and the use of un-approved antenna?
> -ykchan
>
>
> Bob Miller <bamiller@texas.net> wrote in message
> news:FSsiPNIAE4lRYIqSacbgSYzxCFRM@4ax.com...
> | As an early Xmas gift, I have been given a little cell-phone antenna
> that lights
> | up and blinks when there is an incoming call.
> |
> | So, what I'm trying to do is remove the original antenna from my cell
> phone, and
> | then stick in the new antenna.
> |
> | Question: how do you remove the standard antenna from a Nokia cell
> phone? Just
> | pull the little bugger out? I don't want to damage anything.
> |
> | Bob
> | k5qwg
>
>

26. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 16:03:10 UTC
From: richardharrison@webtv.net
Message-ID: <19492-3C31DDBE-314@storefull-112.iap.bryant.webtv.net>
Source record: 151814

Roy Lewallen wrote:
"At least one problem is that it (B, L, & E`s work) doesn`t account for the considerable coupling among radials that takes place."

OK. I learn a lot from these exchanges. This may be another gem.

The current in all radials begins in-step at the antenna base on all radials. Under normal conditions it stays in-step at the same distance from the antenna in all radials. The equipotential lines at the surface of the earth around the vertical antenna are circles. I am assuming a single radiator. This means that at any given distance from the antenna, the voltages and phases on all radials are the same. The propagation velocity, whatever it is, is assumed to be the same in all radials.

If there is no potential difference between radials at any given distance from the antenna base, what impetus exists to cause current between radials?

Ed Laport`s idea is that no current between radials should exist and that none should be encouraged. He advises against any interconnection between radials as it might produce "eddy currents" which could only increase loss.

Without current in one radial causing a voltage in another radial, where is the mutual impedance (coupling)?

The total current ideally divides equally among all radials, just as it would coupling or no coupling.

This "coupling" might have as much effect as paralleling two identical transformer secondaries to feed a load in place of one. But, I think the effect is even less because our antenna system load is becoming more dispersed with distance. Thus, there is less potential interaction afar.

Best regards, Richard Harrison, KB5WZI

27. Re: Water in coax

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 16:17:44 UTC
From: richardharrison@webtv.net
Message-ID: <19492-3C31E128-318@storefull-112.iap.bryant.webtv.net>
Source record: 151815

Roger Halstead wrote:
"The antenna looked like an exploded cigar up near the tip."

Had Roger used an Andrew folded unipole or an Andrew dish antenna, well grounded via the tower, he would likely have suffered only some small pits in the antenna. That`s my experience with hundreds of such installations.

Best regards, Richard Harrison, KB5WZI

28. communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 17:04:32 UTC
From: alevand@yahoo.com
Message-ID: <e52e470e.0201010904.fdab41@posting.google.com>
Source record: 151816

I want to built a spinning antenna, 600 rpm or more. I was considering a 3 element Yagi-Uda, with the driven element a static mast with director and reflector rotating about. This complicates the drive arrangement. Would using carbon brushes typically found in electric motors on copper rings introduce much noise?

Tony
AA9CC

29. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 17:14:08 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <3C31E191.309EA2A9@townsqr.com>
Source record: 151817

"George, W5YR" wrote:

> I recall reading that when Brown developed his "ground-plane" vertical, he
> also found that a single radial was adequate when the antenna mounted well
> above ground. When the antenna was mounted lower, he found that two radials
> would compensate for the lack of added height.
>
> Finally, he elected to use four radials for symmetry and to offset comments
> that "two radials obviously aren't enough!"

Organization from which I retired used a lot of Kraco brand halfwave vertical sleeve dipole antennas, mast - mounted above 50 ft towers for "local" communications on 42 mhz FM. They gave excellent performance and, built to rugged specs, were also very durable.

Dick W0EX

30. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 17:24:48 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <AhmY7.106543$Y6.10401702@news1.rdc1.ct.home.com>
Source record: 151818

Can you explain how a "passive booster", sandwiched between what is
essentially
a self shielding battery pack and circuit board, and located far from the
antenna,
would have any noticiable effect on cell phone coverage?

Pete

"N4LQ" <N4LQ@igLou.com> wrote in message news:3c31dd64_3@news.iglou.com...
> A friend of mine got one of those cell phone antenna boosters that you
stick
> behind your battery. He reports a huge improvement with many dead zones
> being eliminated. It may not blink like your gadget but it does help
> communication.
>
> --
> Steve Ellington
> N4LQ

31. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 17:31:41 UTC
From: John O'Flaherty <wewelcomespam@blackhole.net>
Message-ID: <3C31F27D.EBD3C0B6@blackhole.net>
Source record: 151719

N4LQ wrote:
>
> A friend of mine got one of those cell phone antenna boosters that you stick
> behind your battery. He reports a huge improvement with many dead zones
> being eliminated. It may not blink like your gadget but it does help
> communication.

Isn't that advertised on the same channel as the breast-enhancing cream
and the viagra substitute?

--
john

32. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 17:35:04 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna33sq9.3id.QSB@animas.frontier.net>
Source record: 151720

```
On 1 Jan 2002 09:04:32 -0800, Tony Levand scribbled:
> I want to built a spinning antenna, 600 rpm or more. I was considering
> a 3 element Yagi-Uda, with the driven element a static mast with
> director and reflector rotating about.

This for 75M? <g>

--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK
```

33. Re: Which is a quiet antenna rotor?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 17:36:22 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna33ssn.3id.QSB@animas.frontier.net>
Source record: 151721

On Tue, 01 Jan 2002 16:00:49 GMT, Mark scribbled:

> or get a reading while he is in bed with his wife !

Now you're getting into an area that has regulations, as well.

34. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 17:51:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C31F710.86638413@eznec.com>
Source record: 151722

Reg Edwards wrote:
>
> The conductivity of copper (for example) is independent of the skin depth in
> copper. It is a property of the material itself.
>
> The conductivity and permittivity of soil are also properties of the soil
> itself and independent of the depth to which 3 MHz radio frequency currents
> penetrate into it.

Perhaps at your location, both the moisture content and the type of soil
are constant with depth. They certainly aren't at most other locations,
including here. Both vary a great deal, so a measurement of a surface
sample isn't necessarily at all representative of the overall
characteristics seen by the RF currents.

> Conductivity and permittivity can be measured, indeed SHOULD be measured, on
> small soil samples with dimensions ideally much less than a wavelength at
> the test frequency and also much less than skin depth in the soil.
>
> Such measurements can be made in a laboratory or on the shack bench with an
> Autek or MFJ antenna analyser. Problems lie only in the soil container.

That's most interesting. The folks at the Naval Postgraduate School,
NRaD (Naval Research and Development Center), and others I'm aware of
use some sort of buried transmission line test set. Have you published
your method? If not, would you post it? I know a number of people who
would be very interested in a simpler method that gives reliable and
accurate results -- or even a good approximation.

> That BL&E did not make any measurements of soil characteristics, not even at
> DC or 60 Hz, indicates a considerable lack of appreciation of the
> fundamentals of groundwave propagation which had been fully analysed and
> made available by Sommerfeld and others about 20 years before.

It's more likely that they realized that a 60 Hz measurement has no real
relationship to the characteristics at RF. The conductivity of soil
typically varies more than 2:1 over the HF range (a characteristic
you've surely verified with your antenna analyzer measurements). The
dissipation factor of water itself, one of the important constituents of
soil, is a great deal different at RF than at 50 or 60 Hz (nearly zero
at 60 Hz, 0.04 at 1 MHz, and 0.005 at 10 MHz, for pure water).

> I repeat, I have no wish to decry BL&E's work which was essentially
> practical and appears to have been instrumental in adoption of the
> 120-radials standard.
>

> But I cannot rid myself of the thought that if BL&E had become fresh-out of
> wire after laying 63 radials instead of 118.5 the world would have adopted a
> 64-radial standard. And everybody would have been just as happy without
> ever realising the enormous saving which had been made in shallow-buried
> copper wire.

Their paper also includes results for 60, 30, 15, and for some tests, 2
radials. Are you saying that the choice of 120 as a standard rather than
one of the other even better documented results is simply because the
largest number they used was 113 and not because of the results they
presented?

I hope you'll share your soil test method with us, along with some of
the results you've gotten from your measurements.

Roy Lewallen, W7EL

> ---
> Regards, Reg G4FGQ
> ==

35. Re: off center fed folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 17:56:03 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C31F833.97795D8F@IEEE.org>
Source record: 151723

Robert F Wieland wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote:
>
> > One of the disadvantages of off center feeding a dipole is that
> > it unbalances the antenna currents causing the feedline to
> > radiate and the radiation pattern to be asymmetrical compared
> > to a center fed dipole.
>
> Not necessarily so. There was a technical exchange on this topic in QST
> in 1954 (my references are at at work, I'm on holiday). The problem is
> not that off-center feed causes feedline current imbalance, but that it
> abandons voltage balance, so currents become unbalanced if your source has
> a ground connection that tries to "reassert" a voltage balance different
> from the antenna's.

I was speaking of an off center fed dipole that is fed with ladder-line
with no current balancing circuits at the antenna. Seems it then comes
down to Ohm's law and the feedpoint impedance seen by each side of the
ladder-line.
--
cheers, CAM http://www.qsl.net/w5dxp

36. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:01:51 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <lat33u065mloqbaa127n0kchb5cu0ujr89@4ax.com>
Source record: 151725

On Tue, 1 Jan 2002 13:47:19 +0000 (UTC), "Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
>The conductivity of copper (for example) is independent of the skin depth in
>copper. It is a property of the material itself.

True. Copper is a homogeneous solid.

>The conductivity and permittivity of soil are also properties of the soil
>itself and independent of the depth to which 3 MHz radio frequency currents
>penetrate into it.

Not true. Soil is a nonhomogeneous aggregate, and its properties vary with location and depth. Topsoil has a large percentage of organic material while subsoils have much less organic material. Subsoils are also much more compacted, and may contain large rock inclusions. The percentage of water in soils of differing compositions and compaction also differs. Soil composition also varies widely from one spot to another, even in the same field or yard. It is nothing like a solid block of copper.

Because of the compaction issue, measurements need to be made in situ unless you can duplicate the compaction in a bench press. Because of the ionic nature of the fluids in soil, measurements made at DC (or near DC) will be wildly different from measurements made at higher frequencies. Etc.

Gary

37. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:01:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C31F997.8B8D4D68@eznec.com>
Source record: 151724

Am I mistaken, or can you make this same argument for two parallel elements fed in phase? It's easy to demonstrate that there's coupling, and corresponding effects on feedpoint impedance, current magnitude, and current distribution, between two parallel elements fed at any relative phase angle, including zero. For something that imitates radials more closely, put up a two sloping vertical wires in your back yard, with the bottoms converging to nearly the same point at the ground. Excite one with a signal, and observe the signal at the feedpoint of the other. If there were no coupling, there would be no signal on the second one.

Hm, in fact, you could use your argument to conclude that there can't be any coupling between windings of a 1:1 transformer. It appears that there's a flaw in the reasoning.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "At least one problem is that it (B, L, & E`s work) doesn`t account for
> the considerable coupling among radials that takes place."
>
> OK. I learn a lot from these exchanges. This may be another gem.
>
> The current in all radials begins in-step at the antenna base on all
> radials. Under normal conditions it stays in-step at the same distance
> from the antenna in all radials. The equipotential lines at the surface
> of the earth around the vertical antenna are circles. I am assuming a
> single radiator. This means that at any given distance from the antenna,
> the voltages and phases on all radials are the same. The propagation
> velocity, whatever it is, is assumed to be the same in all radials.
>
> If there is no potential difference between radials at any given
> distance from the antenna base, what impetus exists to cause current
> between radials?
>
> Ed Laport`s idea is that no current between radials should exist and
> that none should be encouraged. He advises against any interconnection
> between radials as it might produce "eddy currents" which could only
> increase loss.
>
> Without current in one radial causing a voltage in another radial, where
> is the mutual impedance (coupling)?
>
> The total current ideally divides equally among all radials, just as it

> would coupling or no coupling.
>
> This "coupling" might have as much effect as paralleling two identical
> transformer secondaries to feed a load in place of one. But, I think the
> effect is even less because our antenna system load is becoming more
> dispersed with distance. Thus, there is less potential interaction afar.
>
> Best regards, Richard Harrison, KB5WZI

38. Re: off center fed folded dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:05:25 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C31FA65.D1AD6A94@IEEE.org>
Source record: 151726

Robert F Wieland wrote:
> In fact, a published antenna in the
> early 1950s was an 80-meter piece of wire (non-folded dipole) fed at 0.333
> of its length with 300-ohm twinlead. This was a fair match to the
> transmission line at ALL the harmonics of its fundemental, enabling
> operation on 80, 40, 20, 15, & 10 meters with one antenna. (Today, it
> sould also be a tunable match on 30, 17, & 12 meters, and would IHMO,
> be a better "all-band-when-tuned" antenna than the Windom or any of its
> variants.)

The antenna you describe above is called a "Windom" in my 1957 ARRL Handbook.
The off center fed dipole fed with balanced transmission line version is called
a "Two-wire off-center-feed" in that Handbook.
--
cheers, CAM http://www.qsl.net/w5dxp

39. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:07:16 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C31FAD4.10C92F24@IEEE.org>
Source record: 151727

Dick Carroll wrote:
> Organization from which I retired used a lot of Kraco brand halfwave vertical
> sleeve dipole antennas, mast - mounted above 50 ft towers for "local"
> communications on 42 mhz FM. They gave excellent performance and, built to
> rugged specs, were also very durable.

Dick, did you insulate the sleeve from the conductive support mast?
--
cheers, CAM http://www.qsl.net/w5dxp

40. Re: GAP Super C

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:13:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C31FC42.418A2E48@eznec.com>
Source record: 151728

You can find the definition of antenna efficiency defined in any
textbook dealing with antennas, and it's always exactly the same: The
efficiency of an antenna is that fraction of the applied power which is
radiated. The remainder is converted to heat.

The efficiency of a perfect dummy load is zero, and that of a typical
dummy load much less than one percent. The EH antenna, when constructed
to be much smaller than a half wavelength in size, is nowhere near 100%
efficient, and to my knowledge no reliable published test data exist
that show differently. In fact, if any reliable published test data
exist at all for this antenna, I'd very much appreciate knowing where.

If an independent test lab were to measure an EH or "cross-field"
antenna and verify the results that the inventors claim, their sales
would explode, they would all become filthy rich, and the cost of the
test would be made back many, many times over in a very short period of
time. So you might wonder why they haven't made the modest investment to
have these tests done -- or, if they have been done, to widely publicize
the results. But I don't.

Roy Lewallen, W7EL

n6nko wrote:
>
> I went and looked at the GAP antennas website at this Super C antenna. Based
> on the description of the circuit and the design, this appears to be a
> version of the EH antenna (info on this design can be found by doing a
> search, like on Google, using "EH antenna" as the criteria). One article
> that I read describes the antenna as a open plate capacitor built on a pvc
> tube with phasing coils and a capacitor. There is also another page out
> there that has on it a description of an EH-style antenna that uses a flat
> plate and an inverted cone. I see this cone being analogous to the cubical
> basket on the Super C.
>
> GAP's website says that the antenna "Efficiency approaches 100%" (found on
> page http://www.gapantenna.com/superc.htm). What is the definition of
> efficiency here? My dummy load is almost 100% efficient - it's a resistor.
> Having a 1:1 match does not imply that you are radiating 100% of your energy
> applied.
>
> I did not find any specifications as to antenna gain related to a reference
> radiator, either isotropic or dipole. All that is there is "Primarily a
> vertical = Omni- Directional - Low angle coverage". I would love to see
> an independent testing lab range test this antenna and see what its
> capabilities and patterns are.

>
> I suggest reading the pages found by the search and make up your mind. Until
> I see verified testing, I myself am witholding judgement on this design.
>
> --
> Richard E. Polivka, N6NKO
> ARRL WI Section TS, OES, OO
> ***All comments are all of my own humble opinion***

41. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:14:51 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <1ot33uc5cjfsd3gq0dslfhub1ggigt9kts@4ax.com>
Source record: 151729

On Tue, 1 Jan 2002 10:03:10 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Roy Lewallen wrote:
>"At least one problem is that it (B, L, & E`s work) doesn`t account for
>the considerable coupling among radials that takes place."
>
>OK. I learn a lot from these exchanges. This may be another gem.
>
>The current in all radials begins in-step at the antenna base on all
>radials. Under normal conditions it stays in-step at the same distance
>from the antenna in all radials. The equipotential lines at the surface
>of the earth around the vertical antenna are circles. I am assuming a
>single radiator. This means that at any given distance from the antenna,
>the voltages and phases on all radials are the same. The propagation
>velocity, whatever it is, is assumed to be the same in all radials.
>
>If there is no potential difference between radials at any given
>distance from the antenna base, what impetus exists to cause current
>between radials?
>
>Ed Laport`s idea is that no current between radials should exist and
>that none should be encouraged. He advises against any interconnection
>between radials as it might produce "eddy currents" which could only
>increase loss.
>
>Without current in one radial causing a voltage in another radial, where
>is the mutual impedance (coupling)?
>
>The total current ideally divides equally among all radials, just as it
>would coupling or no coupling.
>
>This "coupling" might have as much effect as paralleling two identical
>transformer secondaries to feed a load in place of one. But, I think the
>effect is even less because our antenna system load is becoming more
>dispersed with distance. Thus, there is less potential interaction afar.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

I would add a couple of comments to:
>If there is no potential difference between radials at any given
>distance from the antenna base, what impetus exists to cause current
>between radials?

You began with the scenario set to the drive of the system. In that regard you are considering only the conductive side of it. As you point out, without a potential difference, there will be no current flow. However, there are many points for any single point to consider in this comparison of potentials, not just those in the concentric region (consider there is potential difference along the radial itself which is consistent with the current flow, that same point sees its own radial as well as the others). It is only by virtue of symmetry that those other non-concentric points cancel out in the grand scheme.

However this is not to say that the intervening ground between the radials sees these same potentials (well it does, but there's more). The radiation also couples to ground, and at a different current/voltage distribution than that found in the radial; it must, the two are out of time-phase what with the ground's ability to change the velocity factor along the radials, whereas the radiative coupling only arrives at this characteristic after the fact. Again, symmetry here is also a boon.

In so far as cross connections and LaPort's admonition: since in effect it describes a crude approximation of a conductive plane, I see no problems being introduced by these additional connections. Some 20 years ago, PC board designers were coming to terms with ground at high frequencies where busses were exhibiting killer SWR that just devastated CPU timing requirements. The practical solution was the abandonment of point-to-point grounding with advent of power and ground distribution through complete layers in the board (a continuous sheet of conductivity that also aided in signal shielding). This has survived the test of time and the steady progression of upwardly climbing CPU clock speeds (from the HF back then to the SHF of today).

At the onset to this same era of change, I recall the debate of "eddy currents" being made then too, a topic that has not since seen the light of day.

73's
Richard Clark, KB7QHC

42. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:21:54 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C31FE42.809B247C@IEEE.org>
Source record: 151730

ris3 wrote:
> I can't quite fit a 80/40 120 foot dipole. (450 ohm Ladder line)
> Is there a commercial one available that is less than about 100
> feet? Or is there some way I could shorten it without traps?

A standard G5RV is 102' long. You could droop the ends.
--
cheers, CAM http://www.qsl.net/w5dxp

43. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:30:47 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C320057.B8D5A9E@IEEE.org>
Source record: 151732

Reg Edwards wrote:
> It is in fact of little importance provided it is longer that about
> 1/3-wavelength at the lowest frequency it is wished to operate and the
> feedline impedance Zo is a few hundred ohms or more. A Zo of 450 to 600
> ohms is ideal.

Reg, I tend to agree with Walter Maxwell that the dipole should be at least 3/8WL at the lowest frequency of operation which gives an SWR on the 450 ohm ladder-line of about 20:1. The SWR for a 1/3WL dipole would be about 66:1 which is getting pretty high even for ladder-line.
--
cheers, CAM http://www.qsl.net/w5dxp

44. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:31:49 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <pgnY7.106545$Y6.10401909@news1.rdc1.ct.home.com>
Source record: 151731

No, but an amazingly similar device is advertised which
claims to reduce the chances of developing RF induced brain cancers.

"John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
news:3C31F27D.EBD3C0B6@blackhole.net...
>
>
> N4LQ wrote:
> >
> > A friend of mine got one of those cell phone antenna boosters that you
stick
> > behind your battery. He reports a huge improvement with many dead zones
> > being eliminated. It may not blink like your gadget but it does help
> > communication.
>
> Isn't that advertised on the same channel as the breast-enhancing cream
> and the viagra substitute?
>
> --
> john

45. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:43:17 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <9rnY7.5811$4d5.37838@rwcrnsc54>
Source record: 151733

Without a bit of further investigation, I wouldn't dismiss this thing. It would appear that the point of this device is to increase the area of the ground plane. If it was effective in doing so, an increase in performance is likely.
"Peter J. Bertini" <commquart@home.com> wrote in message news:AhmY7.106543$Y6.10401702@news1.rdc1.ct.home.com...
> Can you explain how a "passive booster", sandwiched between what is
> essentially
> a self shielding battery pack and circuit board, and located far from the
> antenna,
> would have any noticiable effect on cell phone coverage?
>
> Pete
>
> "N4LQ" <N4LQ@igLou.com> wrote in message news:3c31dd64_3@news.iglou.com...
> > A friend of mine got one of those cell phone antenna boosters that you
> stick
> > behind your battery. He reports a huge improvement with many dead zones
> > being eliminated. It may not blink like your gadget but it does help
> > communication.
> >
> > --
> > Steve Ellington
> > N4LQ
>
>
>

46. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 18:48:24 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <sf043ug0aojc0c5qqrvl1atbshpcmo3um7@4ax.com>
Source record: 151734

On Tue, 1 Jan 2002 13:47:19 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>Such measurements can be made in a laboratory or on the shack bench with an
>Autek or MFJ antenna analyser. Problems lie only in the soil container.
>

Ah Punchinello!

Problems BEGIN in the soil container.

To think that this problem can be moved AND solved indoors is a larf.

Earlier you posited
>Their broad conclusions were predictable even if their tests had never been
>made.
>

to then post here:
>That BL&E did not make any measurements of soil characteristics, not even at
>DC or 60 Hz, indicates a considerable lack of appreciation of the
>fundamentals of groundwave propagation which had been fully analysed and
>made available by Sommerfeld and others about 20 years before.
>

If their results were predictable, then one could easily imagine that
they allowed these "understood" qualities to migrate through
un-impeded by unnecessary repetition. That is, if your rationale is
consistent, then they treated it as common knowledge already available
to their audience. However, more to the point is your consistent
negative editorialization made at the expense of their work to
propagate these exercises in rhetoric - a wheeze.

73's
Richard Clark, KB7QHC

47. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 19:03:01 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <f0243u8pkbn2dsttog3r80f5aio01tvaku@4ax.com>
Source record: 151735

On Tue, 1 Jan 2002 04:16:48 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Roy,
>
>B, L and E's observations apply only to their test frequencies and local
>soil constants. Unfortunately they forgot to measure and record the local
>soil constants at their test frequencies.
>
>Their broad conclusions were predictable even if their tests had never been
>made.
>
>I am not decrying their efforts. But we should not attempt to apply the
>results of their MF measurements to the whole RF spectrum.
>---

Ah Punchinello!

Your last comment is the proverbial "left handed complement" which you
typically invest into a "back handed complement." Like Iago, you are
simply playing to your Green Eyed monster.

Indeed, to dwell on what they did NOT do; and to what payoff? Hardly
matters given some 10,000 MEASURED installations proverbially spread
across the vast complexity of grounds that would have revealed these
"speculated" flaws in the Brown, Lewis, and Epstein test paradigm. If
from among these 10,000 opportunities you cannot find a citation that
supports your issues, then I would offer they are only that: YOUR
issues. If, on the other hand, you do have citations to offer, that
would be a refreshing change....

This strain of the Old Wive's march is a frumpy tune enjoyed only by
those who wish to recapture the verisimilitude of the tinny sound of
the Atwater Kent.

73's
Richard Clark, KB7QHC

48. 80/40 dipole again.. Reg??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:00:32 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C321560.9CD93211@capnet.com>
Source record: 151736

Actually I made the 80/40 dipole out of 450 ohm ladder line and
fed it with 50 ohm coax.
I cut the top part for 80 and the bottom part for 40.
There were nulls on these bands. Which I thought was necessary
for an efficient antenna.
I don't have an automatic antenna tuner and hate the idea of
tuning, tuning all the time as I change bands.

But your antenna does sound interesting.

I wonder if an automatic tuner would work with it. It I got one.

49. Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:02:02 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C3215BA.6EE4C671@capnet.com>
Source record: 151737

I'd never run more than 500 or 600 Watts.
If the insulated wire was touching a branch or something.

50. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:09:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0t52bcku1@knossos.btinternet.com>
Source record: 151739

Dear CAM,

The difference between 0.333 and 0.375 is hardly worth arguing about. I'd
use a feedline constructed from 14 or 16 gauge wire.

--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C320057.B8D5A9E@IEEE.org...
> Reg Edwards wrote:
> > It is in fact of little importance provided it is longer that about
> > 1/3-wavelength at the lowest frequency it is wished to operate and the
> > feedline impedance Zo is a few hundred ohms or more. A Zo of 450 to 600
> > ohms is ideal.
>
> Reg, I tend to agree with Walter Maxwell that the dipole should be at
> least 3/8WL at the lowest frequency of operation which gives an SWR
> on the 450 ohm ladder-line of about 20:1. The SWR for a 1/3WL dipole
> would be about 66:1 which is getting pretty high even for ladder-line.
> --
> cheers, CAM http://www.qsl.net/w5dxp

51. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:09:49 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0t52ccku2@knossos.btinternet.com>
Source record: 151738

Gary, I agree with everything you say.

Different conductivities and permittivities must be expected in soils at different depths. Are they not different soils, the products of different processes ?

But regarding independence of G and K of depth, the depth I referred to was not the depth of the soil below the surface but the depth of penetration of 3 MHz radio waves.

Regards, Reg G4FGQ

==========
Gary Coffman wrote in message news:lat33u065mloqbaa127n0kchb5cu0ujr89@4ax.com...
> On Tue, 1 Jan 2002 13:47:19 +0000 (UTC), "Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
> >The conductivity of copper (for example) is independent of the skin depth in
> >copper. It is a property of the material itself.
>
> True. Copper is a homogeneous solid.
>
> >The conductivity and permittivity of soil are also properties of the soil
> >itself and independent of the depth to which 3 MHz radio frequency currents
> >penetrate into it.
>
> Not true. Soil is a nonhomogeneous aggregate, and its properties vary with location
> and depth. Topsoil has a large percentage of organic material while subsoils have
> much less organic material. Subsoils are also much more compacted, and may contain
> large rock inclusions. The percentage of water in soils of differing compositions and
> compaction also differs. Soil composition also varies widely from one spot to another,
> even in the same field or yard. It is nothing like a solid block of copper.
>
> Because of the compaction issue, measurements need to be made in situ unless
> you can duplicate the compaction in a bench press. Because of the ionic nature

> of the fluids in soil, measurements made at DC (or near DC) will be wildly
different
> from measurements made at higher frequencies. Etc.
>
> Gary
>

52. Re: GAP Super C

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:10:49 UTC
From: n6nko <ensixenkayoh@ayareareell.net>
Message-ID: <3c321bb6$0$43576$272ea4a1@news.execpc.com>
Source record: 151740

You are correct with the the definition of antenna efficiency. I was trying
to
put my tongue-into-hole-in-cheek with the comment about my load resistor
being almost 100% efficient - If the resistors eats all the energy it is
given and
sends none back, then it is almost 100% efficient in these terms. It just
matters
where the point of reference is.

--
Richard E. Polivka, N6NKO
ARRL WI Section TS, OES, OO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C31FC42.418A2E48@eznec.com...
> You can find the definition of antenna efficiency defined in any
> textbook dealing with antennas, and it's always exactly the same: The
> efficiency of an antenna is that fraction of the applied power which is
> radiated. The remainder is converted to heat.
>
> The efficiency of a perfect dummy load is zero, and that of a typical
> dummy load much less than one percent. The EH antenna, when constructed
> to be much smaller than a half wavelength in size, is nowhere near 100%
> efficient, and to my knowledge no reliable published test data exist
> that show differently. In fact, if any reliable published test data
> exist at all for this antenna, I'd very much appreciate knowing where.
>
> If an independent test lab were to measure an EH or "cross-field"
> antenna and verify the results that the inventors claim, their sales
> would explode, they would all become filthy rich, and the cost of the
> test would be made back many, many times over in a very short period of
> time. So you might wonder why they haven't made the modest investment to
> have these tests done -- or, if they have been done, to widely publicize
> the results. But I don't.
>
> Roy Lewallen, W7EL
>
> n6nko wrote:
> >
> > I went and looked at the GAP antennas website at this Super C antenna.
Based
> > on the description of the circuit and the design, this appears to be a
> > version of the EH antenna (info on this design can be found by doing a
> > search, like on Google, using "EH antenna" as the criteria). One article
> > that I read describes the antenna as a open plate capacitor built on a

pvc
> > tube with phasing coils and a capacitor. There is also another page out
> > there that has on it a description of an EH-style antenna that uses a
flat
> > plate and an inverted cone. I see this cone being analogous to the
cubical
> > basket on the Super C.
> >
> > GAP's website says that the antenna "Efficiency approaches 100%" (found
on
> > page http://www.gapantenna.com/superc.htm). What is the definition of
> > efficiency here? My dummy load is almost 100% efficient - it's a
resistor.
> > Having a 1:1 match does not imply that you are radiating 100% of your
energy
> > applied.
> >
> > I did not find any specifications as to antenna gain related to a
reference
> > radiator, either isotropic or dipole. All that is there is "Primarily a
> > vertical = Omni- Directional - Low angle coverage". I would love to
see
> > an independent testing lab range test this antenna and see what its
> > capabilities and patterns are.
> >
> > I suggest reading the pages found by the search and make up your mind.
Until
> > I see verified testing, I myself am witholding judgement on this design.
> >
> > --
> > Richard E. Polivka, N6NKO
> > ARRL WI Section TS, OES, OO
> > ***All comments are all of my own humble opinion***

53. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:41:17 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c321f0b@news.bnb-lp.com>
Source record: 151742
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

W9INN makes a broad line of wire antennas that would serve this purpose.
One of the more popular ones is the MPD-5-78' or 87' five band dipole.
It offers resonance on each of the 5 bands so no tuner is required. It
is also rated for 1500w pep and there are no trap capacitors to blow
out....

Illustrations, measured data, and contact info is located on the web
site listed below...

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

54. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:42:35 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c321f59@news.bnb-lp.com>
Source record: 151743
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

I should have mentioned the MPD-5-78' or 87' resonant band coverage is
10-15-20-40-80m

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

55. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:43:27 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <Z1pY7.138197$lV4.22939569@e420r-atl1.usenetserver.com>
Source record: 151741

Doesn't the company [Delta Alpha] put out a dipole that works down to 80m
that's less than 100ft? Just a thought. Don't know if you wanted to buy,
build or build if you couldn't buy.
Drink, WP3JQ

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a0t52bcku1@knossos.btinternet.com...
> Dear CAM,
>
> The difference between 0.333 and 0.375 is hardly worth arguing about. I'd
> use a feedline constructed from 14 or 16 gauge wire.
>
> --
> **************************
> Regards, Reg G4FGQ
> Free Radio Modelling Programs
> Http://www.g4fgq.com
> **************************
> CAM <Cecil.A.Moore@IEEE.org> wrote in message
> news:3C320057.B8D5A9E@IEEE.org...
> > Reg Edwards wrote:
> > > It is in fact of little importance provided it is longer that about
> > > 1/3-wavelength at the lowest frequency it is wished to operate and the
> > > feedline impedance Zo is a few hundred ohms or more. A Zo of 450 to
600
> > > ohms is ideal.
> >
> > Reg, I tend to agree with Walter Maxwell that the dipole should be at
> > least 3/8WL at the lowest frequency of operation which gives an SWR
> > on the 450 ohm ladder-line of about 20:1. The SWR for a 1/3WL dipole
> > would be about 66:1 which is getting pretty high even for ladder-line.
> > --
> > cheers, CAM http://www.qsl.net/w5dxp
>
>

56. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:43:59 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0t78n$mlu4l$1@ID-124126.news.dfncis.de>
Source record: 151744

I just did a little analysis.

0.375 lambda dipole, 130 feet of 450-ohm 14AWG feedline, SWR=21, overall loss, Tx to free space, including tuner = 1.2 dB.

0.333 lambda dipole, same feedline, SWR=38, overall loss including tuner = 1.9 dB

Difference = about 1/9th of an S-unit.

Use program DIPOLE2.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:a0t52bcku1@knossos.btinternet.com...
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>
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>
> --
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> > Reg, I tend to agree with Walter Maxwell that the dipole should be at
> > least 3/8WL at the lowest frequency of operation which gives an SWR
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> > would be about 66:1 which is getting pretty high even for ladder-line.
> > --
> > cheers, CAM http://www.qsl.net/w5dxp

>
>

57. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:48:28 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C3220E4.A2946DA2@home.com>
Source record: 151745

How does a large number of radials compare to a grid or simply
connecting the ends of the radials together or several circular
connections.

Of course connecting two radials together would not be practical, but
connecting the ends of 120 radials together would be easy.

This is one of the few discussions I have followed, for two reasons! The
discussion has stuck to the subject and very little name calling! From
the number of posts, it seems many have followed along!

Les, AA4F

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "At least one problem is that it (B, L, & E`s work) doesn`t account for
> the considerable coupling among radials that takes place."
>
> OK. I learn a lot from these exchanges. This may be another gem.
>
> The current in all radials begins in-step at the antenna base on all
> radials. Under normal conditions it stays in-step at the same distance
> from the antenna in all radials. The equipotential lines at the surface
> of the earth around the vertical antenna are circles. I am assuming a
> single radiator. This means that at any given distance from the antenna,
> the voltages and phases on all radials are the same. The propagation
> velocity, whatever it is, is assumed to be the same in all radials.
>
> If there is no potential difference between radials at any given
> distance from the antenna base, what impetus exists to cause current
> between radials?
>
> Ed Laport`s idea is that no current between radials should exist and
> that none should be encouraged. He advises against any interconnection
> between radials as it might produce "eddy currents" which could only
> increase loss.
>
> Without current in one radial causing a voltage in another radial, where
> is the mutual impedance (coupling)?
>
> The total current ideally divides equally among all radials, just as it
> would coupling or no coupling.
>
> This "coupling" might have as much effect as paralleling two identical

> transformer secondaries to feed a load in place of one. But, I think the
> effect is even less because our antenna system load is becoming more
> dispersed with distance. Thus, there is less potential interaction afar.
>
> Best regards, Richard Harrison, KB5WZI

58. Re: DXERS UNLIMITED SATURDAY, DECEMBER 29, 2001 Arnie Coro CO2KK

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 20:48:37 UTC
From: Loretta Shuster <simpent@ntelos.net>
Message-ID: <xgpY7.25034$a56.863@atlpnn01.usenetserver.com>
Source record: 151746
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur

You were quite right about 6 meters for the last 5 days. Condx have been terrific from just my mobile station with a 1/4 wave vertical and 100 watts in Virginia USA.

I've been working Europe and the Carribean quite a bit. Even heard a JY9 (Jordan) today on 6 meters but the pileups were too much for my little station.

I'm working on a project of putting a full wave horizontal loop for 6 meters on my truck (vehicle - automobile) while the Solar Cycle is at near peak and F2 DX is terrific.

73 de N4SLR, Frank.

"Radio Havana Cuba" <radiohc@radiohc.org> wrote in message news:a0si43tat7@nytr.blythe.org...
> RADIO HABANA CUBA
> DXERS UNLIMITED
>
> WEEKEND EDITION
> SATURDAY, DECEMBER 29, 2001
>
> By Arnie Coro CO2KK
>
> Send your comments, questions and ideas to: arnie@radiohc.org
>
> Hi, amigos radioaficionados, welcome to our end of 2001 show!!!! This
> is Dxers Unlimited's weekend edition coming to you from Havana.
>
> I am Arnie Coro, radio amateur CO2KK and here is item one: A VERY
> ACTIVE SUN, and a big X3 Solar Flare Friday afternoon local time here
> in Havana... CO2DT, Charlie Oscar Two Delta Tango, Pedro Domingo and
> yours truly CO2KK thought that our ham band transceivers had broken
> down, as we could not hear any other signals on any band, except our
> ground wave link. Pedro is located within a couple of miles of my
> home QTH, and I could hear him very well, and of course, he heard me
> very well too, but we both simply could not pick up a single short
> wave station via skywave, an unmistakeable sign of a total
> ionospheric absorption event, the so called MOSS DILLINGER effect, or
> total short wave blackout...
>
> The higher frequencies started to come back first, just as the book

> says it should happen, and we both CO2DT and CO2KK had a nice QSO via
> 40 meter band groundwave that was absolutely QRM free thanks to the
> short wave blackout!!! According to my solar observations done early
> Saturday morning, there are chances for more solar flares to happen
> during the next two days or so....
>
> Item two: CO8DM Douglas a very enthusiastic young Cuban radio amateur
> had his first 6 meter band contacts with Europe, making a lot of
> European 50 megaHertz enthusiasts very happy indeed... So far CO2OJ,
> CO8LY, CO8DM and yours truly CO2KK are the only Cuban radio amateurs
> that have communicated with European stations on the magic 6 meter
> band.
>
> Item three: The most popular topic during the year 2001 here at Dxers
> Unlimited was,without any doubts the REGENERODYNE RECEIVER, so far I
> have learned about several completely finished radios and many in the
> works... For 2002... be ready for an all-solid-state version of this
> unique receiver!!!
>
> Item four: antenna section of Dxers Unlimited, with more information
> about the ferrite rod loop transmitting antenna experiments, and as
> always at the end of the show our exclusive and not copyrighted HF
> plus 6 meters propagation update and forecast...
>
> Stay tuned for more radio hobby related information coming to you
> from Radio Havana Cuba.
>
> This is the weekend edition of Dxers Unlimited,and here is our very
> popular antenna topics section amigos: Yes, the experimental ferrite
> rod transmitting loop antenna experiments continue... Here is some
> data to fuel up your experiments too... the length of the ferrite rod
> that seems to work very nicely here is 500 millimeters, of half a
> meter... The rod was made by glueing together several 10 millimeters
> diameter rods, using epoxy glue that was mixed very well with powder
> from a broken ferrite rod, in other words the glue had a high content
> of ferrite material in it, thus helping to provide a much better
> coupling between the rods... I used very little glue, and then had
> the rods placed inside a length of PVC pipe, so that the joints will
> not be under mechanical stress.
>
> The wire used for winding the coil was no 16.pvc insulated, of the
> type used for house wiring, and the number of turns was changed
> during the experiments, as well as the spacing within turns. So far,
> my ferrite rod transmitting loop seems to work very nicely on the 40
> meter amateur band, admitting up to around 10 watts of CW power or
> some 20 watts peak SSB power, before strange things begin to
> happen!!!
>
> At the 20 watts PEP SSB level, my station can be heard during the
> daytime at distances of up to 500 to 700 kilometers via the near

> vertical incidence skywave propagation, and reports are very good
> indeed. The experimental antenna is built on a plywood square to
> which I have attached a copper metal plate that acts as the other
> half-turn of the loop. I use two capacitors, one for tuning the loop
> and the other for optimizing the matching from the antenna to the
> radio.... It seems like it would be possible to use a smaller length
> ferrite rod for the higher amateur bands, but that's a next year
> experiment...
>
> In the meantime, the 40 meter band antenna will be rebuilt so that it
> can be used as a permanent system at my ham radio station during the
> summer thunderstorm season... Using an indoor antenna is a lot safer
> than connecting your rig to the big external antenna when T-storms
> are hovering nearby... Of course, I don't recommend operating a radio
> at all when a thunderstorm is near, but if you are in the middle of
> an emergency, keeping the link open with the indoor ferrite rod
> transmitting antenna can be your only option...
>
> Item four: More about antennas... The grounded vertical folded
> monopole antenna should become more and more popular among radio
> amateurs that already have a tower or mast installed at their
> stations... Want to know why? Well, as AM broadcast band stations
> have learned now, the grounded vertical folded monopole antenna is
> very efficient, has a lot of bandwidth, is easy to feed, and also
> provides complete isolation from other antennas installed on it. So
> yes, you may keep your Yagi beams up the tower, and by adding a set
> of wires and some fiberglass insulators, plus ground radials, you can
> feed the tower as a very nice vertical for the lower bands... You can
> even follow what broadcasters do to use the tower for two stations at
> the same time, and have the grounded vertical folded monopole antenna
> operating on two different amateur bands with an automatic switchover
> system...
>
> By the way that's one of the upcoming projects for 2002 -- turning my
> 6 meters high tower that supports my omnidirectional high gain 2
> meter band vertical, into an effective vertical for the 20 and 17
> meter bands...
>
> If you want to learn more about both the ferrite rod transmitting
> antenna, and the grounded folded monopole vertical antennas just drop
> me an e-mail to arnie@radiohc.org amigos, and I will be happy to send
> you several computer files with data about this interesting antenna
> systems.
>
> This is Radio Havana Cuba, the name of the show is Dxers Unlimited,
> and yes we do QSL one hundred percent here... send your QSL requests
> Via Air Mail to Arnie Coro, Radio Havana Cuba, Havana, Cuba, and Via
> e-mail to arnie@radiohc.org amigos!!!
>
> Now item five: You have questions and Arnie answers them... here is

> today's question:
>
> Arnie, what's the minimum power that an amateur radio station should
> run to provide reliable day to day communications??
>
> Well my friends who asked this tough question, this one I left for
> the end of the year show for sure, as it is a really difficult one to
> answer, and I would not like to generate a lengthy discussion on this
> topic...
>
> Here is my advice: For an HF, that is a short wave bands amateur
> radio station, the minimum power for reliable day-to-day
> communications that I would recommend is 25 watts, with 50 watts
> maybe a better option. You won't need 100 watts most of the time, but
> commercial rigs tend to be made using power output levels in the 25
> watts or 100 watts range. You can make a lot of ham radio contacts
> when conditions are good by running a 5 watts QRP rig, and you will
> enjoy QRP or low power operation a lot, but again, if you need to
> communicate even under difficult propagation conditions, then your
> minimum power option is 25 watts, with 50 watts having an extra 3 dB
> edge helping you...
>
> Of course, if you have an efficient antenna system, especially
> designed for the type of communications you want, then your chances
> of communicating are a lot better. In our experience here in Cuba
> during the hurricane season, we have found that installing special
> near vertical incidence skywave antennas, and using transceivers
> running as little as 10 watts, we can provide really effective
> emergency communications using battery power rigs that won't drain
> the batteries in just a few transmissions... And remember that the
> International Telecommunications Union advice is to use the minimum
> power required to keep the communications link working, in order to
> help reduce interference to other users of the radio sp_ctrum!!!
>
> This is Dxers Unlimited's weekend edition, and here is item six:
> What's coming for 2002... Well amigos, a lot of good news! I have
> several antenna projects, at least two receiver projects, and a lot
> of practical advice for both newcomers and experts regarding our
> wonderful hobby. More and more radio enthusiasts are linking
> computers to radios with very succesful results, and a lot of new
> computer software is being written these days that will further
> enhance our hobby...
>
> Two good examples are the multimode soundcard software that let you
> operate on many different digital modes using your computer sound
> card as a very sophisticated and fast signal processor, and the use
> of computer software to design antenna systems with unique
> characteristics... Among the most recent developments are the use of
> very high speed morse code transmissions for working meteor scatter
> contacts and at the other end of the spectrum, the use of extra slow

> CW to enhance signal reception possibilities on the low frequency
> bands... We may soon see during the year 2002 more nations making the
> low frequency amateur bands available to their amateur radio
> operators, and the continuing shift to low-speed Morse code tests
> even for the most advanced class of amateur radio licenses...
>
> And now just before going QRT, here is Arnie Coro's Dxers Unlimited's
> HF propagation update and forecast: Be ready for some special
> propagation conditions during the next 48 to 72 hours -- we may see
> aurora borealis and aurora australis at higher latitudes, more solar
> flares, geomagnetic disturbances and unique F2 layer MUF enhancements
> that will make worldwide contacts on the 6 meter band possible during
> the next five to seven days.
>
> So, the end of 2001 finds the solar cycle in an upswing, and
> scientists happy to continue to make the best observations ever of
> solar activity during this second peak of cycle 23...
>
> Happy New Year 2002 for all and keep listening to Dxers Unlimited,
> your favorite radio hobby program coming to you from Radio Havana
> Cuba!!!
>
> Arnie Coro CO2KK
> Havana, Cuba
> December 29, 2001
>
> Postal address:
> Arnie Coro, "Dxers Unlimited"
> Radio Havana Cuba, Havana, CUBA
> e-mail: arnie@radiohc.org
>
> --
>
> http://www.radiohc.org

59. Discone HF Antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:04:20 UTC
From: rsmtmn@aol.com
Message-ID: <20020101160420.06896.00002347@mb-bg.aol.com>
Source record: 151747

Thanks for all the replies guys. I appreciate it. I plan to buy a Radio Shack (or similar) mast and build the discone for use on Field Day Events.

Happy New Year

Dan (KA0SDU)
rsmtmn@aol.com

60. A better-built screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:11:40 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <wypY7.128001$BX4.8158983@e3500-atl1.usenetserver.com>
Source record: 151749

About once a month, I will put a blurb on here about my Carolina Cyclone series of screwdriver antennas. I hope I don't annoy anyone by doing so, it's just that I get quite good responses in this manner.

One of the advantages of the Carolina Cyclone is that it is more cost effective while delivering performance equal to or beyond that of the more expensive ones. Thru careful research and. with the assistance of a professional plastics supplier, I have found a material that meets all the requirements of the more expensive competitors in toughness, UV resistance, and power handling. This material is UNMW,or a kind of black Nylon similar or the same as Nyloc used on locking bolts (the little black or white collar near the head). The material turns well for the machinist and further reduces the cost because it produces less waste. Delrin is very high cost, and actually costs FOUR times that of UNMW. Most machinists dread to turn Phenolic because it, too, produces a huge amount of waste, comes off the lathe in long strings of fabric, and causes a huge mess to be cleaned up when finished. It, too, costs almost 4 times that of the Nylon derivative. Back to Delrin. What the fellows that use this hugely expensive stuff don't tell you is that, while Delrin IS very tough, UV resistant, and makes great antenna coils, it is also brittle--meaning that if you prang your coil on a low garage door header, it is more likely to break. We DO make mistakes sometimes. LOL! Now I do not mean to degrade the rival materials because they are good antenna coil forms. But the point I AM making is that there is something out there that will do the very same thing at a more reasonable cost.

And that is where the Carolina Cyclone I & II come in.

Cyclone I is a FULL 2" dia
Wire is #14 wound at 8 TPI
Form is UNMW (black Nylon)
Decoupling fingers are a full 1/4" wide for strength, longevity, and tight contact.
Power handling is 800 watts (warranted)
Hardware is aluminum, brass, and stainless steel to resist corrosion and rust.
Coil cover is 1/8" wall LEXAN for a clear weather protection for many years

(Butyl will crack and discolor in a year or so)
Price is just $240 shipped (less whip) to lower 48 States Includes all ferrules, collets, and parts necessary..

Cyclone II is identical to the one above except it is a FULL 3" dia for the absolutely "persnickety" and avid HF mobile DXer. This is for the fellow that wants Texas Bugcatcher
performance and screwdriver convenience. The one who wants "Q" factors in the 400+ range.
Construction is to the same commercial-grade standards and good looks as the Cyclone I.
For example, most "generic" screwdrivers use a wood insert screwed and glued into the bottom
of a PVC reducer. This has very little in the way of threads, will sometimes strip, or come out of the bottom of the coil altogether. Without revealing too much, I have incorporated a 1" long
turnbuckle nut which has the corresponding length of internal threads. It is secured in such a
way that it is almost impossible to, either pull this assembly out of the coil, or to strip the drive
nut. I have repaired some screwdrivers that "mysteriously" stopped travelling, and the cause was that the brass wood insert pulled completely out because there is not enough material in the
PVC bushing to keep it in there securely. Yet, if disassembly is ever needed, each subassembly can be taken apart, repaired with commonly available hardware, and put back together.
Cyclone II handles a FULL 1500 watts SSB! And costs only $350 Shipped to lower 48 states. Compare those prices to some of the big name screwdriver makers! I guarantee performance that will both please and surprise you, or your money back. For those of you who
have never heard of me, I can say that I have shipped Carolina Cyclones all over the US--many to readers of this newsgroup. In 6 years of building, I have had exactly ONE to return for a
mechanical failure, and I swapped it out immediately. You will find no negative remarks on the
internet about trading with me--I do what I say or I make it right. If I didn't, I would be out of
business in short order. But I want to STAY in the antenna business because this is one of the
aspects of ham radio that I love working with.

Earilier, I said that I have a goal. My production is small--anywhere from 2-3 per month except during hamfest season. I don't try for huge numbers because I acquire the parts, I
assemble, I test, and I ship! When you get an antenna from me, it is, indeed, from me! I have
no employees. I work for myself. I need to make that goal of 3-4 antennas during January.
If you are in the market for an HF mobile antenna, please help me make that goal AND receive
an excellent product in return!

Thank you for reading, and thanks to all of you who have purchased the
Carolina Cyclone
in the past.

Happy New Year, and the best of 73 to all,

Jerry
K4KWH

61. Where and what kind of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:14:46 UTC
From: Charles Gallo <Charlie@thegallos.com>
Message-ID: <uf943u06d33hbg789gv49hhufqu040usdl@4ax.com>
Source record: 151750

Hi Gang,

I'm very new to this hobby, and I've got a question or two. It looks like it's probably time to put up my first antenna. The intended use is 2m/440Mhz FM repeater use. The repeaters that I really want to work, I can work right now with my HT and its stock rubber duckie. I'd like to put up a nice omni antenna

That said, I have 2 options on WHERE to mount my Antenna

option 1) On old TV mast over the main roof - this will require a 75 foot coax run, and a lot of work - it clears the roof by about 6 feet

option 2) on the chimney of the extension - this is about 10 feet lower, and is maybe 5 feet below the roof line - the advantage is that the coax run is about 25 feet, and easier to do

Charlie

--

For the Children - RKBA!

There are two major products to come out of Berkley: LSD and UNIX . We don't believe this to be a coincidence.

62. Looking for ferrite

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:15:06 UTC
From: erik tesnau <sumpcaver@worldnet.att.net>
Message-ID: <uFpY7.209148$WW.12171805@bgtnsc05-news.ops.worldnet.att.net>
Source record: 151748

Hello All,

I'm looking for ferrite- mix Stackpole 24B

I'm looking for this material or its equivalent in rod form, 12" long by
0.625" diameter

If you can help please reply off-list.

Thank you,
Erik
sumpcaver@att.net

63. Re: DXERS UNLIMITED SATURDAY, DECEMBER 29, 2001 Arnie Coro CO2KK

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:24:16 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C322900.7B5CD0E5@coqui.net>
Source record: 151751
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur

Loretta Shuster wrote:
>
> You were quite right about 6 meters for the last 5 days. Condx have been
> terrific from just my mobile station with a 1/4 wave vertical and 100 watts
> in Virginia USA.
>
> I've been working Europe and the Carribean quite a bit. Even heard a JY9
> (Jordan) today on 6 meters but the pileups were too much for my little
> station.

Superb. I'm a TV/FM=DX monitor in Puerto Rico and am not catching any
signs of the openings. Can you suggest any times that you see these
openings?
-Bill WX4A

64. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:31:53 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C322AC9.E5899982@coqui.net>
Source record: 151752

StarGazer wrote:
>
> I'd never run more than 500 or 600 Watts.
> If the insulated wire was touching a branch or something.

No, fergit it. Even the best my local power company can do with bare wire+treebranch and 11,600 volts is the occasional arcing enough to wipe out any BCB reception. 500 watts or so of RF on an insulated wire tangled in tree limbs will rarely be a problem.
That being said, watch out for the sap-rising season and a few anecdotes of where it really did occur.
;-)
Bill WX4A

65. Re: Looking for ferrite

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:36:06 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C322BC6.266EB4EC@coqui.net>
Source record: 151753

erik tesnau wrote:
>
> Hello All,
>
> I'm looking for ferrite- mix Stackpole 24B
>
> I'm looking for this material or its equivalent in rod form, 12" long by
> 0.625" diameter
>
> If you can help please reply off-list.
>
> Thank you,
> Erik
> sumpcaver@att.net

You can glue smaller rods together to reach 12" ...but, I don't know any specifics to that particular mix. If you would elaborate on the project at hand you may find some good alternatives.
-Bill WX4A

66. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:41:26 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C322CFD.751FA382@icok.net>
Source record: 151754

StarGazer,
I really doubt if that's something to worry about,
no matter if the wire is insulated or not. Ruling out
all the 'stories' that can't be confirmed, have you
~ever~ heard of a tree catching on fire from an antenna?
I haven't...
'Doc

67. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:42:24 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C322D0D.FCC10587@tampabay.rr.com>
Source record: 151755

depending on what band this is for you could just end mount the yagi and
just spin it that way
why you would need to do this it beyond me but anyways
good luck

Tony Levand wrote:

> I want to built a spinning antenna, 600 rpm or more. I was considering
> a 3 element Yagi-Uda, with the driven element a static mast with
> director and reflector rotating about. This complicates the drive
> arrangement. Would using carbon brushes typically found in electric
> motors on copper rings introduce much noise?
>
> Tony
> AA9CC

68. Re: Where and what kind of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:45:19 UTC
From: chantey <gael.cridhe@verizon.net>
Message-ID: <P5qY7.1227$wU4.456439@paloalto-snr1.gtei.net>
Source record: 151756

Wasn't there also UNIX work at Bell Labs?
I remember using K & R papers as course notes many years ago.

Bob

"Charles Gallo" <Charlie@thegallos.com> wrote in message
news:uf943u06d33hbg789gv49hhufqu040usdl@4ax.com...
> Hi Gang,
>
> I'm very new to this hobby, and I've got a question or two. It looks
> like it's probably time to put up my first antenna. The intended use
> is 2m/440Mhz FM repeater use. The repeaters that I really want to
> work, I can work right now with my HT and its stock rubber duckie.
> I'd like to put up a nice omni antenna
>
> That said, I have 2 options on WHERE to mount my Antenna
>
> option 1) On old TV mast over the main roof - this will require a 75
> foot coax run, and a lot of work - it clears the roof by about 6 feet
>
> option 2) on the chimney of the extension - this is about 10 feet
> lower, and is maybe 5 feet below the roof line - the advantage is that
> the coax run is about 25 feet, and easier to do
>
> Charlie
>
>
>
> --
>
> For the Children - RKBA!
>
> There are two major products to come out of Berkley: LSD and UNIX . We
don't
> believe this to be a coincidence.

69. Re: Single vs multipoint coax ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:47:39 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3C322E7B.149E87FA@sympatico.ca>
Source record: 151757
Cross-posted to: comp.home.automation,rec.radio.amateur.antenna

Brian wrote:

> >However, our cablevision is grounded to the water pipe and at the point
> >of connection to the water pipe the installer made a simple air wound
> >inductor - 7 turns of about 1" dia. I have noticed a similar
> >configuration on all of the power poles in our area where any connection
> >is made to the pole ground wire.
> >
> >I am curious as to the purpose of these inductors. What effect might
> >they have on a rapidly rising pulse as from a lightning strike?
>
> Are you sure that he didn't just intend to leave a little extra wire,
> in case the ground point had to be moved for whatever reason?
>
> It may not be an inductor, just a coil of extra wire.
> --
> HA mailing lists and tech-tips at FutureStandard.com

There is not much spare wire in a 1" dia 7 turn coil. I suppose I could calculate the inductance, but not on New Year's Day.

This is the way the cable company installed it. I watched it being done.

The coax feed comes through the wall and to a splitter. A single conductor insulated ground wire - about 10 or 12 AWG - is connected directly from the splitter to the closest cold water pipe. Immediately prior to the water pipe connection he wound a 7 turn 1 inch diameter coil, he used a tool to wind it to the desired diameter. At the time I did not think to question him since I was waiting to go out.

Since then the power line on our street has been completely replaced and I have noticed that all connections to the pole ground wires have a similar coil/inductor immediately prior to the connection to the pole ground wire.

Incidentally, since the new line was put in a considerable section was destroyed during the ice storm of '98. It was rebuilt by a crew from a different area - I forget if they were from Canada or the U.S., but the coils in the ground wires have been replaced so it does not appear to be a local thing?

As an added item which might or might not be significant; the telephone and cable TV distribution on the poles is all fibre-optic; and labelled as such at each and every pole.

It just struck me as odd to put an inductor in a ground wire which might be subject to a lightning surge.

Dave

Best Wishes to the group for 2002.

70. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:49:42 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C322EEE.27BBA327@icok.net>
Source record: 151758

Tony,
Carbon brushes would cause problems that you shouldn't have
to worry about if the driven element is stationary. Although,
600 rpm is going to be the 'kicker' at anything but UHF. I'm
wondering what your going to use the antenna for?
'Doc

71. Re: Where and what kind of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:50:45 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C322F02.7AD7B22A@tampabay.rr.com>
Source record: 151759

hey charlie
what i would do is use the chimney and just put a longer mast on the antenna
radio shack sells a chimney mount its a couple of steel straps and stuff to
secure the mast to the chimney and then put 10-15 feet of mast that way the
antenna clears the roof
remember in VHF/UHF the higher the antenna the further you can talk
also remember to use a low loss coax something like LMR400 or 9913F cause at 440
mhz you will be looking at 3-6db of loss in a 50 foot run or so
good luck and welcome to the hobby

Charles Gallo wrote:

> Hi Gang,
>
> I'm very new to this hobby, and I've got a question or two. It looks
> like it's probably time to put up my first antenna. The intended use
> is 2m/440Mhz FM repeater use. The repeaters that I really want to
> work, I can work right now with my HT and its stock rubber duckie.
> I'd like to put up a nice omni antenna
>
> That said, I have 2 options on WHERE to mount my Antenna
>
> option 1) On old TV mast over the main roof - this will require a 75
> foot coax run, and a lot of work - it clears the roof by about 6 feet
>
> option 2) on the chimney of the extension - this is about 10 feet
> lower, and is maybe 5 feet below the roof line - the advantage is that
> the coax run is about 25 feet, and easier to do
>
> Charlie
>
> --
>
> For the Children - RKBA!
>
> There are two major products to come out of Berkley: LSD and UNIX . We don't
> believe this to be a coincidence.

72. Re: Where and what kind of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 21:52:58 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C322FBA.CE13B6DE@coqui.net>
Source record: 151760

Charles Gallo wrote:
>
> Hi Gang,
>
> I'm very new to this hobby, and I've got a question or two. It looks
> like it's probably time to put up my first antenna. The intended use
> is 2m/440Mhz FM repeater use. The repeaters that I really want to
> work, I can work right now with my HT and its stock rubber duckie.
> I'd like to put up a nice omni antenna
>
> That said, I have 2 options on WHERE to mount my Antenna
>
> option 1) On old TV mast over the main roof - this will require a 75
> foot coax run, and a lot of work - it clears the roof by about 6 feet
>
> option 2) on the chimney of the extension - this is about 10 feet
> lower, and is maybe 5 feet below the roof line - the advantage is that
> the coax run is about 25 feet, and easier to do
>
> Charlie
>
> --
>
> For the Children - RKBA!
>
> There are two major products to come out of Berkley: LSD and UNIX . We don't
> believe this to be a coincidence.

Hmmm, height vs loss. In VHF, the first guess always is to go with
height. But you say you can work 'em from a HT already so my guess is
that you aren't pushing that limit with a 10' difference. I'd say take
the easy route. If by some fluke the roofline interferes, you have the
other option. The difference in coax loss won't be a determinimg
factor. An outdoor antenna inside a trampled-on aluminum garbage bag is
better than a 3" HT whip.
As for the Berkley stuff, you are pretty much alone in that perspective
of reality. Harmless, and you'll grow out of it :-)
-Bill

73. Re: Where and what kind of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:02:47 UTC
From: Charles Gallo <Charlie@thegallos.com>
Message-ID: <7lc43uge879ihoblsbe33fjjt89sehn4st@4ax.com>
Source record: 151761

On Tue, 01 Jan 2002 17:52:58 -0400, Your Friend Bill <"Remove The NO
In The Reply To Address"@coqui.net> wrote:

<snip>
>Hmmm, height vs loss. <snip>

Yeah, that's the tradeoff - I'm about 20 feet below the top of one of
the area high points, so I have some height built in

>As for the Berkley stuff, you are pretty much alone in that perspective
>of reality. Harmless, and you'll grow out of it :-)
>-Bill

Just part of the sig file - you'll get something different this time
<g>.

73
KC2IXE
(and yeah, that's a tongue twister)

Charlie

--

For the Children - RKBA!

There are two major products to come out of Berkley: LSD and UNIX . We don't
believe this to be a coincidence.

74. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:13:18 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <2wqY7.3630$dK4.53176@rwcrnsc52>
Source record: 151762

You need to watch that ad a little more closely. The range enhancing device is being sold as the main product. The other product meant to prevent the radiation is thrown into the deal. That device fits over the speaker and is, of course, snake oil.
"Peter J. Bertini" <commquart@home.com> wrote in message news:pgnY7.106545$Y6.10401909@news1.rdc1.ct.home.com...
> No, but an amazingly similar device is advertised which
> claims to reduce the chances of developing RF induced brain cancers.
>
>
>
>

75. point AM antenna N-S, station thus located E-W?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:20:49 UTC
From: Dan Jacobson <jidanni@deadspam.com>
Message-ID: <m23d1p1zni.fsf@dan.jacobson.tw>
Source record: 151764

I point my dimestore AM radio and thus also its ferrite bar antenna
along a north south axis to get best reception of a certain station.
What does this tell me about the station's location. Thanks, and
sorry for so amateur a question. Mountains affect answer much?
--
http://www.geocities.com/jidanni/ Tel+886-4-25854780

76. ferrite rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:23:52 UTC
From: erik tesnau <sumpcaver@worldnet.att.net>
Message-ID: <YFqY7.209214$WW.12179119@bgtnsc05-news.ops.worldnet.att.net>
Source record: 151763

Hello All,

The ferrite rod in the previous post is needed for a LF project. I believe that the mix has a u ~2000.

I mistakenly stated the dimensions as 12" long by 0.625" dia. The diameter really needs to be 0.75".

I've spent many hours searching the Web for this rod and I've turned up very few leads. Amidon seems like they may be able to supply this, however I have to wait for their staff to return from the holiday and hopefully they reply.

Erik
sumpcaver@att.net

77. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:28:16 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <4KqY7.106546$Y6.10403939@news1.rdc1.ct.home.com>
Source record: 151765

I would think the "snake oil" product, the one that attaches over the
earpiece,
could be marketed to improve signals since it is closer to the antenna, and
would help
improve the coupling to the head so it could serve as a counterpoise... Far
fetched.

The "range improving" product I've seen is a mylar strip that mounts on the
back of the
battery. I could place a 19" wire under my trunk and claim "improved"
two-meter
mobile range.

Can anyone show a link to where consumer or other independant group has
shown where these
things can provide any benefit other than to the seller??

73

Pete

"CW" <clinton.magers@attbi.com> wrote in message
news:2wqY7.3630$dK4.53176@rwcrnsc52...
> You need to watch that ad a little more closely. The range enhancing
device
> is being sold as the main product. The other product meant to prevent the
> radiation is thrown into the deal. That device fits over the speaker and
is,
> of course, snake oil.
> "Peter J. Bertini" <commquart@home.com> wrote in message
> news:pgnY7.106545$Y6.10401909@news1.rdc1.ct.home.com...
> > No, but an amazingly similar device is advertised which
> > claims to reduce the chances of developing RF induced brain cancers.
> >
> >
> >
> >
>
>

78. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:31:45 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3238D1.20B173E3@coqui.net>
Source record: 151766

CW wrote:
>
> You need to watch that ad a little more closely. The range enhancing device
> is being sold as the main product. The other product meant to prevent the
> radiation is thrown into the deal. That device fits over the speaker and is,
> of course, snake oil.
> "Peter J. Bertini" <commquart@home.com> wrote in message
> news:pgnY7.106545$Y6.10401909@news1.rdc1.ct.home.com...
> > No, but an amazingly similar device is advertised which
> > claims to reduce the chances of developing RF induced brain cancers.

Aw, heck....I see these things on ebay for 75 cents. Is this any
different than a kid that wanted ten whole cents for a cup of lemonade
30-40 years ago? Maybe the topic of discussion should encompass the
precedents that lead to capitalism rather than boo-haha because the
product is overpriced crap that couldn't find space in the local "dollar
store".
Go buy a bag of lemons and make your own lemonade and figure out a way
to hawk it on the internet at such prices so you can quit your day job.
This is why the South Coast of France isn't overun with big-spending
techno-nurds..
-ex

79. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:38:51 UTC
From: alevand@yahoo.com
Message-ID: <e52e470e.0201011438.7b020c30@posting.google.com>
Source record: 151767

Allodoxaphobia <QSB@QRM-QRN.net> wrote in message
news:<slrna33sq9.3id.QSB@animas.frontier.net>...
> On 1 Jan 2002 09:04:32 -0800, Tony Levand scribbled:
> > I want to built a spinning antenna, 600 rpm or more. I was considering
> > a 3 element Yagi-Uda, with the driven element a static mast with
> > director and reflector rotating about.
>
> This for 75M? <g>

No, 146 MHz.

80. Re: point AM antenna N-S, station thus located E-W?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:43:34 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C323B96.27147D86@coqui.net>
Source record: 151768

Dan Jacobson wrote:
>
> I point my dimestore AM radio and thus also its ferrite bar antenna
> along a north south axis to get best reception of a certain station.
> What does this tell me about the station's location. Thanks, and
> sorry for so amateur a question. Mountains affect answer much?
> --
> http://www.geocities.com/jidanni/ Tel+886-4-25854780

You will see a distinct directional effect with the typical loopstick.
Normally its broadside to a ferrite loop for max signal, and yes, you
can use that feature to separate or ID certain stations.
Mountains can be a big problem on short distance AM reception...I detect
that you are in Taiwan?? I have no idea of your conditions but its not
uncommon outside the USA for stations to have low-power repeaters
on-frequency which will screw up ideas of where the actual transmitter
is located.

-Bill

81. Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:54:31 UTC
From: Bob Meyer <rmeyer5@cinci.rr.com>
Message-ID: <H6rY7.27871$mu.10716825@typhoon.neo.rr.com>
Source record: 151669

Anybody building the ant project in Jan 2002 QST?.i have started building the lawn chair squalo for 6m,just need to finish the gamma match and it will be ready for on air test.

73 Bob W8DQ

82. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:54:53 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C323E3D.2E49EC19@coqui.net>
Source record: 151670

"Peter J. Bertini" wrote:
>
> I would think the "snake oil" product, the one that attaches over the
> earpiece,
> could be marketed to improve signals since it is closer to the antenna, and
> would help
> improve the coupling to the head so it could serve as a counterpoise... Far
> fetched.
>
> The "range improving" product I've seen is a mylar strip that mounts on the
> back of the
> battery. I could place a 19" wire under my trunk and claim "improved"
> two-meter
> mobile range.
>
> Can anyone show a link to where consumer or other independant group has
> shown where these
> things can provide any benefit other than to the seller??
>
> 73
>
> Pete
>
> "CW" <clinton.magers@attbi.com> wrote in message
> news:2wqY7.3630$dK4.53176@rwcrnsc52...
> > You need to watch that ad a little more closely. The range enhancing
> device
> > is being sold as the main product. The other product meant to prevent the
> > radiation is thrown into the deal. That device fits over the speaker and
> is,
> > of course, snake oil.
> > "Peter J. Bertini" <commquart@home.com> wrote in message
> > news:pgnY7.106545$Y6.10401909@news1.rdc1.ct.home.com...
> > > No, but an amazingly similar device is advertised which
> > > claims to reduce the chances of developing RF induced brain cancers.
> > >
> > >
Okay....I'll agree that its snake oil. My local lottery offers 'riches'
based on the same concept but they charge more than these 'cellular
enhancers' cost.
My locale, PR, has the highest rate of telephone lines vs. population
and has even a higher rate of cellphones per capita of anywhere else in
the universe. A population of scarcely 4 million has 2 million
cellphones. If there is a 75 cent trick to be had, we know it locally

but if you fly VFR you'll be dodging the tower blights on the
landscape. Cell-saturation.

csacped

> > >
> > >
> >
> >

83. Re: Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 22:56:40 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna34fl9.jrm.QSB@animas.frontier.net>
Source record: 151671

```
On Tue, 01 Jan 2002 22:54:31 GMT, Bob Meyer scribbled:
> Anybody building the ant project in Jan 2002 QST?.i have started building
> the lawn chair squalo for 6m,just need to finish the gamma match and it will
> be ready for on air test.

All my lawn furniture is buried under snow and ice.
But, come early May..... <g>

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK
```

84. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 23:14:31 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0tg33$mj57m$1@ID-124126.news.dfncis.de>
Source record: 151672

Roy,

Regarding independence of conductance and permittivity versus depth, the depth I referred to was not the depth of the soil below the surface but the depth of penetration of 3 MHz radio waves.

> The folks at the Naval Postgraduate School, NRaD
> (Naval Research and Development Center), and
> others I'm aware of use some sort of buried
> transmission line test set.

Trust the Military to squander a fortune of tax-payer's money on men, time and equipment when what is needed is a borrowed 259B and a pocket calculator.

> Have you published your method? If not,
> would you post it? I know a number of people
> who would be very interested in a simpler method
> that gives reliable and accurate results --
> or even a good approximation.

I've no wish to start a stampede to the US Patents Office. I had no idea that such knowledge was at a premium stateside. But if anybody would like to buy the idea I'm open for offers. Roy, I'm sure you could devise a method which could be used in the average radio shack if you really tried.

Actually it's not worth all the fuss you make of it. If any measurements are needed at all, an accuracy of plus or minus 30 percent is quite good enough for radio prediction purposes. Eznec will demonstrate that. With experience and freedom from any delusions of accuracy, a visual examination of the ground is sufficient.

> It's more likely that they realized that a 60 Hz measurement has no real
> relationship to the characteristics at RF.

Roy, you'll have to face up to the fact that it didn't occur to any of them that conductivity measurements at any frequency were of any consequence. It would have taken only ten minutes to make measurements at DC, 60 Hz or ELF. Other people had been making such measurements for years. Soil conductivity was of fundamental importance in understanding what goes on.

> Their paper also includes results for 60, 30, 15, and
> for some tests, 2 radials. Are you saying .... ?

All I'm saying (before it became a Federal case) it's a great pity they forgot to make any soil conductivity measurements. If the site still exists has anyone visited recently to fill in the gap in our knowledge.

I prefer soil "resistivity" to "conductivity". It's in line with
everybody's way of thinking about volts, amps and ohms. The sizes of
measurement units, ohm.metres, also have practical values. An Ohm.metre is
very simply the resistance between opposite faces of a 1-metre cube of the
material. Most soils are in the range 20 to 50,000 ohm-metres.

Regards, Reg

85. Antennas for Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 23:15:35 UTC
From: Lou <tech@dp.net>
Message-ID: <a0th8p$198s$1@news.dp.net>
Source record: 151675

Inventory Clearance

2 - Antron 99 Antennas - NEW in box - but Non Returnable. "Marketed" by
Radio Shack, but manufactured by the Antron Company.
$57 shipped

--
Lou
Owner of: C.L. FURLONG ENTERPRISES

Home of Gifts and More & Electronics Plus

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Hours: M-F 9-5 - S/S by appt.
Closed on Holidays

86. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 23:20:29 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0tgde$mp8av$1@ID-124126.news.dfncis.de>
Source record: 151673

Hi Richard, so how would YOU determine soil resistivity?
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Richard Clark <kb7qhc@attbi.com> wrote in message
news:sf043ug0aojc0c5qqrvl1atbshpcmo3um7@4ax.com...
> On Tue, 1 Jan 2002 13:47:19 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:
>
> >
> >Such measurements can be made in a laboratory or on the shack bench with
an
> >Autek or MFJ antenna analyser. Problems lie only in the soil container.
> >
>
> Ah Punchinello!
>
> Problems BEGIN in the soil container.
>
> To think that this problem can be moved AND solved indoors is a larf.
>
> Earlier you posited
> >Their broad conclusions were predictable even if their tests had never
been
> >made.
> >
>
> to then post here:
> >That BL&E did not make any measurements of soil characteristics, not even
at
> >DC or 60 Hz, indicates a considerable lack of appreciation of the
> >fundamentals of groundwave propagation which had been fully analysed and
> >made available by Sommerfeld and others about 20 years before.
> >
>
> If their results were predictable, then one could easily imagine that
> they allowed these "understood" qualities to migrate through
> un-impeded by unnecessary repetition. That is, if your rationale is
> consistent, then they treated it as common knowledge already available
> to their audience. However, more to the point is your consistent
> negative editorialization made at the expense of their work to

> propagate these exercises in rhetoric - a wheeze.
>
> 73's
> Richard Clark, KB7QHC

87. Re: GAP Super C

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 23:24:09 UTC
From: stefano <sgalast@tin.it>
Message-ID: <tyrY7.2611$Xj.140966@news2.tin.it>
Source record: 151674

Hi Richard,
the gap super C antenna can do the promised job .
I did early experiments on it looking at the patent.
He can be really quite efficient.
BUT is a traditional resonant antenna , on the site they describe very well
the working principle.
The only doubt I have is they declare perfect performances over different
frequencies....
Is not possible, that antenna can be efficient only on ONE F. On the others
is a compromise.
I tested that.

About eh antenna, please don't be confused.
The eh antenna works on a totally new application.
I mean the physic laws are well defined and nobody can change them.
The eh antenna works on a new NOT resonant way.

I agree with Roy and other skeptics guys....but...
at the moment we decided to reveal ALL the instructions to have one of it
built just to show how great can be.
In the future we will provide any scentific ,indipendent , measures.
I know can be a criticable strategy, but is the our strategy.

Ted Hart will provide , very soon, with a perfect test on a AM version
following the severe FCC rules.
In the counter part here, in Italy , we launched the ham version .
Again, we sent, up today, about 500 documents on the eh practical
building....
We are collecting a lot of complete success stories on eh , perfectely built
and compared on a professional ways.
You can believe it or not, but I can produce all the ham calls having a
complete success with 1% wav. long ehs producing the SAME efficiency
respect to full size dipoles.

again we think the better way to decide IF the eh antenna works or not, if
simply build one of it.
It costs almost nothing, is fast to do AND I am here to drive anybody wants
have a test on it.
What is the risk?
YOU could waste some time having fun experimenting with antennas, in other
words I offer you the possibility to do what any ham should do...experiment
in the perfect ham spirit.

I am here ,just let me know if you want play with it.
sincerly , stefano IK5IIR
"n6nko" <ensixenkayoh@ayareareell.net> ha scritto nel messaggio

news:3c321bb6$0$43576$272ea4a1@news.execpc.com...
> You are correct with the the definition of antenna efficiency. I was
trying
> to
> put my tongue-into-hole-in-cheek with the comment about my load resistor
> being almost 100% efficient - If the resistors eats all the energy it is
> given and
> sends none back, then it is almost 100% efficient in these terms. It just
> matters
> where the point of reference is.
>
> --
> Richard E. Polivka, N6NKO
> ARRL WI Section TS, OES, OO
>
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:3C31FC42.418A2E48@eznec.com...
> > You can find the definition of antenna efficiency defined in any
> > textbook dealing with antennas, and it's always exactly the same: The
> > efficiency of an antenna is that fraction of the applied power which is
> > radiated. The remainder is converted to heat.
> >
> > The efficiency of a perfect dummy load is zero, and that of a typical
> > dummy load much less than one percent. The EH antenna, when constructed
> > to be much smaller than a half wavelength in size, is nowhere near 100%
> > efficient, and to my knowledge no reliable published test data exist
> > that show differently. In fact, if any reliable published test data
> > exist at all for this antenna, I'd very much appreciate knowing where.
> >
> > If an independent test lab were to measure an EH or "cross-field"
> > antenna and verify the results that the inventors claim, their sales
> > would explode, they would all become filthy rich, and the cost of the
> > test would be made back many, many times over in a very short period of
> > time. So you might wonder why they haven't made the modest investment to
> > have these tests done -- or, if they have been done, to widely publicize
> > the results. But I don't.
> >
> > Roy Lewallen, W7EL
> >
> > n6nko wrote:
> > >
> > > I went and looked at the GAP antennas website at this Super C antenna.
> Based
> > > on the description of the circuit and the design, this appears to be a
> > > version of the EH antenna (info on this design can be found by doing a
> > > search, like on Google, using "EH antenna" as the criteria). One
article
> > > that I read describes the antenna as a open plate capacitor built on a
> pvc

> > > tube with phasing coils and a capacitor. There is also another page
out
> > > there that has on it a description of an EH-style antenna that uses a
> flat
> > > plate and an inverted cone. I see this cone being analogous to the
> cubical
> > > basket on the Super C.
> > >
> > > GAP's website says that the antenna "Efficiency approaches 100%"
(found
> on
> > > page http://www.gapantenna.com/superc.htm). What is the definition of
> > > efficiency here? My dummy load is almost 100% efficient - it's a
> resistor.
> > > Having a 1:1 match does not imply that you are radiating 100% of your
> energy
> > > applied.
> > >
> > > I did not find any specifications as to antenna gain related to a
> reference
> > > radiator, either isotropic or dipole. All that is there is "Primarily
a
> > > vertical = Omni- Directional - Low angle coverage". I would love to
> see
> > > an independent testing lab range test this antenna and see what its
> > > capabilities and patterns are.
> > >
> > > I suggest reading the pages found by the search and make up your mind.
> Until
> > > I see verified testing, I myself am witholding judgement on this
design.
> > >
> > > --
> > > Richard E. Polivka, N6NKO
> > > ARRL WI Section TS, OES, OO
> > > ***All comments are all of my own humble opinion***
>
>

88. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 23:32:49 UTC
From: richardharrison@webtv.net
Message-ID: <19493-3C324721-160@storefull-112.iap.bryant.webtv.net>
Source record: 151677

Roy Lewallen wrote:
"Am I mistaken, or can you make the same argument for two parallel elements fed in phase?"

How about wire of a larger size. It`s about the same thing.

Consider adjacent radials. These are comparable to the sides of a bridge circuit with excitation applied between the near end and the far end of the of the pair of radials.

Excitation of the radials comes from displacement current in the space between the vertical antenna and the radials.

Take the same distance along both radials to connect a bridge detector between the radials.
Makes no difference what percentage of the applied voltage appears at the detector points. It will be the same voltage on either radial wire if symmetry prevails as it should. There will be no potential difference to motivate a bridge detector. As long as balance is preserved, the radials don`t affect each other.

As an example consider a transformer with a pair of identical secondary windings, each with the same configuration of multiple taps. Assuming ample transformer capability and equality between the two windings, it makes no difference if all the corresponding taps are interconnected or left unconnected when the secondaries feed a load.

Ed Laport was concerned about assymetry in a ground system producing eddy currents, should radials be interconnected at points remote from the antenna base. With perfect symmetry there is nothing to worry about. Ed worried because perfection is elusive.

Best regards, Richard Harrison, KB5WZI

89. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 23:37:59 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C324857.77C05F0B@IEEE.org>
Source record: 151676

Reg Edwards wrote:
> The difference between 0.333 and 0.375 is hardly worth arguing about.

The difference between 0.333 and 0.375 is only 11.2% but the difference
between SWRs of 66:1 and 19:1 is 347%. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

90. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 23:45:26 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C324A16.AA75F6D8@IEEE.org>
Source record: 151678

Reg Edwards wrote:
> 0.333 lambda dipole, same feedline, SWR=38, overall loss including tuner =
> 1.9 dB

Reg, EZNEC gives SWR = 66:1 for a 0.33WL dipole on 75m fed with
450 ohm ladder-line. Feedpoint impedance is 21-j645. How much
loss it there when the SWR = 66:1?
--
cheers, CAM http://www.qsl.net/w5dxp

91. Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-01 23:51:54 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C324B4F.2AE46668@bellatlantic.net>
Source record: 151679

For HF Quad Antenna:

Any recommendations on Ferrite Types or number of Cores stacked up? I'm guessing the more the better, but might go broke with a 5 band quad. Do those cheap fold in half EMI cores work? I've seen those with over Half inch I.D.

Thanks

KI4Z

92. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 00:02:52 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C324E2C.CB7400AD@IEEE.org>
Source record: 151681

Mark Hall wrote:
> Any recommendations on Ferrite Types or number of Cores stacked up? I'm
> guessing the more the better, but might go broke with a 5 band quad. Do
> those cheap fold in half EMI cores work? I've seen those with over Half
> inch I.D.

Ten Amidon FB-77-5621's are pretty good for 1/4" coax.
--
cheers, CAM http://www.qsl.net/w5dxp

93. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 00:03:47 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <D7sY7.106547$Y6.10404420@news1.rdc1.ct.home.com>
Source record: 151680

For a doppler? This can be done electronically much, much easier...

Peter

"Tony Levand" <alevand@yahoo.com> wrote in message
news:e52e470e.0201011438.7b020c30@posting.google.com...
> Allodoxaphobia <QSB@QRM-QRN.net> wrote in message
news:<slrna33sq9.3id.QSB@animas.frontier.net>...
> > On 1 Jan 2002 09:04:32 -0800, Tony Levand scribbled:
> > > I want to built a spinning antenna, 600 rpm or more. I was considering
> > > a 3 element Yagi-Uda, with the driven element a static mast with
> > > director and reflector rotating about.
> >
> > This for 75M? <g>
>
> No, 146 MHz.

94. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 00:10:25 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <RdsY7.34911$Z03.22217995@news1.rdc1.mi.home.com>
Source record: 151682

You don't want a spinning yagi for a doppler. This will add AM modulation
you don't want.
However, you can do DF this way, with a sin/cos pot, and storage scope or
microcontroller.
You don't need or want to spin fast though. 1-2 scans/second will work fine.

--
--
Dave's Engineering Page: http://www.dvanhorn.org

Got a need to read Bar codes? http://www.barcodechip.com
Bi-directional read of UPC-A, UPC-E, EAN-8, EAN-13, JAN, and Bookland, with
two or five digit supplemental codes, in an 8 pin chip, with NO external
parts.

"Peter J. Bertini" <commquart@home.com> wrote in message
news:D7sY7.106547$Y6.10404420@news1.rdc1.ct.home.com...
> For a doppler? This can be done electronically much, much easier...
>
> Peter
>
>
> "Tony Levand" <alevand@yahoo.com> wrote in message
> news:e52e470e.0201011438.7b020c30@posting.google.com...
> > Allodoxaphobia <QSB@QRM-QRN.net> wrote in message
> news:<slrna33sq9.3id.QSB@animas.frontier.net>...
> > > On 1 Jan 2002 09:04:32 -0800, Tony Levand scribbled:
> > > > I want to built a spinning antenna, 600 rpm or more. I was
considering
> > > > a 3 element Yagi-Uda, with the driven element a static mast with
> > > > director and reflector rotating about.
> > >
> > > This for 75M? <g>
> >
> > No, 146 MHz.
>
>

95. Re: A better-built screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 00:17:17 UTC
From: DGB <dgbcms@netnet.net>
Message-ID: <3c3250de$0$5681$39cecf19@news.twtelecom.net>
Source record: 151683

4 days ago was a month?

Dwight W9YQ

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:wypY7.128001$BX4.8158983@e3500-atl1.usenetserver.com...
> About once a month, I will put a blurb on here about my
Carolina Cyclone
> series of screwdriver antennas. I hope I don't annoy
anyone by doing so,
> it's just that I get quite good
> responses in this manner.
>
> One of the advantages of the Carolina Cyclone is that it
is more cost
> effective while delivering
> performance equal to or beyond that of the more expensive
ones. Thru
> careful research and.
> with the assistance of a professional plastics supplier, I
have found a
> material that meets all the
> requirements of the more expensive competitors in
toughness, UV resistance,
> and power handling. This material is UNMW,or a kind of
black Nylon similar
> or the same as Nyloc used
> on locking bolts (the little black or white collar near
the head). The
> material turns well for the
> machinist and further reduces the cost because it produces
less waste.
> Delrin is very high cost,
> and actually costs FOUR times that of UNMW. Most
machinists dread to turn
> Phenolic because it, too, produces a huge amount of waste,
comes off the
> lathe in long strings of fabric,
> and causes a huge mess to be cleaned up when finished.
It, too, costs
> almost 4 times that of
> the Nylon derivative. Back to Delrin. What the fellows
that use this
> hugely expensive stuff don't tell you is that, while
Delrin IS very tough,

> UV resistant, and makes great antenna coils,
> it is also brittle--meaning that if you prang your coil on
a low garage door
> header, it is more
> likely to break. We DO make mistakes sometimes. LOL! Now
I do not mean to
> degrade the
> rival materials because they are good antenna coil forms.
But the point I
> AM making is that there is something out there that will
do the very same
> thing at a more reasonable cost.
>
> And that is where the Carolina Cyclone I & II come in.
>
> Cyclone I is a FULL 2" dia
> Wire is #14 wound at 8 TPI
> Form is UNMW (black Nylon)
> Decoupling fingers are a full 1/4" wide for strength,
longevity, and tight
> contact.
> Power handling is 800 watts (warranted)
> Hardware is aluminum, brass, and stainless steel to resist
corrosion and
> rust.
> Coil cover is 1/8" wall LEXAN for a clear weather
protection for many years
> (Butyl will crack and discolor in a year or so)
> Price is just $240 shipped (less whip) to lower 48 States
Includes all
> ferrules, collets, and parts necessary..
>
>
> Cyclone II is identical to the one above except it is a
FULL 3" dia for the
> absolutely "persnickety" and avid HF mobile DXer. This is
for the fellow
> that wants Texas Bugcatcher
> performance and screwdriver convenience. The one who
wants "Q" factors in
> the 400+ range.
> Construction is to the same commercial-grade standards and
good looks as the
> Cyclone I.
> For example, most "generic" screwdrivers use a wood insert
screwed and glued
> into the bottom
> of a PVC reducer. This has very little in the way of
threads, will
> sometimes strip, or come out of the bottom of the coil

altogether. Without
> revealing too much, I have incorporated a 1" long
> turnbuckle nut which has the corresponding length of
internal threads. It
> is secured in such a
> way that it is almost impossible to, either pull this
assembly out of the
> coil, or to strip the drive
> nut. I have repaired some screwdrivers that
"mysteriously" stopped
> travelling, and the cause was that the brass wood insert
pulled completely
> out because there is not enough material in the
> PVC bushing to keep it in there securely. Yet, if
disassembly is ever
> needed, each subassembly can be taken apart, repaired with
commonly
> available hardware, and put back together.
> Cyclone II handles a FULL 1500 watts SSB! And costs only
$350 Shipped to
> lower 48 states. Compare those prices to some of the big
name screwdriver
> makers! I guarantee performance that will both please and
surprise you, or
> your money back. For those of you who
> have never heard of me, I can say that I have shipped
Carolina Cyclones all
> over the US--many to readers of this newsgroup. In 6
years of building, I
> have had exactly ONE to return for a
> mechanical failure, and I swapped it out immediately. You
will find no
> negative remarks on the
> internet about trading with me--I do what I say or I make
it right. If I
> didn't, I would be out of
> business in short order. But I want to STAY in the antenna
business because
> this is one of the
> aspects of ham radio that I love working with.
>
> Earilier, I said that I have a goal. My production is
small--anywhere from
> 2-3 per month except during hamfest season. I don't try
for huge numbers
> because I acquire the parts, I
> assemble, I test, and I ship! When you get an antenna
from me, it is,
> indeed, from me! I have
> no employees. I work for myself. I need to make that goal

of 3-4 antennas
> during January.
> If you are in the market for an HF mobile antenna, please
help me make that
> goal AND receive
> an excellent product in return!
>
> Thank you for reading, and thanks to all of you who have
purchased the
> Carolina Cyclone
> in the past.
>
> Happy New Year, and the best of 73 to all,
>
> Jerry
> K4KWH
>
>
>

96. Re: ferrite rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 00:33:07 UTC
From: tdonaly@cs.com
Message-ID: <20020101193307.07025.00002435@mb-bg.news.cs.com>
Source record: 151684

Erik wrote,
>Hello All,
>
>The ferrite rod in the previous post is needed for a LF project. I believe
>that the mix has a u ~2000.
>
>I mistakenly stated the dimensions as 12" long by 0.625" dia. The diameter
>really needs to be 0.75".
>
>I've spent many hours searching the Web for this rod and I've turned up very
>few leads. Amidon seems like they may be able to supply this, however I
>have to wait for their staff to return from the holiday and hopefully they
>reply.
>
>
>Erik
>sumpcaver@att.net
>

A November 1996 price list from Amidon I have lists a .75" diameter X 12.00"
long rod of
#33 material (mu = 850) for $100.00. I don't know if they still sell this, but
it seems a bit on
the expensive side to me.

Tom Donaly, KA6RUH

97. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 00:46:26 UTC
From: richardharrison@webtv.net
Message-ID: <5740-3C325862-68@storefull-114.iap.bryant.webtv.net>
Source record: 151688

Dick Carrol wrote:
"Organization from which I retired used a lot of Kraco brand halfwave vertical sleeve antennas, mast-mounted above 50 ft towers for "local" communications on 42 mhz FM."

Organization I retired from did not use such coaxial antennas on fixed stations but used many on boats and ships because they had no radials to poke out an eye. Our radios were mostly at 33 MHz and in the 150 MHz band, but we had many other radios in many other bands. FM was used in most bands, but we had many aircraft and other applications.

We used only folded radiating elements on our VHF FM fixed stations. If we were forced to use a non-folded element we shunted it with a 1/4-wave short-circuited stub across the drive point and made a good coax ground to the tower at that point. Through the decades this proved the only way to avoid lightning damage. We had hundreds of installations, some on towers up to 400 feet. This worked as an essential lightning protection element.

Andrew supplied our unipoles on whatever frequencies we operated on, if we could get them. We never quit trying other antennas, but never bought any significant quantity of base station antennas made by others with the exception of 2 GHz grid dishes made by Anixter-Mark.

Our coaxial antennas were usually supplied by Motorola and manufactured by Mark Products or whomever Motorola chose at the moment.

Cecil asked if the sleeve were insulated from the support mast. Our coaxial antenna skirts weren`t touched by any conductor anywhere but at the dipole drivepoint. The coax was routed to the feedpoint via a pipe extending from inside the skirt to well outside the skirt. This pipe was also used for mounting the antenna to another pipe or some other support. We grounded the mounting pipe.

Our automobile and aircraft antennas were stainless steel whips, usually of the 1/4-wave variety.

For our aircraft beacons we usually installed inverted L`s with multi-wire canopies.

For our jungle SSB radios, we used 1/2-wave dipoles as high as we could get them up.

For our point to point log-distance HF we used a rhombic, etc.

Best regards, Richard Harrison, KB5WZI

98. Re: Dumb cell-phone antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 00:46:40 UTC
From: Steve Ellington <N4LQ@igLou.com>
Message-ID: <3c325861_1@news.iglou.com>
Source record: 151685

Well I have verified that the antenna booster does in fact work at least on the Motorola Startac phones. From the looks of it, it appears to be a resonant passive reflector which would reflect RF below the antenna back up at some angle. The instructions warn about being sure to point the top part upwards to the antenna. They are available at OfficeMax here and I'll pick one up for my xyl's phone which has rather poor coverage and post a report.

--
Steve
N4LQ
"Your Friend Bill" <"Remove The NO In The Reply To Address"@coqui.net> wrote in message news:3C3238D1.20B173E3@coqui.net...
> CW wrote:
> >
> > You need to watch that ad a little more closely. The range enhancing device
> > is being sold as the main product. The other product meant to prevent the
> > radiation is thrown into the deal. That device fits over the speaker and is,
> > of course, snake oil.
> > "Peter J. Bertini" <commquart@home.com> wrote in message
> > news:pgnY7.106545$Y6.10401909@news1.rdc1.ct.home.com...
> > > No, but an amazingly similar device is advertised which
> > > claims to reduce the chances of developing RF induced brain cancers.
>
> Aw, heck....I see these things on ebay for 75 cents. Is this any
> different than a kid that wanted ten whole cents for a cup of lemonade
> 30-40 years ago? Maybe the topic of discussion should encompass the
> precedents that lead to capitalism rather than boo-haha because the
> product is overpriced crap that couldn't find space in the local "dollar
> store".
> Go buy a bag of lemons and make your own lemonade and figure out a way
> to hawk it on the internet at such prices so you can quit your day job.
> This is why the South Coast of France isn't overun with big-spending
> techno-nurds..
> -ex
>

99. Re: GAP Super C

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 00:48:25 UTC
From: Steve Ellington <N4LQ@igLou.com>
Message-ID: <3c3258ca_3@news.iglou.com>
Source record: 151686

It's the first 2 story dog pen I've seen.

--
Steve
N4LQ
"stefano" <sgalast@tin.it> wrote in message
news:tyrY7.2611$Xj.140966@news2.tin.it...
>
>
> Hi Richard,
> the gap super C antenna can do the promised job .
> I did early experiments on it looking at the patent.
> He can be really quite efficient.
> BUT is a traditional resonant antenna , on the site they describe very
well
> the working principle.
> The only doubt I have is they declare perfect performances over different
> frequencies....
> Is not possible, that antenna can be efficient only on ONE F. On the
others
> is a compromise.
> I tested that.
>
> About eh antenna, please don't be confused.
> The eh antenna works on a totally new application.
> I mean the physic laws are well defined and nobody can change them.
> The eh antenna works on a new NOT resonant way.
>
> I agree with Roy and other skeptics guys....but...
> at the moment we decided to reveal ALL the instructions to have one of it
> built just to show how great can be.
> In the future we will provide any scentific ,indipendent , measures.
> I know can be a criticable strategy, but is the our strategy.
>
> Ted Hart will provide , very soon, with a perfect test on a AM version
> following the severe FCC rules.
> In the counter part here, in Italy , we launched the ham version .
> Again, we sent, up today, about 500 documents on the eh practical
> building....
> We are collecting a lot of complete success stories on eh , perfectely
built
> and compared on a professional ways.
> You can believe it or not, but I can produce all the ham calls having a
> complete success with 1% wav. long ehs producing the SAME efficiency

> respect to full size dipoles.
>
> again we think the better way to decide IF the eh antenna works or not, if
> simply build one of it.
> It costs almost nothing, is fast to do AND I am here to drive anybody
wants
> have a test on it.
> What is the risk?
> YOU could waste some time having fun experimenting with antennas, in other
> words I offer you the possibility to do what any ham should
do...experiment
> in the perfect ham spirit.
>
> I am here ,just let me know if you want play with it.
> sincerly , stefano IK5IIR
> "n6nko" <ensixenkayoh@ayareareell.net> ha scritto nel messaggio
> news:3c321bb6$0$43576$272ea4a1@news.execpc.com...
> > You are correct with the the definition of antenna efficiency. I was
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> > to
> > put my tongue-into-hole-in-cheek with the comment about my load resistor
> > being almost 100% efficient - If the resistors eats all the energy it is
> > given and
> > sends none back, then it is almost 100% efficient in these terms. It
just
> > matters
> > where the point of reference is.
> >
> > --
> > Richard E. Polivka, N6NKO
> > ARRL WI Section TS, OES, OO
> >
> >
> > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > news:3C31FC42.418A2E48@eznec.com...
> > > You can find the definition of antenna efficiency defined in any
> > > textbook dealing with antennas, and it's always exactly the same: The
> > > efficiency of an antenna is that fraction of the applied power which
is
> > > radiated. The remainder is converted to heat.
> > >
> > > The efficiency of a perfect dummy load is zero, and that of a typical
> > > dummy load much less than one percent. The EH antenna, when
constructed
> > > to be much smaller than a half wavelength in size, is nowhere near
100%
> > > efficient, and to my knowledge no reliable published test data exist
> > > that show differently. In fact, if any reliable published test data
> > > exist at all for this antenna, I'd very much appreciate knowing where.
> > >

> > > If an independent test lab were to measure an EH or "cross-field"
> > > antenna and verify the results that the inventors claim, their sales
> > > would explode, they would all become filthy rich, and the cost of the
> > > test would be made back many, many times over in a very short period
of
> > > time. So you might wonder why they haven't made the modest investment
to
> > > have these tests done -- or, if they have been done, to widely
publicize
> > > the results. But I don't.
> > >
> > > Roy Lewallen, W7EL
> > >
> > > n6nko wrote:
> > > >
> > > > I went and looked at the GAP antennas website at this Super C
antenna.
> > Based
> > > > on the description of the circuit and the design, this appears to be
a
> > > > version of the EH antenna (info on this design can be found by doing
a
> > > > search, like on Google, using "EH antenna" as the criteria). One
> article
> > > > that I read describes the antenna as a open plate capacitor built on
a
> > pvc
> > > > tube with phasing coils and a capacitor. There is also another page
> out
> > > > there that has on it a description of an EH-style antenna that uses
a
> > flat
> > > > plate and an inverted cone. I see this cone being analogous to the
> > cubical
> > > > basket on the Super C.
> > > >
> > > > GAP's website says that the antenna "Efficiency approaches 100%"
> (found
> > on
> > > > page http://www.gapantenna.com/superc.htm). What is the definition
of
> > > > efficiency here? My dummy load is almost 100% efficient - it's a
> > resistor.
> > > > Having a 1:1 match does not imply that you are radiating 100% of
your
> > energy
> > > > applied.
> > > >
> > > > I did not find any specifications as to antenna gain related to a
> > reference

> > > > radiator, either isotropic or dipole. All that is there is
"Primarily
> a
> > > > vertical = Omni- Directional - Low angle coverage". I would love
to
> > see
> > > > an independent testing lab range test this antenna and see what its
> > > > capabilities and patterns are.
> > > >
> > > > I suggest reading the pages found by the search and make up your
mind.
> > Until
> > > > I see verified testing, I myself am witholding judgement on this
> design.
> > > >
> > > > --
> > > > Richard E. Polivka, N6NKO
> > > > ARRL WI Section TS, OES, OO
> > > > ***All comments are all of my own humble opinion***
> >
> >
>
>

100. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 00:50:09 UTC
From: richardharrison@webtv.net
Message-ID: <5741-3C325941-27@storefull-114.iap.bryant.webtv.net>
Source record: 151687

As I waited for my message to ship, I noted the phrase "log distance".
That was intended to read "Long Distance".

Best regards, Richard Harrison, KB5WZI

101. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 00:51:08 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <78m43ucsmiliqg3e2dc3ranh8bafno87nd@4ax.com>
Source record: 151689

Reg,

You keep mentioning how easy and fast it is to make these
measurements. Well, sir why don't you just explain it to those of us
less fortunate than to have you vast knowledge just how to do it?

Danny

On Tue, 1 Jan 2002 23:14:31 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Roy,
>
>Regarding independence of conductance and permittivity versus depth, the
>depth I referred to was not the depth of the soil below the surface but the
>depth of penetration of 3 MHz radio waves.
>
>> The folks at the Naval Postgraduate School, NRaD
>> (Naval Research and Development Center), and
>> others I'm aware of use some sort of buried
>> transmission line test set.
>
>Trust the Military to squander a fortune of tax-payer's money on men, time
>and equipment when what is needed is a borrowed 259B and a pocket
>calculator.
>
>> Have you published your method? If not,
>> would you post it? I know a number of people
>> who would be very interested in a simpler method
>> that gives reliable and accurate results --
>> or even a good approximation.
>
>I've no wish to start a stampede to the US Patents Office. I had no idea
>that such knowledge was at a premium stateside. But if anybody would like to
>buy the idea I'm open for offers. Roy, I'm sure you could devise a method
>which could be used in the average radio shack if you really tried.
>
>Actually it's not worth all the fuss you make of it. If any measurements are
>needed at all, an accuracy of plus or minus 30 percent is quite good enough
>for radio prediction purposes. Eznec will demonstrate that. With
>experience and freedom from any delusions of accuracy, a visual examination
>of the ground is sufficient.
>
>
>> It's more likely that they realized that a 60 Hz measurement has no real

>> relationship to the characteristics at RF.
>
>Roy, you'll have to face up to the fact that it didn't occur to any of them
>that conductivity measurements at any frequency were of any consequence. It
>would have taken only ten minutes to make measurements at DC, 60 Hz or ELF.
>Other people had been making such measurements for years. Soil conductivity
>was of fundamental importance in understanding what goes on.
>
>> Their paper also includes results for 60, 30, 15, and
>> for some tests, 2 radials. Are you saying .... ?
>
>All I'm saying (before it became a Federal case) it's a great pity they
>forgot to make any soil conductivity measurements. If the site still exists
>has anyone visited recently to fill in the gap in our knowledge.
>
>I prefer soil "resistivity" to "conductivity". It's in line with
>everybody's way of thinking about volts, amps and ohms. The sizes of
>measurement units, ohm.metres, also have practical values. An Ohm.metre is
>very simply the resistance between opposite faces of a 1-metre cube of the
>material. Most soils are in the range 20 to 50,000 ohm-metres.
>---
>Regards, Reg
>

102. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 01:05:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0tnkj$mpg2o$1@ID-124126.news.dfncis.de>
Source record: 151691

Cecil, so what ? The addition loss in dB on the line over the matched loss
is not proprtional to SWR. Your reasoning is at fault.

Use program DIPOLE2 for correct comparison between the two dipoles. Takes
only two or three minutes and 99% of that is thinking about it.

>
> The difference between 0.333 and 0.375 is only 11.2% but the difference
> between SWRs of 66:1 and 19:1 is 347%. :-)
> --
> cheers, CAM http://www.qsl.net/w5dxp

103. Re: Where and what kind of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 01:17:54 UTC
From: "J. David Schronce" <david.nospam@schronce.f2s.com>
Message-ID: <3C32600B.4070709@schronce.f2s.com>
Source record: 151692

If you'd like to have a little fun, learn something about antennas and get on the air for CHEAP, you might consider building a couple Eggbeater IIs as seen at http/://members.aol.com/k5oe - These antennas are great for working satellites on 2m and 70cm and also excellent general purpose antennas for local use.

Of course 2 meter dipoles encased in 1/2 in PVC pipe are cheap too...

Charles Gallo wrote:

>Hi Gang,
>
>I'm very new to this hobby, and I've got a question or two. It looks
>like it's probably time to put up my first antenna. The intended use
>is 2m/440Mhz FM repeater use. The repeaters that I really want to
>work, I can work right now with my HT and its stock rubber duckie.
>I'd like to put up a nice omni antenna
>
>That said, I have 2 options on WHERE to mount my Antenna
>
>option 1) On old TV mast over the main roof - this will require a 75
>foot coax run, and a lot of work - it clears the roof by about 6 feet
>
>option 2) on the chimney of the extension - this is about 10 feet
>lower, and is maybe 5 feet below the roof line - the advantage is that
>the coax run is about 25 feet, and easier to do
>
>Charlie
>
>
>
>--
>
>For the Children - RKBA!
>
>There are two major products to come out of Berkley: LSD and UNIX . We don't
>believe this to be a coincidence.
>

104. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 01:23:08 UTC
From: Frank Donovan <donovanf@erols.com>
Message-ID: <a0tndplac1@bob.news.rcn.net>
Source record: 151690

Readers of this thread may be interested in
reading and commenting on the papers at:

http://www.commtechrf.com/

click on:
AM Antenna Systems
Download Library, and
History

73
Frank
W3LPL
donovanf@erols.com

105. Re: DXERS UNLIMITED SATURDAY, DECEMBER 29, 2001 Arnie Coro CO2KK

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 01:31:08 UTC
From: Loretta Shuster <simpent@ntelos.net>
Message-ID: <nptY7.27381$a56.26322@atlpnn01.usenetserver.com>
Source record: 151693
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur

I worked KP4 Sunday at about 1500Z from my mobile and 100 watts with a 1/4 wave vertical.

Europe has been coming in from 1300Z at the earliest until 1800Z or so at the latest. The times vary somewhat depending on condx each day.

I've heard some Carribean stations working Europe so just be on the lookout.

73 de N4SLR, Frank from a friend's computer.
"Your Friend Bill" <"Remove The NO In The Reply To Address"@coqui.net> wrote in message news:3C322900.7B5CD0E5@coqui.net...
> Loretta Shuster wrote:
> >
> > You were quite right about 6 meters for the last 5 days. Condx have been
> > terrific from just my mobile station with a 1/4 wave vertical and 100 watts
> > in Virginia USA.
> >
> > I've been working Europe and the Carribean quite a bit. Even heard a JY9
> > (Jordan) today on 6 meters but the pileups were too much for my little
> > station.
>
> Superb. I'm a TV/FM=DX monitor in Puerto Rico and am not catching any
> signs of the openings. Can you suggest any times that you see these
> openings?
> -Bill WX4A
>

106. Smaller versions of screwdrivers??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 01:41:27 UTC
From: Max <ve3tmt@rac.ca>
Message-ID: <pytY7.6387$A67.1724873@news20.bellglobal.com>
Source record: 151694

A couple of years ago I was using a BB3 screwdriver mounted on the trailer hitch of my '99 Intrepid. Although it worked not bad, honestly I thought the antenna was just too big for the car. On a F350 or tractor trailer they might look ok, but it looked out of place on the back of the car. Is there a smaller version available, say to cover 40-10m? I don't do too much on 75 anyway, but I guess I would if I had the antenna right? Just curious if anyone makes or can make a smaller version, meaning not as tall or as big a diameter to cover 40 and up?

Thanks,

Max ve3tmt@rac.ca

107. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 01:51:08 UTC
From: richardharrison@webtv.net
Message-ID: <26217-3C32678C-414@storefull-117.iap.bryant.webtv.net>
Source record: 151695

Reg wrote:
"Hi Richard, so how would you determine soil conductivity?"

I`m one of the Richards, so here is how I would determine soil loss without going into great detail.

Field strength measurements have been made for at least a century. I haven`t been doing it quite that long, but I`ve done some on more than one continent. The FCC has published curves of signal strength versus distance from a transmitter with curves for differing soil conductivities. These are called "Ground Wave Propagation Curves" and are a part of the FCC Rules.

Across a stretch of earth of interest, I would make a field strength measurement as close to the transmitter as I could get, but no closer than 0.1 mile away. Then I would make a second measurement similar to the first as far away as I could but no farther than 20 miles away. These distances are for convenience in using the FCC charts. These distances can be changed to conform with the limits of the area of interest.

All that is left to do is to see which FCC curve best fits the data. These curves are clearly labeled as to the conductivity represented by each curve.

Best regards, Richard Harrison, KB5WZI

108. Re: Smaller versions of screwdrivers??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 03:05:47 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020101220547.06156.00003316@mb-mq.aol.com>
Source record: 151696

Yaesu ATAS-100. Works great for me.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

109. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 03:39:59 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0tvee$q3b$1@helle.btinternet.com>
Source record: 151697

```
CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C324A16.AA75F6D8@IEEE.org...
> Reg Edwards wrote:
> > 0.333 lambda dipole, same feedline, SWR=38, overall loss including tuner
=
> > 1.9 dB
>
> Reg, EZNEC gives SWR = 66:1 for a 0.33WL dipole on 75m fed with
> 450 ohm ladder-line. Feedpoint impedance is 21-j645. How much
> loss it there when the SWR = 66:1?
> --
> cheers, CAM http://www.qsl.net/w5dxp
========================================

Cecil, It depends on both the matched line loss and the length of line.
```

110. Re: Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 03:45:44 UTC
From: whagen6@cs.com
Message-ID: <20020101224544.10220.00001977@mb-fh.news.cs.com>
Source record: 151698

for a second there I thought I was going to read "lawn chair pilot 2", where a ham hooks a bunch of ballons to his lawnchair, takes his two meter rig for long distance qso's and proceeds to drop his bb gun before its time to come down. anyway, guess not....

111. Re: A better-built screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 03:46:42 UTC
From: whagen6@cs.com
Message-ID: <20020101224642.10220.00001978@mb-fh.news.cs.com>
Source record: 151699

where do the weekends go?

112. Re: Hy-Gain HT 18 Tower Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 03:59:49 UTC
From: Snafu <snafu@starband.net>
Message-ID: <fBvY7.6813$XT7.2268361868@twister1.starband.net>
Source record: 151700

I had an HT-18 for several years and really like it. It got out on 80 and 40 real well. I fed it with hard line and put the power to it...but.... when I got the loading coil for 160 I found that I could NOT use it on both 80 AND 160 (without retuning the coil). If I tuned the coil for 160, I couldn't get a low swr on 80 and vice-versa.

--
Remove (nospam) from reply e-mail address

113. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 04:21:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a0u1s3$c5m$1@paris.btinternet.com>
Source record: 151701

Richard Harrison <richardharrison@webtv.net> wrote in message
news:26217-3C32678C-414@storefull-117.iap.bryant.webtv.net...
> Reg wrote:
> "Hi Richard, so how would you determine soil conductivity?"
>
> I`m one of the Richards, so here is how I would determine soil loss
> without going into great detail.
>
> Field strength measurements have been made for at least a century. I
> haven`t been doing it quite that long, but I`ve done some on more than
> one continent. The FCC has published curves of signal strength versus
> distance from a transmitter with curves for differing soil
> conductivities. These are called "Ground Wave Propagation Curves" and
> are a part of the FCC Rules.
>
> Across a stretch of earth of interest, I would make a field strength
> measurement as close to the transmitter as I could get, but no closer
> than 0.1 mile away. Then I would make a second measurement similar to
> the first as far away as I could but no farther than 20 miles away.
> These distances are for convenience in using the FCC charts. These
> distances can be changed to conform with the limits of the area of
> interest.
>
> All that is left to do is to see which FCC curve best fits the data.
> These curves are clearly labeled as to the conductivity represented by
> each curve.
>
> Best regards, Richard Harrison, KB5WZI
==========

Yes the method works. Gives you the average conductivity over the groundwave path. But you don't need to know what it is.

Having obtained a number from the chart you can now go back to the same number on the same chart and predict the groundwave field stengths you have just measured at various distances for a given transmitter power.
Fascinating ! With a little imagination you don't even need the chart.

Actually those curves are incorrect. They all apply to a soil permittivity of 15. Real permittivities vary from 3 to 80.

If my memory serves me correct the curves are useless at HF because they stop at 1.7 MHz.

Best of luck and a peaceful 2002.

Reg.

114. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 04:38:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C328ED1.584ED2A5@IEEE.org>
Source record: 151702

Reg Edwards wrote:
> Cecil, so what ? The addition loss in dB on the line over the matched loss
> is not proprtional to SWR. Your reasoning is at fault.

Maybe not proportional but certainly correlated. The ARRL Antenna Book
has the following equation:

Total loss = 10 log((a^2-|Rho^2|)/a(1-|Rho|)^2)

where 'a' is the matched line loss and Rho = (SWR-1)/(SWR+1)

Assuming a=.075 dB per 100 ft on 75m, I get very high losses since
the denominator a(1-|Rho|)^2 equals 0.0000675

Are you using the above equation in your software?

> > The difference between 0.333 and 0.375 is only 11.2% but the difference
> > between SWRs of 66:1 and 19:1 is 347%. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

115. Re: Where and what kind of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 04:51:57 UTC
From: Charles Gallo <Charlie@thegallos.com>
Message-ID: <sk453usecdjrgfe1hup9ghs6eeumunne56@4ax.com>
Source record: 151703

On Wed, 02 Jan 2002 01:17:54 GMT, "J. David Schronce"
<david.nospam@schronce.f2s.com> wrote:

>If you'd like to have a little fun, learn something about antennas and
>get on the air for CHEAP, you might consider building a couple Eggbeater
>IIs as seen at http/://members.aol.com/k5oe - These antennas are great
>for working satellites on 2m and 70cm and also excellent general purpose
>antennas for local use.
>
>Of course 2 meter dipoles encased in 1/2 in PVC pipe are cheap too...
>

I've also considered a dual band J Pole

73
KC2IXE

Charlie

--
73
KC2IXE

For the Children - RKBA!

It is better to die on your feet than to live on your knees.

116. Re: Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 05:20:44 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3298AC.52493036@coqui.net>
Source record: 151704

Bob Meyer wrote:
>
> Anybody building the ant project in Jan 2002 QST?.i have started building
> the lawn chair squalo for 6m,just need to finish the gamma match and it will
> be ready for on air test.
>
> 73 Bob W8DQ

What freq? I'll listen.
Bill WX4A/KP4

117. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 05:22:05 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3298FD.BAE1B4DC@coqui.net>
Source record: 151705

"Peter J. Bertini" wrote:
>
> For a doppler? This can be done electronically much, much easier...
>
> Peter

No, its a babe-magnet :-)
-Bill

118. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 05:23:54 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C32996A.A4E54A91@IEEE.org>
Source record: 151707

CAM wrote:
> Total loss = 10 log((a^2-|Rho^2|)/a(1-|Rho|)^2)

Question to all: If Rho^2 is greater than a^2 in the above equation,
we are asked to take the log of a negative number. I'm wondering
if there is an error in the equation.

For (a = 0.075 dB per 100 ft) and (Rho = 0.97) we get
10 log (-13843)

It doesn't make any sense to write |Rho^2| since Rho^2 is always
positive anyway. Should the equation be:

Total loss = 10 log((|a^2 - Rho^2|)/a(1-|Rho|)^2))

In which case the total loss would be 41.4 dB?
--
cheers, CAM http://www.qsl.net/w5dxp

119. Re: Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 05:25:28 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3299C8.C6859176@coqui.net>
Source record: 151706

"William F. Hagen" wrote:
>
> for a second there I thought I was going to read "lawn chair pilot 2", where a
> ham hooks a bunch of ballons to his lawnchair, takes his two meter rig for long
> distance qso's and proceeds to drop his bb gun before its time to come down.
> anyway, guess not....

You obviously heard the guy on Art Bell that did exactly that/
-Bill

120. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 06:14:50 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <6c953uo7vojsfsc0cd1tbknjtqh57i2b60@4ax.com>
Source record: 151708

On Tue, 1 Jan 2002 23:20:29 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Hi Richard, so how would YOU determine soil resistivity?

Ah Punchinello!

To use one of your quotes (suitably altered in the following):
>
>I've no wish to start a stampede to the US Patents Office. I had no idea
>that such knowledge was at a premium in Britain. But if anybody would like to
>buy the idea I'm open for offers. I'm sure you could devise a method
>which could be used in the average radio shack if you really tried.
>

Doesn't really answer anything at all does it? ;-)

That was toooo easy.

For the others who have higher technical expectations, I would offer
the answer is available to anyone with a modeler. Simply put,
modelers have far more accuracy than your kitchen table approach and
any measured deviation from the theoretical (courtesy of the modeler)
must of necessity represent the variables that we are discussing. If
EZNEC tells me a particular configuration exhibits 37 Ohms resistive
(we are talking a simple vertical here), and I measure something
different, it is in all likelihood a difference that I brought to the
mix - not a fault of the software that has been refined through
thousands of measured observations - away from the kitchen table.

The last time I pointed this simple remedy out to our glorious Herr
Doktor's ground warmer, he sputtered on about special mathematics that
was not included in NEC and the special qualities of Fractals that
rendered common sense passï¿½. Yeah, sure. Perhaps I was off by 10% as
a function of what he said that was reasonably faithful to the
prostituted logic; but the face full of spit from his sputtering would
have suggested I was off by 1000%.

Don't tell me it's raining.

I don't even have to drag a container of dirt indoors to make an
assessment of its contribution to loss, and I can even measure it as a
function of frequency, environmental variables, and the like, in situ.
The single greatest contributor to error is adding your own problems
and improvising tests that are elaborate beyond necessity.

Your methods are simply too filled with the mystique of fossilized academia, leaning on vague and ancient references - common sense solutions are available; the work has already been done; the tools are robust and available.

73's
Richard Clark, KB7QHC

121. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 06:50:47 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C32ADC7.621E5DF0@IEEE.org>
Source record: 151709

CAM wrote:
>
> CAM wrote:
> > Total loss = 10 log((a^2-|Rho^2|)/a(1-|Rho|)^2)
>
> I'm wondering if there is an error in the equation.

There does seem to be an error in the equation. The denominator above apparently should be a(1-|Rho|^2)

This is equation (9) on page 19.6 of "The ARRL Handbook 2000".

My apologies to Reg and the group. The total loss on a T-line with a matched line loss of 0.075 dB and an SWR of 66:1 appears to be about 1.9 dB which may or may not be important. My main objection to that high SWR is that it can be transformed by the T-line to 20k ohms at the transmitter end, a value hard to match with an antenna tuner.
--
cheers, CAM http://www.qsl.net/w5dxp

122. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 07:05:47 UTC
From: RayOfLight <kelon100>
Message-ID: <a2753u88hs2he2bdtviaq90dokgm9t4hl7@4ax.com>
Source record: 151712

>No biggie.....unplug the TV from power, and unplug the
>antenna EVERYTIME you leave home which is much of the time per your
>post. Nothing to it.

Well ralph buddy like i said in my post i already figure that out!
That's the simple way out but not the most efficient. As i have to
unplug/plug every 2/3 times per week the connectors are getting used!
And in some months i might have to change them.

Let me tell you though that i have devised all on my own an umbrella
lightning protection for my antennas and it's undergoing tests right
now!

And also it's not only when their are lightings that equipments get
damaged but when there are heavy clouds (thus big static buildup) and
with that protection nothing can damage my antennas and equipments :))
If the tests are 100% positive i will post the details for everyone to
check it out :)

Ralph: I do not waste time posting things! I just wanted to know if
there were professionals who have better ideas than mine. But it seems
some people just auto proclaim themselves 'professionals'! Nothing
personal.

Cheers.

123. Best Antenna for FRG-100

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 07:05:49 UTC
From: RayOfLight <kelon100>
Message-ID: <5u753u8g0kmi7mpsr8dsht8fqgl2kdn36n@4ax.com>
Source record: 151713

Hello i am looking forward to buy a Yaesu FRG-100 soon. i am looking
for the best antenna which will go with it. Size does not matter but t
should not be too large. Thanks.

124. Re: A better-built screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 07:33:39 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a0ud4i$k87$1@quark.scn.rain.com>
Source record: 151710

DGB <dgbcms@netnet.net> wrote:
> 4 days ago was a month?

It was last year.

If this is the only post he makes in January, then he is posting the
advertisement "once a month".

Bill

--
Bill Nelson (billn@peak.org)

125. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 08:27:40 UTC
From: jan.anker@pi.be
Message-ID: <l4g53uc6vqk6v2qi8mo4anur3pt6l1bbvt@4ax.com>
Source record: 151711

On Tue, 01 Jan 2002 12:02:02 -0800, StarGazer <pti@capnet.com> wrote:

>I'd never run more than 500 or 600 Watts.
>If the insulated wire was touching a branch or something.
>
Be careful.
Years back, when I had an open line with standing waves running through the garden, hitting the key started a little fire, when releasing the key it calmed down. The fire could followed the (slow) morse ritme. (output 1KW+)
Wire insulation can make the effect even worse.
With 600 watss output voltages over 1KV rf can be at the end of your antenna.

Jan on4caf

126. Re: Smaller versions of screwdrivers??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 11:31:17 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3C32EF85.C6FFE2A6@bloomer.net>
Source record: 151714

Although not a screwdriver, I use an Outbacker. Mine is the Perth plus, covers 80M-2M including WARC's. It's about 6 feet tall. Only disadvantage is you have to get out and move the tap wire to change bands.

Scott
N0EDV

Max wrote:
>
> A couple of years ago I was using a BB3 screwdriver mounted on the trailer
> hitch of my '99 Intrepid. Although it worked not bad, honestly I thought
> the antenna was just too big for the car. On a F350 or tractor trailer they
> might look ok, but it looked out of place on the back of the car. Is there
> a smaller version available, say to cover 40-10m? I don't do too much on 75
> anyway, but I guess I would if I had the antenna right? Just curious if
> anyone makes or can make a smaller version, meaning not as tall or as big a
> diameter to cover 40 and up?
>
> Thanks,
>
> Max ve3tmt@rac.ca

--
Scott
http://corbenflyer.tripod.com/
Building RV-4
Gotta Fly or Gonna Die!

127. Re: Supply hot peppers and do to sample in a large amount

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 13:09:18 UTC
From: KAZeringue <kazeringue@aol.com>
Message-ID: <3C330A1D.6020306@aol.com>
Source record: 151715

Let me guess, the "feedpoint" is "hot"? Voltage fed?

128. HY-Gain 18AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 14:11:09 UTC
From: Gordon & Kate Taylor <gordokate@ozemail.com.au>
Message-ID: <hyEY7.487$lt4.26916@ozemail.com.au>
Source record: 151716

Does anybody have details of which trap is which on these antenna's,
including which coil goes in which can.

--
Regards
Gordon Taylor VK4VP
E-Mail: gordokate@ozemail.com.au

129. Re: Smaller versions of screwdrivers??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 14:17:22 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <hxQzPDt=N=dejMdeZeAUPQv8me55@4ax.com>
Source record: 151717

"Max" <ve3tmt@rac.ca> wrote:

>A couple of years ago I was using a BB3 screwdriver mounted on the trailer
>hitch of my '99 Intrepid. Although it worked not bad, honestly I thought
>the antenna was just too big for the car. On a F350 or tractor trailer they
>might look ok, but it looked out of place on the back of the car. Is there
>a smaller version available, say to cover 40-10m? I don't do too much on 75
>anyway, but I guess I would if I had the antenna right? Just curious if
>anyone makes or can make a smaller version, meaning not as tall or as big a
>diameter to cover 40 and up?
>
>Thanks,
>
>Max ve3tmt@rac.ca
>
>
>

The past few months, I've been seeing ads for an MFJ "HF mini-Bugcatcher" that operates on 40 thru 6 meters with a 5.5' whip and a coil with a clip-on lead. Other than what's in the ads, I don't know much about it, but you can probably see it at mfj site, www.mfjenterprises.com

Bob
k5qwg

130. Re: Smaller versions of screwdrivers??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 14:34:58 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C331A92.22E39819@IEEE.org>
Source record: 151619

Scott wrote:
> Although not a screwdriver, I use an Outbacker. Mine is the Perth plus,
> covers 80M-2M including WARC's. It's about 6 feet tall. Only
> disadvantage is you have to get out and move the tap wire to change
> bands.

That's not the only disadvantage. :-) 12 dB down from a good bugcatcher
on 75m sounds like another disadvantage to me. It works pretty well
on 20m-10m though.
--
cheers, CAM http://www.qsl.net/w5dxp

131. Re: Smaller versions of screwdrivers??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 14:35:31 UTC
From: Dan McKenzie <dan.mckenzie@centurytel.com>
Message-ID: <3C331AB3.7D63ED6A@centurytel.com>
Source record: 151718

Take a look at Superantennas MP-2. Might be what you're looking for.
I use the MP-1 for portable backpacking use. I'm not sure if it
has any weather protection though, but I've heard from others
who are using them as mobile antennas.

http://www.superantennas.com/

Dan, W9FCC

Max wrote:
>
> A couple of years ago I was using a BB3 screwdriver mounted on the trailer
> hitch of my '99 Intrepid. Although it worked not bad, honestly I thought
> the antenna was just too big for the car. On a F350 or tractor trailer they
> might look ok, but it looked out of place on the back of the car. Is there
> a smaller version available, say to cover 40-10m? I don't do too much on 75
> anyway, but I guess I would if I had the antenna right? Just curious if
> anyone makes or can make a smaller version, meaning not as tall or as big a
> diameter to cover 40 and up?
>
> Thanks,
>
> Max ve3tmt@rac.ca

132. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 14:45:41 UTC
From: richardharrison@webtv.net
Message-ID: <19492-3C331D15-378@storefull-112.iap.bryant.webtv.net>
Source record: 151622

Reg wrote:
"Actually those curves are incorrect. They all apply to a soil
permittivity of 15. Real permittivities vary from 3 to 80."

That is a valid criticism, on its face.

Permittivity is measured in Farads per meter.

The earth as a propagation medium for radio waves appears as a
capacitor and resistor in parallel. At very low frequencies,
permittiivity is inconsequential. In the upper HF range, soil resistance
is inconsequential because it is so well bypassed by permittivity.

The fact that the FCC`s curves have been used a million times, the U.S.
must have 10 000 licensed AM broadcast stations, and that measurements
are repeatable while conforming fairly well to the FCC`s curves, attests
to their utility.

In trying to extrapolate the curves it should be noted that at several
times 1.7 MHz the curves are irrelevant due to permittivity which
becomes the medium of propagation.

Best regards, Richard Harrison, KB5WZI

133. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 14:54:23 UTC
From: alevand@yahoo.com
Message-ID: <e52e470e.0201020654.6c2f4dd8@posting.google.com>
Source record: 151620

'Doc <w5lz@icok.net> wrote in message news:<3C322EEE.27BBA327@icok.net>...
> Tony,
> Carbon brushes would cause problems that you shouldn't have
> to worry about if the driven element is stationary. Although,
> 600 rpm is going to be the 'kicker' at anything but UHF. I'm
> wondering what your going to use the antenna for?
> 'Doc
The purpose is direction finding. The advantage over a "Doppler" is 7
dB gain, no switching noise and AM vs phase detection. Basically I
want to have Yagi performance with the hands off and summation of a
"Doppler". A grey code wheel will address the switched capacitor
filter and display. The antenna will have to be dynamically balanced
for the 2 meter band. It should create quite a whir, simular to an
engine cooling fan.

Tony
AA9CC
BSME

134. Re: point AM antenna N-S, station thus located E-W?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 15:03:04 UTC
From: alevand@yahoo.com
Message-ID: <e52e470e.0201020703.709a62c7@posting.google.com>
Source record: 151621

Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net> wrote in message news:<3C323B96.27147D86@coqui.net>...
> Dan Jacobson wrote:
> >
> > I point my dimestore AM radio and thus also its ferrite bar antenna
> > along a north south axis to get best reception of a certain station.
> > What does this tell me about the station's location. Thanks, and
> > sorry for so amateur a question. Mountains affect answer much?
> > --
> > http://www.geocities.com/jidanni/ Tel+886-4-25854780
>
> You will see a distinct directional effect with the typical loopstick.
> Normally its broadside to a ferrite loop for max signal, and yes, you
> can use that feature to separate or ID certain stations.
> Mountains can be a big problem on short distance AM reception...I detect
> that you are in Taiwan?? I have no idea of your conditions but its not
> uncommon outside the USA for stations to have low-power repeaters
> on-frequency which will screw up ideas of where the actual transmitter
> is located.
>
> -Bill

Approximately. A more accurate bearing is had by using the null of the loop.

Tony
AA9CC

135. Connections for a Hygain model Ham IV needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 16:46:19 UTC
From: Jon G2FHF <jon.g2fhf@ntlworld.com>
Message-ID: <xPGY7.42416$4x4.5030161@news2-win.server.ntlworld.com>
Source record: 151623

Please can someone tell me the connections for a Hygain model Ham IV rotator. I have an old one here with no instructions, I would really appreciate the loan of a manual for photocopying and will cover all expenses if someone would be kind enough to help me out.

Thanks in advance

Jon G2FHF

136. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 16:52:54 UTC
From: richardharrison@webtv.net
Message-ID: <19492-3C333AE6-386@storefull-112.iap.bryant.webtv.net>
Source record: 151625

Roy Lewallen wrote:
"Am I mistaken, or can you make the same argument for two parallel elements fed in phase? It`s easy to demonstrate there is coupling,---."

Yes, if one wire is placed close to a second, the field produced by current in one wire will induce voltage in the wire nearby.

If one amp flowing in the first wire induces one volt in the second wire, the mutual inductance is one henry.

Is this mutual inductance relevant to ground radials? I think not.

The current flowing into the radials totals the current into the vertical radiator.. Ideally, in a non-directional antenna, current is equally divided among the radials.

If uncoupled wires are in parallel, their inductive opposition to current is reduced in the same way as parallel resistive opposition to current is reduced. With mutual inductance between the wires in parallel, induced voltage adds to or subtracts from the applied voltage.

Roy suggested I might use my argument to conclude there can`t be any coupling between windings of a 1 : 1 transformer.

There are two ways to connect identical transformer windings, phase aiding and in phase opposition. Assuming perfection, connected one way the sum of the transformer winding voltages is twice the voltage of either winding. Connected the other way the sum of the transformer winding voltages is zero.

If these same transformer windings were used as inductors, connected one way they would total 4X the inductance of a single winding. Connected the other way they would have zero inductance.

So what? We really don`t need to wory about mutual inductance of radials. Ground radials are not resonant as Reg has often stated. We are merely trying to launch and capture radio waves with an antenna of half the height required of a dipole. We can tune out reactance in the radials, whatever it is, to get the maximum power to the antenna system. The function of the ground radials is to get a low-loss ground connection.

Placement of the radials should avoid the antenna system`s displacement current having to flow through the soil. That`s it!

Best regards, Richard Harrison, KB5WZI

137. Re: Best Antenna for FRG-100

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 16:57:30 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <2TgzPKwg5sFh0N+nNNE36DvAGRwU@4ax.com>
Source record: 151624

RayOfLight <kelon100<NOSPAM>@yahoo.com> wrote:

>Hello i am looking forward to buy a Yaesu FRG-100 soon. i am looking
>for the best antenna which will go with it. Size does not matter but t
>should not be too large. Thanks.

Kind of like asking what the best car is... :-)

But for your general coverage HF receiver, you could string a piece of random wire across your floor. Or string it outdoors, as long as you can make it, and as high as you can get it.

There are any number of amplified antennas that will work indoors or out. The Dymek DA100D works very nicely for me. For outdoors pre-made antennas, I've also had good luck with the Alpha Delta DX-SWL 60' sloper.

Once you get your receiver, it will probably have pretty good instructions for antennas in the operating manual, and possibly even include a simple antenna of some sort, a piece of wire or whatever.

Good luck!

(There are books on this subject -- try Universal Radio)

(Also, try Radio Shack. They have antenna kits for swl listening that include wire, insulators, everything you need.)

Bob
k5qwg

138. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 17:16:23 UTC
From: richardharrison@webtv.net
Message-ID: <19492-3C334067-390@storefull-112.iap.bryant.webtv.net>
Source record: 151629

Ray wrote:
"---I have devised my own umbrella lightning protection---."

Hope it works!

If any improvement over what the best AM radio stations use as protection ever appears, I want to know about it.

Best regards, Richard Harrison, KB5WZI

139. Re: GAP Super C

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 17:30:52 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <ovg63u4lin7h7iu198qkt34enqhj3je42v@4ax.com>
Source record: 151626

On Tue, 01 Jan 2002 23:24:09 GMT, "stefano" <sgalast@tin.it> wrote:

>
>
>Hi Richard,
>the gap super C antenna can do the promised job .

Sounds like a testimonial to a recent acquisition of the Brooklyn
Bridge.

>I did early experiments on it looking at the patent.
>He can be really quite efficient.

Obviously, the job performed was not of sufficient caliber.

>BUT is a traditional resonant antenna , on the site they describe very well
>the working principle.
>The only doubt I have is they declare perfect performances over different
>frequencies....
>Is not possible, that antenna can be efficient only on ONE F. On the others
>is a compromise.
>I tested that.

One can only wonder how in the face of other statements.

>
>About eh antenna, please don't be confused.

Your material is sufficient for that.

>The eh antenna works on a totally new application.

Name it.

>I mean the physic laws are well defined and nobody can change them.

non-sequitar.

>The eh antenna works on a new NOT resonant way.

How is that new?

>
>I agree with Roy and other skeptics guys....but...

It always about someone's but (Peewee Herman).

>at the moment we decided to reveal ALL the instructions to have one of it
>built just to show how great can be.

>In the future we will provide any scentific ,indipendent , measures.
>I know can be a criticable strategy, but is the our strategy.

One wonders why you haven't started yet!

>
>Ted Hart will provide , very soon, with a perfect test on a AM version
>following the severe FCC rules.
>In the counter part here, in Italy , we launched the ham version .
>Again, we sent, up today, about 500 documents on the eh practical
>building....

500 documents? Wasn't this suppose to be simple?

>We are collecting a lot of complete success stories on eh , perfectely built
>and compared on a professional ways.
>You can believe it or not, but I can produce all the ham calls having a
>complete success with 1% wav. long ehs producing the SAME efficiency
>respect to full size dipoles.

And so you should if you expect to sell any (your stated goal); hardly
qualifies as proof however.

>
>again we think the better way to decide IF the eh antenna works or not, if
>simply build one of it.

IF!? Methinks you have too little faith.

>It costs almost nothing, is fast to do AND I am here to drive anybody wants
>have a test on it.
>What is the risk?
>YOU could waste some time having fun experimenting with antennas, in other
>words I offer you the possibility to do what any ham should do...experiment
>in the perfect ham spirit.

We would like to see the fruit of your own effort in this regard. To
date it has been breathless prose, a comic paisano vegetable vendor
writing style (this is not a function of translation), and absolutely
no proof of any attempts.

>
>I am here ,just let me know if you want play with it.
>sincerly , stefano IK5IIR

Yeah, sure.

Don't tell me its raining.

73's
Richard Clark, KB7QHC

140. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 17:30:58 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <vvg63u88ana6thh8p31n6kbdnfomjlu0di@4ax.com>
Source record: 151627

On Wed, 2 Jan 2002 04:21:24 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>Actually those curves are incorrect. They all apply to a soil permittivity
>of 15. Real permittivities vary from 3 to 80.
>
>If my memory serves me correct the curves are useless at HF because they
>stop at 1.7 MHz.

Ah Punchinello!

The usual Old Wives fairy tale. Useless?

Knowing the geology (usually available in the form of a "soil map"
from the local commission) and the typical permittivity for the region
from the source offered by Richard, correlations made against those
constituents that MAY vary (and that is hardly to be taken for
granted) can be projected to HF. This variation is more in part to
the water content in the loam than in any exotic electrical properties
(di-electric loss principally) of the various granitic, basaltic, or
anyic continental substructures (gad) you can summon up.

This is the typical abandonment of thinking simply because the "exact"
answer is not available - the sort of argument that allowed fractals
to come to light.

As Richard may agree and expound upon, our common resource found in
one Arnold Bailey offers some interesting data in regard to this
"useless data" (sic).

From his TV and Other Receiving Antennas," page 163 is offered a fine
graph plotting the Intrinsic Impedance of various earths from 100 KHz
to 10 GHz. As this printing is from 1950, the subject was hardly
veiled in the arcana of personal experience and is far more scholarly
than the platitudes of abandonment quoted above.

I shall recap what is encompassed in that fine graph:
Air/Vacuum 377 Ohms over the entire frequency range;
Dry Soil 120 Ohms @100 KHz
Dry Soil 170 Ohms @1.7 MHZ through 10 GHz;
Wet Soil 14 Ohms @100 KHz
Wet Soil 65 Ohms @10 MHz through 10 GHz;
Lake 30 Ohms @100 KHz
Lake 42 Ohms @500 KHz through 10 GHz;
Ocean <1 Ohm @100 KHz
Ocean 14 Ohms @10 MHz

Ocean 72 Ohms @10 GHz

Most of continental America falls into the Dry Soil characteristic with the heartland as Wet Soil. Hard to miss the correlation to the drainage of the Mississippi. The FCC Data offers higher precision, but you are not going to move to the next county and find a vastly better situation, unless it is waterfront property.

If there is any wild card in this data, it is clearly with sea water - not land. For Dry Soil, the FCC 1.7 MHz Data is already calibrated through 10 GHz. For those so unfortunate to live in Wet Soil conditions, you will have to apply a sliding scale (god only knows how hard that is to do without unzipped software).

73's
Richard Clark, KB7QHC

141. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 17:31:04 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <40h63u8uhv68vk4d33bt844k4cneloftju@4ax.com>
Source record: 151628

On Tue, 01 Jan 2002 22:38:41 -0600, CAM <Cecil.A.Moore@IEEE.org>
wrote:

>
>Are you using the above equation in your software?
>

:-)

142. W9INN HPD-3 Antenna Feedback

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 17:48:27 UTC
From: Vince Staffo <vstaffo@twcny.rr.com>
Message-ID: <LJHY7.63348$Fu6.22904154@typhoon.nyroc.rr.com>
Source record: 151630

Has anyone used the W9INN HPD-3-113' or HPD-3-125'
40/80/160 Meter Multi Band Dipole Antenna? I would appreciate
your feedback on its performance!

Thanks,

Vince WB2FYZ

143. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 17:51:50 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <dph63ug1umm8a253c32opa94ij1p04bagc@4ax.com>
Source record: 151631

On Wed, 2 Jan 2002 10:52:54 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>
>Yes, if one wire is placed close to a second, the field produced by
>current in one wire will induce voltage in the wire nearby.
>
>If one amp flowing in the first wire induces one volt in the second
>wire, the mutual inductance is one henry.
>
>Is this mutual inductance relevant to ground radials? I think not.
>
>The current flowing into the radials totals the current into the
>vertical radiator.. Ideally, in a non-directional antenna, current is
>equally divided among the radials.
>

Hi Richard,

This uncharacteristically off the mark for you.

Given that radials are not harmonic due to being swamped by loss (no
Q) AND due to the fact that they are quite close (initially at the
origin, if not in fact as a portion of wavelength); it is the symmetry
that in some large part maintains the balance of individual currents
THROUGH mutual inductance.

73's
Richard Clark, KB7QHC

144. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 17:55:59 UTC
From: richardharrison@webtv.net
Message-ID: <26217-3C3349AF-472@storefull-117.iap.bryant.webtv.net>
Source record: 151633

I wrote:
"Is mutual inductance relevant to ground radials? I think not."

Another way to explain may be that currents in a balanced system will still be balanced if equal deposits and withdrawals are made in each radial. A balanced system will remain balanced because anything given away by coupling to other radials will be received in the same proportion from the other radials in the system.

Not to start a new discussion, but it is something like similar objects in proximity and all at the same temperature, They will be radiating and receiving heat at the same rates if they are arranged symmetrically.

Best regards, Richard Harrison, KB5WZI

145. Newbie Question on VHF half wave dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 18:00:01 UTC
From: sander@icon.co.za
Message-ID: <3c3346e7.10982515@news.saix.co.za>
Source record: 151632

This is probably a really basic question, but here goes...

I want to build a half wave dipole antenna for VHF in the marine range, 156.05MHz to 162.025MHz, in particular 156.80MHz.

I would like to build the two legs using alum. rod (Which I happen to have) in a plastic tube. The question is about the join between the two rods. Obviously I need to isolate the two, but is the distance between them important? Also the length of the two legs are 17.5" ea. Do I measure that from the centre of the isolation, or the actual length? In other words, will the total length be 17.5" x 2, or (17.5" x 2) + length of isolator?

Lastly, are there any problems doing it the way I intend?

Thanks
Sander

146. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 18:21:02 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201021021.74d308b@posting.google.com>
Source record: 151634

StarGazer <pti@capnet.com> wrote in message news:<3C3215BA.6EE4C671@capnet.com>...
> I'd never run more than 500 or 600 Watts.
> If the insulated wire was touching a branch or something.

Shouldn't have any problems with insulated wire, even up to 1500w.
I've "toasted" a few tree branches at the ends "hi-voltage point" on
the antenna where "bare" wire touched green tree branches. But they
need to be somewhat green, and have moisture in them to be able to
conduct. I've never had any problem with insulated wire. Even at the
far ends where the voltage is very high. With a KW, it can be in the
7000-8000 volt range at the ends. About a 1/10th of that for 100w
rigs. Only with bare wire against moist tree branches have I ever seen
this happen, and even then no fire, just a browning of the branches
like someone stuck a bic lighter under them trying to light them and
was unsuccessful. I've never seen a fire. It's possible of course, but
for the branch to be dry enough to burn, it won't be a very good
conductor to ground to start the problem in the first place. All my
wire antennas are thrown though trees. Never have had a problem with
insulated wire. And only very rarely with bare wire, at the ends only,
with a KW plus and damp branches. And even then I didn't notice it
from the shack. My amp didn't flinch. I only noticed it later when I
went out to adjust an antenna leg and saw the fried green branches. I
switched to insulated wire, and have never seen it since. MK

147. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 18:22:08 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <3C334FD0.E11226C0@west.raytheon.com>
Source record: 151635

'Doc wrote:
>
> StarGazer,
> I really doubt if that's something to worry about,
> no matter if the wire is insulated or not. Ruling out
> all the 'stories' that can't be confirmed, have you
> ~ever~ heard of a tree catching on fire from an antenna?
> I haven't...

Not only have I heard of it, I've seen the aftermath of a fire started in a pine tree in contact with an amateur antenna installation.

My guess is that arcing between a high impedance point on the antenna and the tree formed a carbon track over many weeks, or months, of operating at QRO power levels. The cavity became progressively more insulated thermally as it burrowed deeper into the tree. Eventually combustion was self sustaining....

Fortunately the fire was spotted before significant property damage occurred.

bart
wb6hqk

148. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 18:32:25 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <hfk63us05jtr7mng4mh6vcrgujn95aav5a@4ax.com>
Source record: 151636

On 2 Jan 2002 10:21:02 -0800, nm5k@wt.net (Mark Keith) wrote:

>fried green branches

:-)

149. WTB: Icom CR-502 High Stability Xtal Unit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 18:46:13 UTC
From: Neil <DontDoIt@ImNotHere.com>
Message-ID: <u8l63uk0jf9ud2n402fqm30ublo4ej0cd2@4ax.com>
Source record: 151637
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.swap

Hi all. I'm looking for an Icom CR-502 High Stability Crystal Unit.
Please reply to K1VY@arrl.net or call me at one of the numbers below.

Thanks.

Neil
(603) 465-2788
(800) 962-2949
New Hampshire

150. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 18:47:08 UTC
From: richardharrison@webtv.net
Message-ID: <13889-3C3355AC-430@storefull-115.iap.bryant.webtv.net>
Source record: 151642

Richard Clark wrote:
"It is the symmetry that in some large part maintains the balance of individual currents THROUGH mutual inductance."

Yes, tight coupling insures that what happens in one part of a ground sysem strongly affects the rest of the system. I reacted rather than logically explaining. I hope I`ve learned in the process. Sorry my posting may have been unintelligible.

The importance of the radial system is largely replacing 1/2 of a vertical dipole. The radial system`s function is not providing coupling between radials, though that results.

Best regards, Richard Harrison, KB5WZI

151. Re: Newbie Question on VHF half wave dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 18:47:19 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C3355A7.D754073@icok.net>
Source record: 151638

Sander,
The total length would be (17.5" x 2) + insulator. Keep the
length of the insulator fairly short, 1/2" to 1" between
elements(?)
and you should do fine. You may have to adjust the length of
each
element to get the dipole tuned, but it should work pretty well
just as you described it.
'Doc

152. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 18:50:34 UTC
From: jflanders2@home.com
Message-ID: <3c335589.49434043@NEWS>
Source record: 151639

Good to hear that my fears are real. I have always made sure my bare wires do not come near any of my pine branches here and always wondered if I was just wasting my time. I see I am not.

Jerry W4UK (with 3 bare wire dipoles and one insulated one in my SC pines)

On Wed, 02 Jan 2002 10:22:08 -0800, Bart Rowlett <BHRowlett@west.raytheon.com> wrote:

>
>
>'Doc wrote:
>>
>> StarGazer,
>> I really doubt if that's something to worry about,
>> no matter if the wire is insulated or not. Ruling out
>> all the 'stories' that can't be confirmed, have you
>> ~ever~ heard of a tree catching on fire from an antenna?
>> I haven't...
>
>Not only have I heard of it, I've seen the aftermath of a fire started
>in a pine tree in contact with an amateur antenna installation.
>
>My guess is that arcing between a high impedance point on the antenna
>and the tree formed a carbon track over many weeks, or months, of
>operating at QRO power levels. The cavity became progressively more
>insulated thermally as it burrowed deeper into the tree. Eventually
>combustion was self sustaining....
>
>Fortunately the fire was spotted before significant property damage
>occurred.
>
>bart
>wb6hqk

153. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 18:55:18 UTC
From: jflanders2@home.com
Message-ID: <3c33578a.49946724@NEWS>
Source record: 151640

On Wed, 02 Jan 2002 06:14:50 GMT, in rec.radio.amateur.antenna Richard Clark wrote:

>On Tue, 1 Jan 2002 23:20:29 -0000, "Reg Edwards"
><g4fgq.regp@btinternet.com> wrote:
>
>>Hi Richard, so how would YOU determine soil resistivity?
>
>Ah Punchinello!
>
>To use one of your quotes (suitably altered in the following):
>>
>>I've no wish to start a stampede to the US Patents Office. I had no idea
>>that such knowledge was at a premium in Britain. But if anybody would like to
>>buy the idea I'm open for offers. I'm sure you could devise a method
>>which could be used in the average radio shack if you really tried.
>>
>
>Doesn't really answer anything at all does it? ;-)
>
>That was toooo easy.
>
>For the others who have higher technical expectations, I would offer
>the answer is available to anyone with a modeler. Simply put,
>modelers have far more accuracy than your kitchen table approach and
>any measured deviation from the theoretical (courtesy of the modeler)
>must of necessity represent the variables that we are discussing. If
>EZNEC tells me a particular configuration exhibits 37 Ohms resistive
>(we are talking a simple vertical here), and I measure something
>different, it is in all likelihood a difference that I brought to the
>mix - not a fault of the software that has been refined through
>thousands of measured observations - away from the kitchen table.
>
>The last time I pointed this simple remedy out to our glorious Herr
>Doktor's ground warmer, he sputtered on about special mathematics that
>was not included in NEC and the special qualities of Fractals that
>rendered common sense pass&#65533;. Yeah, sure. Perhaps I was off by 10% as
>a function of what he said that was reasonably faithful to the
>prostituted logic; but the face full of spit from his sputtering would
>have suggested I was off by 1000%.
>
>Don't tell me it's raining.
>

>I don't even have to drag a container of dirt indoors to make an
>assessment of its contribution to loss, and I can even measure it as a
>function of frequency, environmental variables, and the like, in situ.
>The single greatest contributor to error is adding your own problems
>and improvising tests that are elaborate beyond necessity.
>
>Your methods are simply too filled with the mystique of fossilized
>academia, leaning on vague and ancient references - common sense
>solutions are available; the work has already been done; the tools are
>robust and available.
>
>73's
>Richard Clark, KB7QHC

Hi Richard

A couple of years ago I posted something on determining characteristics of the area surrounding the radiator (ground, etc) similar to what you describe. I found the old post in the GOOGLE archives and have pasted it below.

I still hope anyone developing the algorithm will email me full instructions and a copy of the computer program ;-)

Jerry W4UK

==========
Message 1 in thread
From: Jerry Flanders (flanders@groupz.net)
Subject: Re: Ground Conductivity Measurement? Here's how (?)
Newsgroups: rec.radio.amateur.antenna
View this article only
Date: 1999/04/16

On Fri, 16 Apr 1999 12:58:00 GMT, wbecks5762@my-dejanews.com wrote:

>Has anyone on this news group had any actual experience at measuring
>ground conductivity at radio frequencies? Can an RF bridge be used?
>
>I am looking for a test method other than a fall of potential test
>using 60 Hz current described by W2FMI that appears in the ARRL Antenna
>Handbook.
>
>Thanks,
>
>Bill - WA8WG

There have been several comments here during the last few months concerning the difficulty of measuring the actual earth ground resistance at RF in the "real-world" situation. From this, I assume that RF engineers have no simple way to determine the RF ground characteristics of interest to the field antenna engineer.

It is likely that we could deduce ground characteristics at a specific frequency by making a series of measurements on a simple antenna as it is brought nearer and nearer to the ground and then reducing the measurement data with an appropriate algorithm to solve for the desired answer.

My scientific intuition tells me that when we measure the properties of an antenna in a given environment, we are actually measuring TWO things - the properties of the antenna AND (indirectly) the properties of the environment. If this is true, then when we make a series of measurements in a series of environments, we should be able to infer the differences in those environments by the differences we observe in the measurement data. All we need is the appropriate way to tease the desired result from the data - i.e., the appropriate rearrangement of the fundamental equations.

As a very simple example of this basic idea, we indirectly measure the dielectric constant of a _nearby_ material every time we take a grid-dip meter or antenna analyzer to a length of coax to determine its velocity factor. We are comparing the resonant frequency of the length of wire inside the coax in two different environments, with the dielectric the only environment variable (and with the "other" environment, the free-space one, calculated, rather than measured). It is all done by re-arranging the basic equations in a way that solves for the parameter we are trying to find.

Thought Experiment:

Take a small loop antenna designed for the frequency of interest and make measurements when that loop is (a) in free space vacuum, (b) in atmosphere at a large distance from the ground to be tested, (c) at progressively closer specific distances to the ground, parallel to it, (d) on the ground. The measurements should include parameters known to be dependent on the ground characteristics of interest.

With the appropriate fundamental equations re-arranged to solve for the desired parameter, we should be able to determine whatever ground characteristics are of interest at the measurement frequency, even perhaps including its distance below the physical surface.

(Anyone developing the algorithm please email me full instructions and a copy of the computer program ;-)

Jerry W4UK
(This is the only article in this thread)

154. Re: A better-built screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 19:06:49 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <2TIY7.354581$er5.8264524@e3500-atl2.usenetserver.com>
Source record: 151641

Bill,

I hadn't thought of it that way, and they actually caught me in a mistake.
I thought I was posting it to a different group, but it ended up here. I
promise I won't post any more screwdriver ads
in here (this month). Thanks for softening the "impact" LOL!

Jerry
K4KWH
Bill Nelson <billn@spock.peak.org> wrote in message
news:a0ud4i$k87$1@quark.scn.rain.com...
> DGB <dgbcms@netnet.net> wrote:
> > 4 days ago was a month?
>
> It was last year.
>
> If this is the only post he makes in January, then he is posting the
> advertisement "once a month".
>
> Bill
>
> --
> Bill Nelson (billn@peak.org)
>

155. Re: Newbie Question on VHF half wave dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 19:34:59 UTC
From: sander@icon.co.za
Message-ID: <3c3460d2.17617031@news.saix.co.za>
Source record: 151643

On Wed, 02 Jan 2002 18:47:19 GMT, 'Doc <w5lz@icok.net> wrote:

>Sander,
> The total length would be (17.5" x 2) + insulator. Keep the
>length of the insulator fairly short, 1/2" to 1" between
>elements(?)
>and you should do fine. You may have to adjust the length of
>each
>element to get the dipole tuned, but it should work pretty well
>just as you described it.
> 'Doc

Now this was a quick reply !

Thanks
S

156. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 19:50:18 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <_vJY7.35246$Z03.22985510@news1.rdc1.mi.home.com>
Source record: 151644

> The purpose is direction finding. The advantage over a "Doppler" is 7
> dB gain, no switching noise and AM vs phase detection. Basically I
> want to have Yagi performance with the hands off and summation of a
> "Doppler". A grey code wheel will address the switched capacitor
> filter and display. The antenna will have to be dynamically balanced
> for the 2 meter band. It should create quite a whir, simular to an
> engine cooling fan.

Having been there, done that, I can tell you that spinning an antenna at this sort of speed is going to be VERY problematic. Your antenna elements will need to be redesigned to withstand the wind forces and centripital forces. Very non-trivial, and we haven't started moving yet. Did I mention low-hanging trees?

When I did this, we scanned at most 2x/sec, with a 5 element yagi, using a sin-cos pot to feed a storage scope. The pattern was easy to interpret, and the rig doubled as a mini antenna range. The antenna could be stopped in less than a second and easily positioned to best negotiate any arboreal hazards.

I'm not sure what the switched cap filter is doing for you here. You should maybe look at sampling the AGC with an ADC, and doing the averaging in ram. Much less hardware. You could do all this in a mid-range AVR.

The display could be a graphic LCD, or a more practical approach might be a GameBoy or Palm Pilot device.

157. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 20:01:36 UTC
From: mike.luther@ziplog.com
Message-ID: <u36pp0naq8u5c9@corp.supernews.com>
Source record: 151645

In <19492-3C334067-390@storefull-112.iap.bryant.webtv.net>, richardharrison@webtv.net (Richard Harrison) writes:

Richard,

>Ray wrote:
>"---I have devised my own umbrella lightning protection---."

>Hope it works!

>If any improvement over what the best AM radio stations use as
>protection ever appears, I want to know about it.

>Best regards, Richard Harrison, KB5WZI

This is like that cat that ate the cheese and waited in front of the mousehole with baited breath! The etimology of the word parasol springs to mind like one thrust out in a gigantic thunderstorm! ;)

--> Sleep well; OS/2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

158. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 21:12:57 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <0rs63uk61u7puu6rdf3c38higafh1i3un8@4ax.com>
Source record: 151646

On Wed, 02 Jan 2002 18:55:18 GMT, jflanders2@home.com (Jerry Flanders) wrote:

>Hi Richard
>
>A couple of years ago I posted something on determining
>characteristics of the area surrounding the radiator (ground, etc)
>similar to what you describe. I found the old post in the GOOGLE
>archives and have pasted it below.
>
>I still hope anyone developing the algorithm will email me full
>instructions and a copy of the computer program ;-)
>
>Jerry W4UK
>
>==========
>Message 1 in thread
>From: Jerry Flanders (flanders@groupz.net)
>Subject: Re: Ground Conductivity Measurement? Here's how (?)
>Newsgroups: rec.radio.amateur.antenna
>View this article only
>Date: 1999/04/16
>
>
>On Fri, 16 Apr 1999 12:58:00 GMT, wbecks5762@my-dejanews.com wrote:
>
>>Has anyone on this news group had any actual experience at measuring
>>ground conductivity at radio frequencies? Can an RF bridge be used?
>>
>>I am looking for a test method other than a fall of potential test
>>using 60 Hz current described by W2FMI that appears in the ARRL Antenna
>>Handbook.
>>
>>Thanks,
>>
>>Bill - WA8WG
>
>There have been several comments here during the last few months
>concerning the difficulty of measuring the actual earth ground
>resistance at RF in the "real-world" situation. From this, I assume
>that RF engineers have no simple way to determine the RF ground
>characteristics of interest to the field antenna engineer.
>
>It is likely that we could deduce ground characteristics at a specific

>frequency by making a series of measurements on a simple antenna as it
>is brought nearer and nearer to the ground and then reducing the
>measurement data with an appropriate algorithm to solve for the
>desired answer.
>
>My scientific intuition tells me that when we measure the properties
>of an antenna in a given environment, we are actually measuring TWO
>things - the properties of the antenna AND (indirectly) the
>properties of the environment. If this is true, then when we make a
>series of measurements in a series of environments, we should be able
>to infer the differences in those environments by the differences we
>observe in the measurement data. All we need is the appropriate way to
>tease the desired result from the data - i.e., the appropriate
>rearrangement of the fundamental equations.
>
>As a very simple example of this basic idea, we indirectly measure the
>dielectric constant of a _nearby_ material every time we take a
>grid-dip meter or antenna analyzer to a length of coax to determine
>its velocity factor. We are comparing the resonant frequency of the
>length of wire inside the coax in two different environments, with
>the dielectric the only environment variable (and with the "other"
>environment, the free-space one, calculated, rather than measured).
>It is all done by re-arranging the basic equations in a way that
>solves for the parameter we are trying to find.

This also goes by the term "Substitution" in the parlence of
Metrology; that is, you swap in a known for an unknown and observe the
differences.

My approach would be to accept the results of modeling as the "known,"
make measurements of the results of its implementation, "the unknown."
The differences are going to be far more attributable to the local
variables than the modeler.

Seems far more accurate than reading the dielectric constant of mud in
the kitchen sink.
>
>Thought Experiment:
>
>Take a small loop antenna designed for the frequency of interest and
>make measurements when that loop is (a) in free space vacuum, (b) in
>atmosphere at a large distance from the ground to be tested, (c) at
>progressively closer specific distances to the ground, parallel to it,
>(d) on the ground. The measurements should include parameters known to
>be dependent on the ground characteristics of interest.

My point (being picky here) was that you can skip steps a and b above
by substituting a modeler, especially for such a conservative design.

>
>With the appropriate fundamental equations re-arranged to solve for
>the desired parameter, we should be able to determine whatever ground

>characteristics are of interest at the measurement frequency, even
>perhaps including its distance below the physical surface.
>
>(Anyone developing the algorithm please email me full instructions and
>a copy of the computer program ;-)
>
>Jerry W4UK
>(This is the only article in this thread)

Hi Jerry,

>My scientific intuition tells me that when we measure the properties
>of an antenna in a given environment, we are actually measuring TWO
>things - the properties of the antenna AND (indirectly) the
>properties of the environment.

rings clear!

Balance this with trudging a box full of dirt into the kitchen - an
old wive's domain.

73's
Richard Clark, KB7QHC

159. Re: Discone HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 21:33:31 UTC
From: Karl Beckman <Karl.Beckman@Motorola.com>
Message-ID: <a0vub0$d90$1@newshost.mot.com>
Source record: 151648

There was a later work with "NVIS" in the title (published within the last four years) which involved using a Radio Shack 40 ft push-up TV mast and four guy wires/elements, with an autotuner at the base. The 50 ft guywires were broken with egg insulators at the halfway point, from which the elements return to just above the bottom of the mast.

I envision something like a "hula hoop" at the bottom of the wires to keep them from shorting to the steel mast, which was directly earthed with four buried radials running out to the guy anchors. I am still in the mental fabrication phase, having only driven some wood stakes to mark where the base and anchors would land in the flower beds.

--
Karl Beckman, PE
Amateur Radio since 1964 WA8NVW WA8NVW@ARRL.net
West Park Radiops Club W8VM SkyWARN NWS-Cle WX8CLE
U.S. Navy MARS NNN0VBH NNN0VBH@NavyMARS.org

"Roger Halstead" <rdhalste@tm.net> wrote in message
news:nDdY7.87$5d.14901@newshog.newsread.com...
>
> "Bob Miller" <bamiller@texas.net> wrote in message
> news:p5wwPOx4Y9DA914HM1oyBW7th3el@4ax.com...
> > rsmtmn@aol.com (RSMTMN) wrote:
> >
> > >Years ago I saw a detailed article on how to build a HF discone antenna
> that
> > >used a 40' mast as a center point, but I can nolonger figure out where
I
> saw
> > >the article.. Does anyone know where a person could find information
for
> > >building a HF Discone?
> > >
> > >Thanks,
> > >Dan
> > >
> > >rsmtmn@aol.com
> >
> > My 19th edition ARRL Antenna Book describes an HF discone antenna with a
> 40 foot
> > A-frame wood mast as the center point. The article gives theory and
> detailed
> > construction info. The chapter also references QST, July 1975 for an HF

> discone
> > article by J.S. Belrose.
>
> That's the one of which I was thinking.
>
>
> --
> Roger (K8RI - EN73)
> WWW.RogerHalstead.com
> N833R World's oldest Debonair? (S#CD-2)
>
> >
> > Bob
> > k5qwg
> >
>
>

160. Re: Icom CR-502 High Stability Xtal Unit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 21:34:21 UTC
From: DL7JSK <truckdrivingman@hotmail.com>
Message-ID: <a0vue7ien07$1@news.t-online.com>
Source record: 151647
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.swap

Me too.Please reply to tom.ansorg@t-online.de

Thanx and 73
Tom

"Neil" <DontDoIt@ImNotHere.com> schrieb im Newsbeitrag
news:u8l63uk0jf9ud2n402fqm30ublo4ej0cd2@4ax.com...
> Hi all. I'm looking for an Icom CR-502 High Stability Crystal Unit.
> Please reply to K1VY@arrl.net or call me at one of the numbers below.
>
> Thanks.
>
> Neil
> (603) 465-2788
> (800) 962-2949
> New Hampshire
>

161. Re: Discone HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 22:09:03 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3C3384FF.EAB57492@iquest.net>
Source record: 151649

It sounds as you are referring to a small version of the NORD which has
been around for decades. Used by the Navy regularly. See Capt. Paul
Lee's excellent vertical handbook for more details. This wasn't a
design for NVIS applications - they sought broadband abilities. A couple
of these have turned up surplus and in the hands of amateurs.

Bests

Patrick
W9GTA

Karl Beckman wrote:
>
> There was a later work with "NVIS" in the title (published within the last
> four years) which involved using a Radio Shack 40 ft push-up TV mast and
> four guy wires/elements, with an autotuner at the base. The 50 ft guywires
> were broken with egg insulators at the halfway point, from which the
> elements return to just above the bottom of the mast.
>
> I envision something like a "hula hoop" at the bottom of the wires to keep
> them from shorting to the steel mast, which was directly earthed with four
> buried radials running out to the guy anchors. I am still in the mental
> fabrication phase, having only driven some wood stakes to mark where the
> base and anchors would land in the flower beds.
>
> --
> Karl Beckman, PE
> Amateur Radio since 1964 WA8NVW WA8NVW@ARRL.net
> West Park Radiops Club W8VM SkyWARN NWS-Cle WX8CLE
> U.S. Navy MARS NNN0VBH NNN0VBH@NavyMARS.org
> ---
>
> "Roger Halstead" <rdhalste@tm.net> wrote in message
> news:nDdY7.87$5d.14901@newshog.newsread.com...
> >
> > "Bob Miller" <bamiller@texas.net> wrote in message
> > news:p5wwPOx4Y9DA914HM1oyBW7th3el@4ax.com...
> > > rsmtmn@aol.com (RSMTMN) wrote:
> > >
> > > >Years ago I saw a detailed article on how to build a HF discone antenna
> > that
> > > > >used a 40' mast as a center point, but I can nolonger figure out where
> I
> > saw
> > > > >the article.. Does anyone know where a person could find information

> for
> > > >building a HF Discone?
> > > >
> > > >Thanks,
> > > >Dan
> > > >
> > > >rsmtmn@aol.com
> > >
> > > My 19th edition ARRL Antenna Book describes an HF discone antenna with a
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> > > construction info. The chapter also references QST, July 1975 for an HF
> > discone
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> >
> > That's the one of which I was thinking.
> >
> >
> > --
> > Roger (K8RI - EN73)
> > WWW.RogerHalstead.com
> > N833R World's oldest Debonair? (S#CD-2)
> >
> > >
> > > Bob
> > > k5qwg
> > >
> >
> >

162. Re: Connections for a Hygain model Ham IV needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 22:34:39 UTC
From: Jon G2FHF <jon.g2fhf@ntlworld.com>
Message-ID: <7WLY7.45217$4x4.5331794@news2-win.server.ntlworld.com>
Source record: 151650

Thank you to all who have emailed me with the connections for the rotator,
I'll be connecting it up at the weekend in preparation for my new quad.

Jon G2FHF

"Jon G2FHF" <jon.g2fhf@ntlworld.com> wrote in message
news:xPGY7.42416$4x4.5030161@news2-win.server.ntlworld.com...
> Please can someone tell me the connections for a Hygain model Ham IV
> rotator. I have an old one here with no instructions, I would really
> appreciate the loan of a manual for photocopying and will cover all
expenses
> if someone would be kind enough to help me out.
>
> Thanks in advance
>
> Jon G2FHF
>
>

163. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 22:47:34 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C338E06.D02F6937@IEEE.org>
Source record: 151651

Reg Edwards wrote:

After correcting the formula in the ARRL Handbook, my latest results
using matched line loss for 450 ohm ladder-line = 0.075dB/100ft:

> 0.375 lambda dipole, 130 feet of 450-ohm 14AWG feedline, SWR=21, overall
> loss, Tx to free space, including tuner = 1.2 dB.

0.375WL dipole, 130ft of 450 ohm ladder-line on 3.8MHz:
SWR at antenna 19:1, T-line loss 0.88dB, not including tuner losses.

> 0.333 lambda dipole, same feedline, SWR=38, overall loss including tuner =
> 1.9 dB

0.33WL dipole, 130ft of 450 ohm ladder-line on 3.8MHz:
SWR at antenna 66:1, T-line loss 2.5dB, not including tuner losses.

0.5WL dipole, 130ft of 450 ohm ladder-line on 3.8MHz:
SWR at antenna 7.5:1, T-line loss 0.36dB, not including tuner losses.
--
cheers, CAM http://www.qsl.net/w5dxp

164. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 22:52:54 UTC
From: alevand@yahoo.com
Message-ID: <e52e470e.0201021452.2cb1fcea@posting.google.com>
Source record: 151652

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:<_vJY7.35246$Z03.22985510@news1.rdc1.mi.home.com>...
> > The purpose is direction finding. The advantage over a "Doppler" is 7
> > dB gain, no switching noise and AM vs phase detection. Basically I
> > want to have Yagi performance with the hands off and summation of a
> > "Doppler". A grey code wheel will address the switched capacitor
> > filter and display. The antenna will have to be dynamically balanced
> > for the 2 meter band. It should create quite a whir, simular to an
> > engine cooling fan.
>
> Having been there, done that, I can tell you that spinning an antenna at
> this sort of speed is going to be VERY problematic. Your antenna elements
> will need to be redesigned to withstand the wind forces and centripital
> forces. Very non-trivial, and we haven't started moving yet. Did I mention
> low-hanging trees?
>
> When I did this, we scanned at most 2x/sec, with a 5 element yagi, using a
> sin-cos pot to feed a storage scope. The pattern was easy to interpret, and
> the rig doubled as a mini antenna range. The antenna could be stopped in
> less than a second and easily positioned to best negotiate any arboreal
> hazards.
>
> I'm not sure what the switched cap filter is doing for you here. You should
> maybe look at sampling the AGC with an ADC, and doing the averaging in ram.
> Much less hardware. You could do all this in a mid-range AVR.
>
> The display could be a graphic LCD, or a more practical approach might be a
> GameBoy or Palm Pilot device.

Been there done that also, six elements broadside interfaced through
the joystick port. I want to spin it faster with only a director and
reflector. Trees are trees at 40 mph, no matter if the antenna is
spinning or not.

Tony

165. Re: Newbie Question on VHF half wave dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 23:06:54 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C3392DA.8FBE76ED@home.com>
Source record: 151653

If you are putting it in PVC make the conductors copper. This will make
it easy to attach the wire!
Les, AA4F

sander wissing wrote:
>
> On Wed, 02 Jan 2002 18:47:19 GMT, 'Doc <w5lz@icok.net> wrote:
>
> >Sander,
> > The total length would be (17.5" x 2) + insulator. Keep the
> >length of the insulator fairly short, 1/2" to 1" between
> >elements(?)
> >and you should do fine. You may have to adjust the length of
> >each
> >element to get the dipole tuned, but it should work pretty well
> >just as you described it.
> > 'Doc
>
> Now this was a quick reply !
>
> Thanks
> S

166. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 23:19:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a108q4$nba8m$1@ID-124126.news.dfncis.de>
Source record: 151658

> >Are you using the above equation in your software?
==========
Rest assured, if it comes from the ARRL handbooks, I'm not. ;o)

167. Re: Smaller versions of screwdrivers??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-02 23:38:55 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a108q6$nba8m$2@ID-124126.news.dfncis.de>
Source record: 151657

```
> It works pretty well
> on 20m-10m.
> --
ANYTHING will work pretty well on 20m-10m.
```

168. What is Hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 00:05:21 UTC
From: Ace_On_Par3 <pwhelton@hal-pcNOSPAM.org>
Message-ID: <a10783$16nn$1@news.hal-pc.org>
Source record: 151655

I see the term "hard line" used frequently. What exactly is hard line?

169. Re: Newbie Question on VHF half wave dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 00:11:59 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3C33A1CF.29148B18@one.net>
Source record: 151654

The total length should be 17.5 x 2. The length of the insulator does not factor into the desired length of the dipole, provided you don't make the insulator absurdly long.

A 35-inch dipole will be resonant at about 159 to 160 MHz, depending on how fat your element is. If you have a 1/2-inch-long insulator at the center, the overall length of the dipole still needs to be 35 inches - not 35.5 inches.

... Rich

'Doc wrote:
>
> Sander,
> The total length would be (17.5" x 2) + insulator. Keep the
> length of the insulator fairly short, 1/2" to 1" between
> elements(?)
> and you should do fine. You may have to adjust the length of
> each
> element to get the dipole tuned, but it should work pretty well
> just as you described it.
> 'Doc

170. Re: DXERS UNLIMITED SATURDAY, DECEMBER 29, 2001 Arnie Coro CO2KK

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 00:16:18 UTC
From: Trevor Day <Trev@southwestuk.demon.co.uk>
Message-ID: <H+bytvGSL6M8EwrD@southwestuk.demon.co.uk>
Source record: 151656
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur

In article <3C322900.7B5CD0E5@coqui.net>, Your Friend Bill <"Remove The
NO In The Reply To Address"@coqui.net> writes
>Loretta Shuster wrote:
>>
>> You were quite right about 6 meters for the last 5 days. Condx have been
>> terrific from just my mobile station with a 1/4 wave vertical and 100 watts
>> in Virginia USA.
>>
>> I've been working Europe and the Carribean quite a bit. Even heard a JY9
>> (Jordan) today on 6 meters but the pileups were too much for my little
>> station.
>
>Superb. I'm a TV/FM=DX monitor in Puerto Rico and am not catching any
>signs of the openings. Can you suggest any times that you see these
>openings?
>-Bill WX4A
>
The Caribbean has been open from the UK on 6m daily from around 1130Z
for several days now Bill. You should be able to hear Band I TV sigs
from Eu from around this time.
gl Trev G3ZYY

PS, wkd CO8DM this lunchtime for a new one on 6m :)))
--
Trevor Day

171. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 00:32:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a108q8qrf1@paris.btinternet.com>
Source record: 151660

Mark, what an excellent deposition. More pleae !
==========

Mark Keith <nm5k@wt.net> wrote in message
news:25eb70d7.0201021021.74d308b@posting.google.com...
> StarGazer <pti@capnet.com> wrote in message
news:<3C3215BA.6EE4C671@capnet.com>...
> > I'd never run more than 500 or 600 Watts.
> > If the insulated wire was touching a branch or something.
>
>
> Shouldn't have any problems with insulated wire, even up to 1500w.
> I've "toasted" a few tree branches at the ends "hi-voltage point" on
> the antenna where "bare" wire touched green tree branches. But they
> need to be somewhat green, and have moisture in them to be able to
> conduct. I've never had any problem with insulated wire. Even at the
> far ends where the voltage is very high. With a KW, it can be in the
> 7000-8000 volt range at the ends. About a 1/10th of that for 100w
> rigs. Only with bare wire against moist tree branches have I ever seen
> this happen, and even then no fire, just a browning of the branches
> like someone stuck a bic lighter under them trying to light them and
> was unsuccessful. I've never seen a fire. It's possible of course, but
> for the branch to be dry enough to burn, it won't be a very good
> conductor to ground to start the problem in the first place. All my
> wire antennas are thrown though trees. Never have had a problem with
> insulated wire. And only very rarely with bare wire, at the ends only,
> with a KW plus and damp branches. And even then I didn't notice it
> from the shack. My amp didn't flinch. I only noticed it later when I
> went out to adjust an antenna leg and saw the fried green branches. I
> switched to insulated wire, and have never seen it since. MK

172. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 00:32:10 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a108q9qrf2@paris.btinternet.com>
Source record: 151659

> >Are you using the above equation in your software?
> >
No, I am not. Never heard of it. If it has been descibed correctly it is a load of nonsense.

173. Re: What is Hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 00:43:34 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C33A936.A401732A@dialpoint.net>
Source record: 151661

It is often used to describe a type of coaxial cable where the outer conductor is made of solid material like a copper pipe or aluminum pipe instead of flexiable wire. It is usually lower loss than regular coax of the same diameter and is 100 % shielded. The smaller hardline can be bent to some extent like copper water pipe but you have to use a large bending radius.

Ace_On_Par3 wrote:
>
> I see the term "hard line" used frequently. What exactly is hard line?

174. Re: DXERS UNLIMITED SATURDAY, DECEMBER 29, 2001 Arnie Coro CO2KK

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 00:50:27 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C33AAD3.4D0B4460@coqui.net>
Source record: 151662
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur

Trevor Day wrote:
>
> >
> The Caribbean has been open from the UK on 6m daily from around 1130Z
> for several days now Bill. You should be able to hear Band I TV sigs
> from Eu from around this time.
> gl Trev G3ZYY
>
> PS, wkd CO8DM this lunchtime for a new one on 6m :)))
> --
> Trevor Day

Thanks for the info. Will give a serious listen tomorrow morning.
-Bill

175. Re: HY-Gain 18AVT

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 00:57:15 UTC
From: Alan Caplan <alan.caplan@att.net>
Message-ID: <L%NY7.582$fe1.44702@bgtnsc06-news.ops.worldnet.att.net>
Source record: 151663

Unless you can get a trap tuning guide and the exact spacers to
hold the coil and a good grid dip meter you will spend 6 months
trying to get it going. If traps were taken apart it is hope less endeavor.

Alan K4AVQ, Hy-gain customer service 1976-82, Sales Mgr.
Amateur Products 1982-1993 Telex-Hy-gain.

176. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 00:58:09 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <B0OY7.106564$Y6.10408801@news1.rdc1.ct.home.com>
Source record: 151664

For a start, establish a common grounding window at the set. They make
a power strip with F connectors that allows the coax and power line to share
a common ground. This helps limit ground paths through the equipment. The
TV and power pack for the antenna should be plugged into the strip.

Install a good whole-house surge arrestor in you breaker box.

Run the TV coax to coaxial ground fixture that is directly grounded at an
outside
ground rod, before the cable enters the house. This should be the same
ground rod used for the home electrical panel and meter box.

This will reduce your chances for damage, but not eliminate it.

"RayOfLight @yahoo.com>" <kelon100<NOSPAM> wrote in message
news:kp613ugp8t4el11bojk2s3i6k5vt28mc4f@4ax.com...
> I am new to radio/TV reception and i use a 'flying saucer' antenna for
> TV reception. But in the tropical country i live in we get heavy rains
> with lightning and thunder and it is quite common to get TV's burnt up
> because of that.
>
> The precaution i take is to disconnect the antenna from the TV each
> time such conditions are present. But i am looking for the best way to
> protect the antenna from such weather conditions and also much of the
> time i am not at home so i cannot disconnect the antenna and the TV
> may blow up anytime.
>
> Thanks for helping me out :)
>
> Regards,
>
> RayOfLight
>

177. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 00:58:09 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C33ACA1.BE9E2D80@IEEE.org>
Source record: 151665

Reg Edwards wrote:
>
> > >Are you using the above equation in your software?
> > >
> No, I am not. Never heard of it. If it has been descibed correctly it is a
> load of nonsense.

The equation is Total Loss = 10 log ((a^2 - |Rho|^2)/(a(1-|Rho|^2))
where a = 10^(ML/10) and Rho = (SWR-1)/(SWR+1)
ML is matched line loss and SWR is at the load.
The equation for the SWR at the source is (a+|Rho|)/a-|Rho|)
Anybody know where these equations came from?
--
cheers, CAM http://www.qsl.net/w5dxp

178. Re: Hy-Gain HT 18 Tower Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:01:33 UTC
From: Alan Caplan <alan.caplan@att.net>
Message-ID: <N3OY7.587$fe1.44827@bgtnsc06-news.ops.worldnet.att.net>
Source record: 151666

You are correct there was a switching article in now
gone Ham Radio Mag. The coil and upper insulators
would only take legal power that used to be in effect
in the late 50's when I think it was 150 watts.

If you want more info send e-mail.

Alan K4AVQ
ex: Hy-gain 1976 to 1993.

179. LDG AT-11 MP Automatic Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:02:52 UTC
From: Diablo <diablo_42@hotmail.com>
Message-ID: <u37berk80nct82@corp.supernews.com>
Source record: 151667

Does anybody have any experience with the LDG AT-11 MP Auto Antenna Tuner? I just got one, and after the first attempt at tuning the antenna, it fails to give the proper power up indication. When I press the tune button, it seems to find a match, but when I go back to receive, both needles continuously bounce to full scale and back to zero. I'm not sure if it's something I did or if it has a problem from the factory. I can load and tune the antenna using a manual tuner.

Thanks,

Bob WA7VKF

180. Re: communicators

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:16:20 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c33b484_2@news1.prserv.net>
Source record: 151668

You want to find information on the original TACAN systems, where they did exactly what you propose, and it was a 7 element yagi at 900 RPM IIRC.

--
Crazy George
Remove NO and SPAM from return address
Tony Levand <alevand@yahoo.com> wrote in message
news:e52e470e.0201010904.fdab41@posting.google.com...
> I want to built a spinning antenna, 600 rpm or more. I was considering
> a 3 element Yagi-Uda, with the driven element a static mast with
> director and reflector rotating about. This complicates the drive
> arrangement. Would using carbon brushes typically found in electric
> motors on copper rings introduce much noise?
>
> Tony
> AA9CC

181. Re: Help - Harris RF-3281 Antenna Coupler

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:27:08 UTC
From: WEMA Account #1 <wema1@wyoming.com>
Message-ID: <3c33b128$1_1@corp.newsgroups.com>
Source record: 151569
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,uk.radio.amateur

Martin,

I hope this information is of use to you, as your post is a couple of months old. This information is from the Harris service manual

1) The operating Voltage of the unit (PSU requirements)
13.6 VDC +/- 20%, 1.3 Amp typical

2) The tuning range
The operating frequency is 1.6 to 32 MHz

3) The minimum wire / whip length that can be used
1.6 - 32 MHz - Longwire, dipole, and 24-35 ft. whip
2.0 - 32 MHz - 16 ft. whip
4.0 - 32 MHz - 9 ft. whip

4) The maximum transmitter power the ATU will handle
RF input power: 125 watts PEP voice duty, 30 watts average

One item to be aware of when choosing antennas:

"JMP4 must not be installed when the RF-3281 is operating into a whip antenna from 9 to 35 feet long (2.7 to 10.7 meters). This combination may result in an overcurrent condition at low operating frequencies.

"Installing JMP4 configures the antenna coupler matching network for long-wire antennas from 75 to 150 feet (22.9 to 45.7 meters). When the jumper is installed, additional shunt capacitance is added to the antenna connection. THis capacitance is required to overcome the inductive impedence of the long-wire antennas when operated at frequencies where the electrical length of the antenna is between 1/4 and 1/2 wavelength."

Brian Grimm, N7QJB
Communications Officer
Wyoming Emergency Management Agency

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

182. Re: Discone HF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:31:09 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <82d73ugbk7u807o8nnc72ul3mejc0d0676@4ax.com>
Source record: 151570

I have to second Patrick's suggestion, an excellent reference.

73's
Richard Clark, KB7QHC

On Wed, 02 Jan 2002 17:09:03 -0500, Patrick Croft <mai@iquest.net>
wrote:

>It sounds as you are referring to a small version of the NORD which has
>been around for decades. Used by the Navy regularly. See Capt. Paul
>Lee's excellent vertical handbook for more details. This wasn't a
>design for NVIS applications - they sought broadband abilities. A couple
>of these have turned up surplus and in the hands of amateurs.
>
>Bests
>
>Patrick
>W9GTA
>
>
>Karl Beckman wrote:
>>
>> There was a later work with "NVIS" in the title (published within the last
>> four years) which involved using a Radio Shack 40 ft push-up TV mast and
>> four guy wires/elements, with an autotuner at the base. The 50 ft guywires
>> were broken with egg insulators at the halfway point, from which the
>> elements return to just above the bottom of the mast.
>>
>> I envision something like a "hula hoop" at the bottom of the wires to keep
>> them from shorting to the steel mast, which was directly earthed with four
>> buried radials running out to the guy anchors. I am still in the mental
>> fabrication phase, having only driven some wood stakes to mark where the
>> base and anchors would land in the flower beds.
>>
>> --
>> Karl Beckman, PE
>> Amateur Radio since 1964 WA8NVW WA8NVW@ARRL.net
>> West Park Radiops Club W8VM SkyWARN NWS-Cle WX8CLE
>> U.S. Navy MARS NNN0VBH NNN0VBH@NavyMARS.org
>> --
>>
>> "Roger Halstead" <rdhalste@tm.net> wrote in message
>> news:nDdY7.87$5d.14901@newshog.newsread.com...
>> >
>> > "Bob Miller" <bamiller@texas.net> wrote in message

>> > news:p5wwPOx4Y9DA914HM1oyBW7th3el@4ax.com...
>> > > rsmtmn@aol.com (RSMTMN) wrote:
>> > >
>> > > >Years ago I saw a detailed article on how to build a HF discone antenna
>> > that
>> > > >used a 40' mast as a center point, but I can nolonger figure out where
>> I
>> > saw
>> > > >the article.. Does anyone know where a person could find information
>> for
>> > > >building a HF Discone?
>> > > >
>> > > >Thanks,
>> > > >Dan
>> > > >
>> > > >rsmtmn@aol.com
>> > >
>> > > My 19th edition ARRL Antenna Book describes an HF discone antenna with a
>> > 40 foot
>> > > A-frame wood mast as the center point. The article gives theory and
>> > detailed
>> > > construction info. The chapter also references QST, July 1975 for an HF
>> > discone
>> > > article by J.S. Belrose.
>> >
>> > That's the one of which I was thinking.
>> >
>> >
>> > --
>> > Roger (K8RI - EN73)
>> > WWW.RogerHalstead.com
>> > N833R World's oldest Debonair? (S#CD-2)
>> >
>> > >
>> > > Bob
>> > > k5qwg
>> > >
>> >
>> >

183. MFJ 259 self service

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:38:29 UTC
From: maildoc <maildoc@ananzi.co.za>
Message-ID: <pCOY7.13852$CS6.4442641@typhoon.jacksonville.mediaone.net>
Source record: 151574

Need help on servicing the 259.If you have a SERVICE note or know how to calibrate the SWR IMPEDANCE meters (mine is >6 years old) please reply.For example the SWR reads 2.0 at 25 ohms only at the lower freqeuencies <40Mhz and then sails around.
Replies are welcome
Thank you
MOT

184. Ladder Line Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:43:55 UTC
From: Richard Myers <kb1flr@hotmail.com>
Message-ID: <vHOY7.50257$Sj1.20716644@typhoon.ne.mediaone.net>
Source record: 151572

Hi All,

Would it be possible to construct a simple portable antenna using just ladder line? What I mean is, could you take 82 feet of 450 ohm ladder line and separate 51 feet to make both halves of the dipole with the rest becoming feedline to a balun and tuner for an instant G5RV? I do a lot of portable operating which means generally very inefficient antennas. I would like to have a simple, easy to carry antenna with a bit more efficiency, especially for emergency situations.

Any opinions would be greatly appreciated.

73 de KB1FLR, Rick

185. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:46:47 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <pvd73uk86e8p699sshlf8o2shbus603kc2@4ax.com>
Source record: 151571

On Wed, 02 Jan 2002 16:47:34 -0600, CAM <Cecil.A.Moore@IEEE.org>
wrote:

>> 0.333 lambda dipole, same feedline, SWR=38, overall loss including tuner =
>> 1.9 dB
>
>0.33WL dipole, 130ft of 450 ohm ladder-line on 3.8MHz:
>SWR at antenna 66:1, T-line loss 2.5dB, not including tuner losses.
>

Hi Cecil,

You need one of them tuners!

;-)

73's
Richard Clark, KB7QHC

186. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:47:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a10d6m$3c4$1@paris.btinternet.com>
Source record: 151573

Determining soil resistivity from samples in the kitchen sink is the correct way of going about it. Some of my most critical measurements have been made in galvanised buckets sitting on the floor. (The buckets, dolt - not me.)

The derived values are, by definition, independent of the size of the sample.

When the sample size is small relative to a wavelength AT THE PROPAGATION VELOCITY IN THE SOIL ITSELF measurement errors due to the dimensions of the test leads are minimised.

Since the measured impedances (not the derived values) must be in the range best accommodated by the impedance measuring instrument there are restrictions on the size and shape of the sample. It follows there are similar restrictions on the measuring instrument itself.

The advent of hand-held 'antenna analysers' has made HF kitchen sink measurements feasible for the amateur. They are the best thing since sliced bread. Can be made better.

It now remains only for antenna analysers to provide the sign of plus or minus jX.

The necessary technology has been available for 10 or so years. Delays in putting such instruments on the market is due solely to the need for manufacturers to introduce the facilities in easy graduated phases, so maximising the profits.

The profit motive has much to answer for ! ;o)

****
Regards, Reg G4FGQ
Radio Modelling Programs.
Help yourself to a free lunch.
Http://www.g4fgq.com
****

187. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:50:56 UTC
From: AB7RS <ab7rs@arrl.net>
Message-ID: <u37e97mhucooe8@corp.supernews.com>
Source record: 151575

Had it happen,end of dipole near or touching a few dry leaves and the power level was only 300 watts.This was during an outing and the antenna had only been up for an hour.

"StarGazer" <pti@capnet.com> wrote in message
news:3C3215BA.6EE4C671@capnet.com...
> I'd never run more than 500 or 600 Watts.
> If the insulated wire was touching a branch or something.
>
>

188. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 01:51:50 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201021751.326fa672@posting.google.com>
Source record: 151576

Roy Lewallen <w7el@eznec.com> wrote in message news:<3C30C647.14DEAC10@eznec.com>...
> The only problem with this simplified analysis is that can produce
> conclusions that don't agree with experimental measurements. At least
> one problem is that it doesn't account for the considerable coupling
> among radials that takes place. It does, however, reach the right
> conclusion if there aren't a large number of radials.
>
> Brown, Lewis, and Epstein showed measurements of radial currents in
> their 1937 paper. While the current drops fairly rapidly when there
> aren't many radials, the measurement of current with 113 radials (the
> largest number they used, because they ran out of wire) shows the
> following: The current is very nearly constant out to a distance of
> about 0.125 wavelength (all values are in free-space wavelengths), then
> drops to about 60% at 0.25 wavelength, rises again to about 85% at 0.32
> wavelength, drops again to about 65% at 0.375 wavelength. So there's
> very significant current flowing at a distance of around 0.4 free-space
> wavelength when a large number of radials are used. With 60 radials, the
> current hits a minimum of about 25% at about 0.23 wavelength, then rises
> to about 35% at 0.375 wavelength, then drops again. These are from their
> Fig. 42 on p. 781. NEC-4, which is able to model buried conductors,
> gives results reasonably similar to Brown, Lewis, and Epstein's for
> field strength and impedance, and shows a similar current distribution
> along the radials.
>
> A simplified, but reasonably accurate, summary of Brown, Lewis, and
> Epstein's conclusions is that if the radials are short, adding more
> radials doesn't help a whole lot. And if there are only a few radials,
> making them longer doesn't help a whole lot.
>
> In practice, it's seldom useful for an amateur installation to have a
> large number of radials. While a few percent additional coverage area,
> and stabilized feedpoint impedance, are important and very worthwhile to
> broadcasters (who don't base their radial system designs on old wives'
> tales, but on sound economics), the difference in field strength is
> generally negligible for long range communications.
>
> Roy Lewallen, W7EL

Out of curiosity I decided to do a test using modeling to test this.
The results tend to back up Reg's claims. But I am a bit leary of the
accuracy of the modeling being I can't really test it in the real
world too easy. I decided to start with an average ground.

And here are the numbers...

antenna is a 1/4 vertical on 1.825 mhz. ground dial. 13 , cond 5, NEC4
engine, using 40m long radials "appx 1/4 wave"

DBI TOA in degrees
0 40m radials 1.63 at 22
4 40m radials 2.42 at 22
8 40m radials 2.88 at 22
16 40m radials 3.39 at 20
32 40m radials 3.87 at 18
64 40m radials 4.27 at 14
120 40m radials 4.54 at 12

Now the same, except 20m long half size radials:

DBI TOA in degrees
4 20m radials 2.39 at 22
8 20m radials 2.85 at 22
16 20m radials 3.37 at 20
32 20m radials 3.85 at 18
64 20m radials 4.26 at 14
120 20m radials 4.54 at 12

and with 5m long radials:

DBI TOA in degrees
4 5m radials 2.27 at 22
8 5m radials 2.73 at 22
16 5m radials 3.26 at 20
32 5m radials 3.78 at 18
64 5m radials 4.22 at 16
120 5m radials 4.51 at 12

and just for kicks, 1m long radials:

DBI TOA in degrees
4 1m radials 2.09 at 22
8 1m radials 2.50 at 22
16 1m radials 3.02 at 22
32 1m radials 3.58 at 20
64 1m radials 4.09 at 16
120 1m radials 4.44 at 14

I tried the same tests with mininec and got almost the same results.
So then I decided to try other ground conditions using NEC again.

For the same antenna over "bad" ground of ground dial. 4 , cond 1, I
got these results:

First with 40m long radials:

DBI TOA in degrees
0 40m radials 0.00 at 26 - actually is negative gain...
4 40m radials 1.50 at 28
8 40m radials 2.37 at 24
16 40m radials 3.17 at 22

32 40m radials 3.81 at 18
64 40m radials 4.26 at 16
120 40m radials 4.56 at 12

and with the same bad ground 4/1 and short 1m radials:

DBI TOA in degrees
4 1m radials 0.76 at 28
8 1m radials 1.64 at 28
16 1m radials 2.60 at 24
32 1m radials 3.43 at 22
64 1m radials 4.05 at 18
120 1m radials 4.45 at 14

Now the same antenna and excellent ground of ground dial. 20, cond. 30
and 40m long radials.

DBI TOA in degrees
0 40m radials 3.25 at 16
4 40m radials 3.44 at 16
8 40m radials 3.60 at 16
16 40m radials 3.82 at 16
32 40m radials 4.07 at 16
64 40m radials 4.34 at 14
120 40m radials 4.56 at 12

Now the same antenna and excellent ground of ground dial. 20, cond. 30
and 1m long radials.

DBI TOA in degrees
4 1m radials 3.35 at 18
8 1m radials 3.46 at 18
16 1m radials 3.66 at 16
32 1m radials 3.93 at 16
64 1m radials 4.22 at 14
120 1m radials 4.47 at 12

Now, if this test is accurate, it seems to me the number of radials is
the most important thing regardless of the length. About the only
advantage I can see to the longer radials is the slightly reduced TOA.
And it's barely enough to notice I bet except for maybe the hard core
dx hounds. Note that the 120 radials gives nearly optimum results no
matter the length. Is this a fluke of NEC4, or is this accurate? I did
get the same results using mininec almost to a tee. Hard to say
without being able to test in the real world, but according to the
numbers, Reg seems to be right about long radials being pretty much a
waste of copper for hams anyway. But I also noticed 120 1/4 radials
did give consistant results over any type of ground, so I can
understand why the BC'ers use that many just to be on the safe side.
But then again, I got pretty much the same thing even with the 120 1m
radials. Just a slightly higher TOA than the 40m radials. The gain
itself wouldn't be enough to notice. Before doing this, I wouldn't

have expected the short radials to do near as well as they did. But on the other hand, maybe the modeling is all wet in this regard and I wasted my time...:(Was an interesting exercise though...This was done at 160m. I may try other frequencies later to compare. I don't think the overall results would change too much. Adding 120 3 ft radials to my 160m antenna is something I could get away with. I may try it. If my performance takes a big jump, there may be something to the short radials. I'm only using about 4 1/4 wl radials right now over fairly good ground. So if the modeling is accurate, I should see a noticable difference when adding 120 3 ft radials. If I don't , something is wrong with the NEC engine/model. MK

189. Re: Ladder Line Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 02:52:04 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C33C748.62A5C03D@icok.net>
Source record: 151577

Rick,
Yes and no. What you described wouldn't be a 'G5RV', but
it should work fine depending on the tuner. If your tuner is
one of the 'built-in' ATUs, it probably won't work all bands.
The common ATU doesn't have much impedance range...
'Doc

190. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 02:58:36 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <4fh73ug2bfgma8u9dm0c2kv0bqbgi1v6qr@4ax.com>
Source record: 151578

On Thu, 3 Jan 2002 01:47:03 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Determining soil resistivity from samples in the kitchen sink is the correct
>way of going about it. Some of my most critical measurements have been made
>in galvanised buckets sitting on the floor. (The buckets, dolt - not me.)

This does not validate the process (still undisclosed) and suggests
nothing of being a better way than measurements in situ.

>
>The derived values are, by definition, independent of the size of the
>sample.

So they are by simpler methods you are responding through.

>
>When the sample size is small relative to a wavelength AT THE PROPAGATION
>VELOCITY IN THE SOIL ITSELF measurement errors due to the dimensions of the
>test leads are minimised.

Test leads being part of the System dismiss any such notion of
"error." If you move away from the in situ problem, you must reduce
your variables, but you can never remove the added inaccuracy.

>
>Since the measured impedances (not the derived values) must be in the range
>best accommodated by the impedance measuring instrument there are
>restrictions on the size and shape of the sample. It follows there are
>similar restrictions on the measuring instrument itself.

So they are met by simpler methods you are responding through.

>
>The advent of hand-held 'antenna analysers' has made HF kitchen sink
>measurements feasible for the amateur. They are the best thing since sliced
>bread. Can be made better.

That's like expecting a 3" meter giving you 1% accuracy. Works on a
bridge, but nothing as sophisticated as that has been described.

>
>It now remains only for antenna analysers to provide the sign of plus or
>minus jX.

And as Dr. Johnson would say "the triumph of hope over experience."

>
>The necessary technology has been available for 10 or so years. Delays in
>putting such instruments on the market is due solely to the need for
>manufacturers to introduce the facilities in easy graduated phases, so
>maximising the profits.
>
>The profit motive has much to answer for ! ;o)

Ah Punchinello,

An admirable try, but nothing really said was there?

If you simply gave away the recipe you jealously guard in your
kitchen, the mantle of Old Wife might fall away.

73's
Richard Clark, KB7QHC

191. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 05:07:58 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C33E72E.15486922@IEEE.org>
Source record: 151579

Richard Clark wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote:
>
> >> 0.333 lambda dipole, same feedline, SWR=38, overall loss including tuner =
> >> 1.9 dB
> >
> >0.33WL dipole, 130ft of 450 ohm ladder-line on 3.8MHz:
> >SWR at antenna 66:1, T-line loss 2.5dB, not including tuner losses.
>
> Hi Cecil, You need one of them tuners! ;-)

With a built-in amp?
--
cheers, CAM http://www.qsl.net/w5dxp

192. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 05:22:14 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201022122.ece916b@posting.google.com>
Source record: 151580

nm5k@wt.net (Mark Keith) wrote in message If I don't , something is
> wrong with the NEC engine/model. MK

I think I made an error on the program I was using. I don't think it used the NEC4 engine after all. I think it is mininec based also. I had thought I had downloaded the standard NEC-4 program for some reason, and I did a search of all my programs and found a NEC4WIN demo. I made the mistake of assuming that this program was based on NEC-4 being it had that name, but after reading the help file a bit, I think it is also mininec based. So that may be why I'm seeing the things I am. The NEC-4 you mention must be a totally different animal. So anyway, I'm now probably more confused than when I started as I don't know how well mininec deals with various length ground radials...:/ MK

193. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 05:55:39 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201022155.8dc543a@posting.google.com>
Source record: 151581

RayOfLight <kelon100<NOSPAM>@yahoo.com> wrote in message
news:<a2753u88hs2he2bdtviaq90dokgm9t4hl7@4ax.com>...
> >No biggie.....unplug the TV from power, and unplug the
> >antenna EVERYTIME you leave home which is much of the time per your
> >post. Nothing to it.
>
> Well ralph buddy like i said in my post i already figure that out!
> That's the simple way out but not the most efficient. As i have to
> unplug/plug every 2/3 times per week the connectors are getting used!
> And in some months i might have to change them.

>
> Let me tell you though that i have devised all on my own an umbrella
> lightning protection for my antennas and it's undergoing tests right
> now!

The normal way to protect an antenna or any other object is to put a
lightning rod slightly above it. And even this is not totally
foolproof. Ben Franklin already devised this many, many , years ago.
Normally, in ham radio you don't "protect" an antenna. You use the
antenna or it's mast as a lightning rod to ground. The less resistance
to ground, the less damage. Only dish owners and such try to protect
their antennas from direct strikes. And the only really sure way is to
put a more attractive lighting rod slightly above it. One with a sharp
point. But like I said, even this is not totally foolproof as
lightning can strike below the tops of structures. But the sharp point
and easy streaming of the lighting rod make this fairly unlikely. You
can drive around Houston on the freeway and see freeway cams every few
blocks that are mounted on tall poles. You will notice on each one,
you will see a curved one piece lightning rod that curves around the
camera from underneath it's grounded base and comes to a sharp point
over the top of the camera. Looks like a big C with a point on top.

>
> And also it's not only when their are lightings that equipments get
> damaged but when there are heavy clouds (thus big static buildup) and
> with that protection nothing can damage my antennas and equipments :))
> If the tests are 100% positive i will post the details for everyone to
> check it out :)

It may take a while to take a "test" strike. How much time do you
allow to be 100% sure?
>
> Ralph: I do not waste time posting things! I just wanted to know if
> there were professionals who have better ideas than mine. But it seems

> some people just auto proclaim themselves 'professionals'! Nothing
> personal.
>
> Cheers.

Well, if thats the case, you are on the wrong newsgroup. This is
amateur radio antenna. Not professional radio antenna. MK

194. Re: Water in coax

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 06:22:54 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <2NSY7.313$k7.202932@monger.newsread.com>
Source record: 151582

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:19492-3C31E128-318@storefull-112.iap.bryant.webtv.net...
> Roger Halstead wrote:
> "The antenna looked like an exploded cigar up near the tip."
>
> Had Roger used an Andrew folded unipole or an Andrew dish antenna, well
> grounded via the tower, he would likely have suffered only some small
> pits in the antenna. That`s my experience with hundreds of such
> installations.
>
Twas a grounded antena...and an elaborate ground system. That ws the only
time I've had an antenna damaged from lightening even though the tower gets
hit two or three times a summer on average. This past summer we didn't get
anything remotely close.

We had one of the big commercial verticals side mounted at 600 feet on a
broadcast tower as part of a comercial installation. It took a direct hit,
even though it was about 300 feet below the top of the tower. It blew that
one all to pieces.

--
Roger (K8RI - EN73)
WWW.RogerHalstead.com
N833R World's oldest Debonair? (S#CD-2)

I don't think any one would argue that those instances are rare, but they do
happen.

> Best regards, Richard Harrison, KB5WZI
>

195. Re: MFJ 259 self service

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 07:56:40 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C3407A8.DA381027@shaw.ca>
Source record: 151583

maildoc wrote:

> Need help on servicing the 259.If you have a SERVICE note or know how to
> calibrate the SWR IMPEDANCE meters (mine is >6 years old) please reply.For
> example the SWR reads 2.0 at 25 ohms only at the lower freqeuencies <40Mhz
> and then sails around.
> Replies are welcome
> Thank you
> MOT

If possible, please include me as well. Thanks
in advance for any information provided.

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

196. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 08:20:49 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <hr383u85oojvqu74s00mj92smv3cmr77du@4ax.com>
Source record: 151584

On 2 Jan 2002 21:22:14 -0800, nm5k@wt.net (Mark Keith) wrote:

>nm5k@wt.net (Mark Keith) wrote in message If I don't , something is
>> wrong with the NEC engine/model. MK
>
>I think I made an error on the program I was using. I don't think it
>used the NEC4 engine after all. I think it is mininec based also. I
>had thought I had downloaded the standard NEC-4 program for some
>reason, and I did a search of all my programs and found a NEC4WIN
>demo. I made the mistake of assuming that this program was based on
>NEC-4 being it had that name, but after reading the help file a bit, I
>think it is also mininec based. So that may be why I'm seeing the
>things I am. The NEC-4 you mention must be a totally different animal.
>So anyway, I'm now probably more confused than when I started as I
>don't know how well mininec deals with various length ground
>radials...:/ MK

Hi Mark,

Your effort was enourmous, your correction was vast beyond that.

73's
Richard Clark, KB7QHC

197. Re: Ladder Line Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 10:32:40 UTC
From: KC1DI <elbc@pivot.net>
Message-ID: <3c343054_2@corp.newsgroups.com>
Source record: 151585

Yes will work fine.. In face it has already been done check out :
http://www.w7fg.com/ant.htm
73 and Happy Haming
Dave KC1DI

"Richard Myers" <kb1flr@hotmail.com> wrote in message
news:vHOY7.50257$Sj1.20716644@typhoon.ne.mediaone.net...
> Hi All,
>
> Would it be possible to construct a simple portable antenna using just
> ladder line? What I mean is, could you take 82 feet of 450 ohm ladder line
> and separate 51 feet to make both halves of the dipole with the rest
> becoming feedline to a balun and tuner for an instant G5RV? I do a lot of
> portable operating which means generally very inefficient antennas. I
would
> like to have a simple, easy to carry antenna with a bit more efficiency,
> especially for emergency situations.
>
> Any opinions would be greatly appreciated.
>
> 73 de KB1FLR, Rick
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.312 / Virus Database: 173 - Release Date: 12/31/01

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

198. Re: Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 13:07:23 UTC
From: n2ey@aol.com
Message-ID: <20020103080723.02371.00000826@mb-cc.aol.com>
Source record: 151586

In article <3C3299C8.C6859176@coqui.net>, Your Friend Bill <"Remove The NO In
The Reply To Address"@coqui.net> writes:

>"William F. Hagen" wrote:
>>
>> for a second there I thought I was going to read "lawn chair pilot 2",
>where a
>> ham hooks a bunch of ballons to his lawnchair, takes his two meter rig for
>long
>> distance qso's and proceeds to drop his bb gun before its time to come
>down.
>> anyway, guess not....
>
>You obviously heard the guy on Art Bell that did exactly that/

The "balloons tied to a lawn chair" part is not an urban legend. A guy actually
did it, years ago. Lived to tell the tale, too.

http://www.snopes.com

73 de Jim, N2EY

199. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 13:47:57 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a11necfgg1@helle.btinternet.com>
Source record: 151536

Dear Richard,

I'm surprised you appear unable to solve such a trivial problem in electrical measurements for youself. People have been making conductivity measurements ever since Michael Faraday. And HE didn't have a 259.

Just concentrate on it. Start at DC and work your way up.

I'll give you a clue - if your soil sample is a cube, 39.37 inches along each edge, you can measure conductivity (or resistivity) directly. But your XYL is unlikely to welcome half a ton of damp dirt into the kitchen. ;o)

****
Regards, Reg G4FGQ
Radio Modelling Programs.
Have a free lunch.
Http://www.g4fgq.com
****
Richard Clark <kb7qhc@attbi.com> wrote in message
news:4fh73ug2bfgma8u9dm0c2kv0bqbgi1v6qr@4ax.com...
> On Thu, 3 Jan 2002 01:47:03 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:
>
> >Determining soil resistivity from samples in the kitchen sink is the
correct
> >way of going about it. Some of my most critical measurements have been
made
> >in galvanised buckets sitting on the floor. (The buckets, dolt - not
me.)
>
> This does not validate the process (still undisclosed) and suggests
> nothing of being a better way than measurements in situ.
>
> >
> >The derived values are, by definition, independent of the size of the
> >sample.
>
> So they are by simpler methods you are responding through.
>
> >
> >When the sample size is small relative to a wavelength AT THE PROPAGATION
> >VELOCITY IN THE SOIL ITSELF measurement errors due to the dimensions of
the
> >test leads are minimised.
>

> Test leads being part of the System dismiss any such notion of
> "error." If you move away from the in situ problem, you must reduce
> your variables, but you can never remove the added inaccuracy.
>
> >
> >Since the measured impedances (not the derived values) must be in the
range
> >best accommodated by the impedance measuring instrument there are
> >restrictions on the size and shape of the sample. It follows there are
> >similar restrictions on the measuring instrument itself.
>
> So they are met by simpler methods you are responding through.
>
> >
> >The advent of hand-held 'antenna analysers' has made HF kitchen sink
> >measurements feasible for the amateur. They are the best thing since
sliced
> >bread. Can be made better.
>
> That's like expecting a 3" meter giving you 1% accuracy. Works on a
> bridge, but nothing as sophisticated as that has been described.
>
> >
> >It now remains only for antenna analysers to provide the sign of plus or
> >minus jX.
>
> And as Dr. Johnson would say "the triumph of hope over experience."
>
> >
> >The necessary technology has been available for 10 or so years. Delays in
> >putting such instruments on the market is due solely to the need for
> >manufacturers to introduce the facilities in easy graduated phases, so
> >maximising the profits.
> >
> >The profit motive has much to answer for ! ;o)
>
> Ah Punchinello,
>
> An admirable try, but nothing really said was there?
>
> If you simply gave away the recipe you jealously guard in your
> kitchen, the mantle of Old Wife might fall away.
>
> 73's
> Richard Clark, KB7QHC

200. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 13:47:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a11nedfgg2@helle.btinternet.com>
Source record: 151535

CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C33ACA1.BE9E2D80@IEEE.org...
> Reg Edwards wrote:
> >
> > > >Are you using the above equation in your software?
> > > >
> > No, I am not. Never heard of it. If it has been descibed correctly it is
a
> > load of nonsense.
>
> The equation is Total Loss = 10 log ((a^2 - |Rho|^2)/(a(1-|Rho|^2))
> where a = 10^(ML/10) and Rho = (SWR-1)/(SWR+1)
> ML is matched line loss and SWR is at the load.
> The equation for the SWR at the source is (a+|Rho|)/a-|Rho|)
> Anybody know where these equations came from?
> --
> cheers, CAM http://www.qsl.net/w5dxp
========================

Cecil,

Your amendments now make sense. They come from elementary transmission line analysis and relate SWR and Reflection Coefficient to each other. They assume line Zo is purely resistive which is reasonable for ordinary lines at HF.

That great man Oliver Heaviside, amateur physicist and mathematician, may have been the first person to write down the formulae in that form around 1870. At the time of the Franco-Prussian war. But In those days there were no ARRL handbooks to publish them in.

As RC goes from 0 to 1, SWR goes from 1 to infinity. If you know what the RC is then you also know the SWR - that is if a long transmission actually exists between meter and transmitter. Otherwise it is necessary to exercise one's imagination of which commodity there is no shortage amongst radio amateurs.

Our SWR meters don't measure SWR, they merely respond to the modulus of the RC and should be scaled linearly from 0 to 1.0 Yes, I know I'm a heretic.

For the exact behaviour of SWR and RC on transmission lines, at any frequency, for any terminating impedance download programs RJELINE3 and 4. Which, incidentally, will also demonstrate the existence on real lines of reflection coeficients much greater than 1.0 Mr Smith's ordinary charts will not admit of such an outrageous idea. ;o)

Program ZL_ZIN does things in reverse. It calculates on real lines what the terminating impedance must be to give a measured line input impedance. It avoids the dangerous hazards involved with taking an impedance bridge up to the centre feedpoint of your horizontal dipole. You will be using the feedline as a very long test lead to the measuring instrument and is another example of a formula preceding the measurement.

****
Regards, Reg G4FGQ
Radio Modelling Programs.
Have a free lunch.
Http://www.g4fgq.com
****

201. Re: MFJ 259 self service

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 14:05:49 UTC
From: "KMA Antennas"
Message-ID: <o7p83u0svlriek6licsdmbnn13894gh0vs@4ax.com>
Source record: 151587

This site may help........
http://www.vhfman.freeuk.com/radio/analyser.html

73
Ed

>> Need help on servicing the 259.If you have a SERVICE note or know how to
>> calibrate the SWR IMPEDANCE meters (mine is >6 years old) please reply.For
>> example the SWR reads 2.0 at 25 ohms only at the lower freqeuencies <40Mhz
>> and then sails around.
>> Replies are welcome
>> Thank you
>> MOT
>

KMA Antennas
VHF - UHF - HF log periodics
http://www.kmaantennas.com

Dayton fleamarket spaces 2828 - 2831

help support qsl.net with a donation
https://proxy.qsl.net/donation

202. Re: Best Antenna for FRG-100

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 14:08:13 UTC
From: RayOfLight <kelon100>
Message-ID: <r9o83ukop00nemh17vu2unneve1aqcq13v@4ax.com>
Source record: 151588

Thanks bob for the info. I am a newbie listening to SW radio with a normal cassette deck radio but with a long wire antenna round into a coil which gives me quite a nice reception all the time.

But now i think it has now come for some serious DXing after so many years of listening and that's why i am looking for the antenna which i will have buy for the Yaesu radio. :))

Thanks a lot :)

203. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 14:08:17 UTC
From: RayOfLight <kelon100>
Message-ID: <1to83usvnnctfftpopmckcl9vqtadnn6uu@4ax.com>
Source record: 151589

>If any improvement over what the best AM radio stations use as
>protection ever appears, I want to know about it.
>
>Best regards, Richard Harrison, KB5WZI

Yep Richard if i do get positive result i'll post here. It's still
under tests with some radio enthusiasts :))

>Yep Richard if i do get positive result i'll post here. It's still under tests with some
radio enthusiasts :))

>This is like that cat that ate the cheese and waited in front of the
>mousehole with baited breath! The etimology of the word parasol springs
>to mind like one thrust out in a gigantic thunderstorm! ;)

Well Mike i live in a tropical island and we have lots of sun and
right now we are in summer with temperatures of 90F in a normal day
:)). They thunderstorms too you might imagine are rather big and can
last for hours (sometimes the whole night!). Without any good
protection system i will surely loose everything (antennas &
equipments).

204. Re: Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 14:28:27 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C346A8B.6BDA8ECC@IEEE.org>
Source record: 151590

N2EY wrote:
> The "balloons tied to a lawn chair" part is not an urban legend. A guy actually
> did it, years ago. Lived to tell the tale, too.

Wasn't that in the Los Angeles area?
--
cheers, CAM http://www.qsl.net/w5dxp

205. Re: Best Antenna for FRG-100

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 15:17:28 UTC
From: Martin <mab@delete-this.capita.nildram.co.uk>
Message-ID: <u38t34q7kdugbc@corp.supernews.com>
Source record: 151591

"RayOfLight @yahoo.com>" <kelon100<NOSPAM> wrote in message
news:5u753u8g0kmi7mpsr8dsht8fqgl2kdn36n@4ax.com...
> Hello i am looking forward to buy a Yaesu FRG-100 soon. i am looking
> for the best antenna which will go with it. Size does not matter but t
> should not be too large. Thanks.
>

Don't go spending any large amount of money (or effort) on an antenna to
start with - you will
hear a lot with 5 to 10 metres of wire hooked into the hi-res input on the
back of the '100 - I used
one like that for a long time.

Like most relatively budget prices HF receivers, the front end of the
FRG-100 is pretty wide
and suffers from noise and overloading from strong signals - I tried a
variety of antennas and
found that while putting up more wire boosted the required signal strength,
it also brings up the
noise level, so you often do not gain much. A dipole cut approximately to
frequency seemed to be better than a long wire but you will probably find
that you have some attenuation switched in a
lot of the time.

If you are prepared to spend some money on the antenna side, you are
probably best off
buying (or building) a pre-selector (MFJ make one) to replace some of the
missing front-end
selectivity that used to be built into old valve superhets...

Martin (G8FXC)

206. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 15:26:12 UTC
From: richardharrison@webtv.net
Message-ID: <5738-3C347814-665@storefull-114.iap.bryant.webtv.net>
Source record: 151592

Roy Lewallen wrote:
"At least one problem is that it (simplified analysis) doesn`t account for the considerable coupling among radials that takes place."

That puzzled me because I see no relevance.

I went back to Ed Laport who has included much of the findings of Brown, Lewis, and Epstein in his "Radio Antenna Engineering". Sure enough, Laport has an Appendix III-A which is: "Magnitudes of Mutual Impedance Between Identical Thin Vertical Cylindrical Radiators as a Function of Height and Spacing" (After G.H. Brown).

This concerns directional arrays, not ground wires.

Best regards, Richard Harrison, KB5WZI

207. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 16:14:27 UTC
From: richardharrison@webtv.net
Message-ID: <9974-3C348363-283@storefull-113.iap.bryant.webtv.net>
Source record: 151594

Roy Lewallen wrote:
"A simplified, but reasonably accurate summary of Brown, Lewis, and Epstein`s conclusions is that if the radials are short, adding more radials doesn`t help a whole lot. And if there are only a few radials, making them longer doesn`t help a lot.

Ed Laport puts his own spin on B, L, & E`s findings on pages 117 and 118 among others of "Radio Antenna Engineering". Incidently, B, L, & E`s work was done at 3 MHz according to Ed Laport.

Beyond 1/2-wavelength, displacement currents captured by radials are negligible.

Beyond 0.4-wavelength, efficiency gain from radial extensions is negligible.

Effective length of radials decreases as their number increases.

B, L, & E found the point of diminishing returns for radials to be 0.4-wavelength and 120 wires. With such a system of radial ground wires they said a perfect earth was approximated.

The FCC was actually lenient in requiring only 120 1/4-wave radials.

Best regards, Richard Harrison, KB5WZI

208. Re: MFJ 259 self service

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 16:36:17 UTC
From: oz1pif@get2net.dk
Message-ID: <3c34872b.38418173@190.168.0.1>
Source record: 151593

On Thu, 03 Jan 2002 09:05:49 -0500, KMA Antennas <-----@.net> wrote:

>
>>> Need help on servicing the 259.If you have a SERVICE note or know how to
>>> calibrate the SWR IMPEDANCE meters (mine is >6 years old) please reply.For
>>> example the SWR reads 2.0 at 25 ohms only at the lower freqeuencies <40Mhz
>>> and then sails around.
>>> Replies are welcome
>>> Thank you
>>> MOT
>>
You may also consider contacting MFJ - I did when I accidentially blew
my MF-259B by applying reverse polarity from the powersupply (I know I
know, stupid...) I emailed their tech-support
(techinfo@mfjenterprises.com), and got all the necessary documents for
free, enabling me to repair and align the analyzer.

Very very good service from MFJ, and I'll certainly recommend them for
their products as well as their support. *** Kudos ***

73 de OZ1PIF, Peter

209. Re: Help - Harris RF-3281 Antenna Coupler

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 17:21:15 UTC
From: gzmrfrw@freeuk.com
Message-ID: <3c34914b.22215060@news.cis.dfn.de>
Source record: 151595
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,uk.radio.amateur

On Wed, 2 Jan 2002 18:27:08 -0700, "WEMA Account #1" <wema1@wyoming.com>
wrote:

>Brian Grimm, N7QJB
>Communications Officer
>Wyoming Emergency Management Agency

Is that part of FEMA?

--

gm4

210. airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 17:34:26 UTC
From: John O'Flaherty <wewelcomespam@blackhole.net>
Message-ID: <3C349622.4281A893@blackhole.net>
Source record: 151596

When the planes were hijacked on Sept. 11, according to reports many people on the plane used cell phones. How do these phones work through the aluminum skin of the aircraft, which seems to surround them completely? I apologize for the ignorance that this question reveals, but I don't have a cell phone and I haven't flow for about ten years.

--
john

211. Re: Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 17:34:52 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C34963C.3DC7B351@coqui.net>
Source record: 151597

CAM wrote:
>
> N2EY wrote:
> > The "balloons tied to a lawn chair" part is not an urban legend. A guy actually
> > did it, years ago. Lived to tell the tale, too.
>
> Wasn't that in the Los Angeles area?

Yeah. They actually had recordings of the guy's desperate
communications on the show. The guy was somewhat sensible and
sober...the little stunt simply got out of hand.

212. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 18:07:47 UTC
From: mikea@mikea.ath.cx
Message-ID: <T51Z7.587$RO.131416179@newssvr15.news.prodigy.com>
Source record: 151598

John O'Flaherty <wewelcomespam@blackhole.net> wrote:

: When the planes were hijacked on Sept. 11, according to reports many
: people on the plane used cell phones. How do these phones work through
: the aluminum skin of the aircraft, which seems to surround them
: completely? I apologize for the ignorance that this question reveals,
: but I don't have a cell phone and I haven't flow for about ten years.

They don't get through the skin, but they do get through the
windows just fine. The wavelengths are comparable to or less
than the window size, and so the windows present minimal or
no obstacle.

--
A layman knows he has to kick it.; An amateur knows where to kick it.; A
professional knows how hard.

213. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 18:07:54 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C349DFA.8993FB02@IEEE.org>
Source record: 151599

John O'Flaherty wrote:
> When the planes were hijacked on Sept. 11, according to reports many
> people on the plane used cell phones. How do these phones work through
> the aluminum skin of the aircraft, which seems to surround them
> completely? I apologize for the ignorance that this question reveals,
> but I don't have a cell phone and I haven't flow for about ten years.

Holding the cellphone near an airplane window allows the RF to escape.
--
cheers, CAM http://www.qsl.net/w5dxp

214. Re: Water in coax

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 18:32:39 UTC
From: richardharrison@webtv.net
Message-ID: <25384-3C34A3C7-265@storefull-111.iap.bryant.webtv.net>
Source record: 151601

Roger, K8RI wrote:
"We had one of the big commercial verticals side mounted on a broadcast tower as a part of a commercial installation. It took a direct hit even though it was about 300 feet below the top of the tower. It blew that one all to pieces."

We standardized early on with Andrew stainless folded monopoles because they were never seriously damaged by lightning. Antenna vendors were always trying to sell us something that was cheaper, performed better, or had some other advantages. During 26 years at that company, I never saw a successful replacement for the Andrew.

Vendors often would try to sell us some fibergless thingie. Even fiberglass parabolas to replace aluminum. I saw no reason to try a fiberglass dish. Aluminum dishes worked very well for us. But, we did try a fiberglass 33 MHz tubular thing wrapped with wire. It turned out like Roger`s antenna. It looked like a giant cigar that had exploded on being hit by lightning. No problem when we put the old Andrew back at the top of the tower.

Best regards, Richard Harrison, KB5WZI

215. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 18:33:50 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u3990s96ulmt40@corp.supernews.com>
Source record: 151600

They didn't use cell phones. They used the in-flight phones mounted in the seat backs. These are wired into the aircraft and to an antenna on the outside of the fuselage.

They couldn't have used a cell phone due to the interference it would have caused being in range of so many towers. The cell phones wouldn't have worked.

Man - the level of ignorance on Usenet astounds me sometimes!

--
Nick: Hey in there! Don't you want your doorknocker?
Catherwood: I already have a doorknocker.
Nick: But this is yours!
Catherwood: See, I told you!

"John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message news:3C349622.4281A893@blackhole.net...
>
> When the planes were hijacked on Sept. 11, according to reports many
> people on the plane used cell phones. How do these phones work through
> the aluminum skin of the aircraft, which seems to surround them
> completely? I apologize for the ignorance that this question reveals,
> but I don't have a cell phone and I haven't flow for about ten years.
>
> --
> john

216. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 19:31:32 UTC
From: richardharrison@webtv.net
Message-ID: <9973-3C34B194-672@storefull-113.iap.bryant.webtv.net>
Source record: 151603

Ray wrote:
"It`s still under tests with some radio enthusiasts."

If someone or something is effectively enclosed with a continuous conductor, there is no danger from lightning. The shorted conducting surface allows no voltage difference to cause harm to the contents from lightning.

Bring a wire in from the outside and it poses a threat unless it has high impedance to lightning and a bypass around the enclosure wire entrance is provided.

AM radio stations though often hit by lightning need to operate right through every storm. Those that are successful use the screened, impeded and bypassed system to avoid serious lightning impediment to their operations.

Best regards, Richard Harrison, KB5WZI

217. Re: Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 19:42:50 UTC
From: n2ey@aol.com
Message-ID: <9f4bfe89.0201031142.259081b8@posting.google.com>
Source record: 151602

CAM <Cecil.A.Moore@IEEE.org> wrote:

> Wasn't that in the Los Angeles area?

Yes.

http://www.snopes.com/spoons/noose/balloon.htm

73 de Jim, N2EY

218. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 20:10:58 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3C34BAD2.8701CD46@iquest.net>
Source record: 151604

Well AstroMan, suggest you take a look around you the next time you're sitting inside a commercial airplane and note the number of individuals USING THEIR CELL PHONES. Man, the level of arrogance displayed astounds us all.

AstroMan wrote:
>
> They didn't use cell phones. They used the in-flight phones mounted in the
> seat backs. These are wired into the aircraft and to an antenna on the
> outside of the fuselage.
>
> They couldn't have used a cell phone due to the interference it would have
> caused being in range of so many towers. The cell phones wouldn't have
> worked.
>
> Man - the level of ignorance on Usenet astounds me sometimes!
>
> --
> Nick: Hey in there! Don't you want your doorknocker?
> Catherwood: I already have a doorknocker.
> Nick: But this is yours!
> Catherwood: See, I told you!
>
> "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> news:3C349622.4281A893@blackhole.net...
> >
> > When the planes were hijacked on Sept. 11, according to reports many
> > people on the plane used cell phones. How do these phones work through
> > the aluminum skin of the aircraft, which seems to surround them
> > completely? I apologize for the ignorance that this question reveals,
> > but I don't have a cell phone and I haven't flow for about ten years.
> >
> > --
> > john

219. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 20:18:24 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u39f54fgjl170e@corp.supernews.com>
Source record: 151605

Not while in the air. They DON'T work.

--
Nick: Hey in there! Don't you want your doorknocker?
Catherwood: I already have a doorknocker.
Nick: But this is yours!
Catherwood: See, I told you!

"Patrick Croft" <mai@iquest.net> wrote in message
news:3C34BAD2.8701CD46@iquest.net...
> Well AstroMan, suggest you take a look around you the next time you're
> sitting inside a commercial airplane and note the number of individuals
> USING THEIR CELL PHONES. Man, the level of arrogance displayed astounds
> us all.
>
>
>
> AstroMan wrote:
> >
> > They didn't use cell phones. They used the in-flight phones mounted in
the
> > seat backs. These are wired into the aircraft and to an antenna on the
> > outside of the fuselage.
> >
> > They couldn't have used a cell phone due to the interference it would
have
> > caused being in range of so many towers. The cell phones wouldn't have
> > worked.
> >
> > Man - the level of ignorance on Usenet astounds me sometimes!
> >
> > --
> > Nick: Hey in there! Don't you want your doorknocker?
> > Catherwood: I already have a doorknocker.
> > Nick: But this is yours!
> > Catherwood: See, I told you!
> >
> > "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> > news:3C349622.4281A893@blackhole.net...
> > >
> > > When the planes were hijacked on Sept. 11, according to reports many
> > > people on the plane used cell phones. How do these phones work through
> > > the aluminum skin of the aircraft, which seems to surround them
> > > completely? I apologize for the ignorance that this question reveals,
> > > but I don't have a cell phone and I haven't flow for about ten years.

> > >
> > > --
> > > john

220. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 20:21:04 UTC
From: richardharrison@webtv.net
Message-ID: <18660-3C34BD30-560@storefull-116.iap.bryant.webtv.net>
Source record: 151607

Mark Keith wrote:
"But they have to be somewhat green and have moisture in them to be able to conduct."

Ohm prevails. It`s a matter of volts. In 1949 when KPRC and KXYZ shared a radio tower, we used to measure the antenna currents of each station regularly. The tower was built for KTRH, 740 KHz. It was hot for KPRC at 950 KHz and even hotter for KXYZ at 1320 KHz. We had a long wood stick with a bent nail in one end to operate the ammeter shorting switches. Every few weeks we had to replace the stick which quickly developed a carbonized groove between the nail and the operator`s hand. The groove lit up with sparks on every switch operation with growing intensity.

Then, at the SW broadcast plant where I worked, birds trying to land on the 600-ohm transmission lines carrying 100 KW simply evaporated in a plume of flame. So, it`s just a question of enough volts to light a fire.

Best regards, Richard Harrison, KB5WZI

221. Re: Best Antenna for FRG-100

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 20:32:19 UTC
From: Jeff Santee <Jeff352@home.com>
Message-ID: <nd3Z7.62909$va.32958422@news2.rdc1.mi.home.com>
Source record: 151606

>
> Like most relatively budget prices HF receivers, the front end of the
> FRG-100 is pretty wide
> and suffers from noise and overloading from strong signals - I tried a
> variety of antennas and
> found that while putting up more wire boosted the required signal strength,
> it also brings up the
> noise level, so you often do not gain much. A dipole cut approximately to
> frequency seemed to be better than a long wire but you will probably find
> that you have some attenuation switched in a
> lot of the time.

> Martin (G8FXC)

Martin

I was wondering if you are speaking from personal experience with the FRG 100
or just "what you have heard". Because my experience with the FRG 100 does not
reflect this statement at all. I have one and I also have all kinds of commercial broadcast
towers around me, one as close as 1000' from my house. I have a state police repeater
tower about as close, and all kinds of pager and what not antennas close to me. I have
yet to have any images show up on mine. Not even any A.M. station crosstalk when I'm
in the A.M. band. My experience with the FRG 100 is that it has a pretty good front end
and is quite sensitive. I will agree with your first statement that all you need is about
10
to 15 meters of wire and a good earth grd.

Jeff

222. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 21:25:28 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <C8s0PHNTqHJa4bnfnaO9KUy+i835@4ax.com>
Source record: 151608

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote:

>Not while in the air. They DON'T work.

Can you explain, technically, how the Gods immobolize cell phones so they "DON'T work," while an airliner is in the air?

Bob
k5qwg

223. info needed for Ringo 2mtr antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 22:01:35 UTC
From: "aa8wl@home.com" <aa8wl@home.com>
Message-ID: <3C350030.34E39B53@home.com>
Source record: 151609

I lost my info on the lengths for the Ringo 2mtr antenna and would like to find the dimensions for it. It is the colinear one with out radials. Thanks in advance. DE AA8WL Sam

224. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-03 22:04:22 UTC
From: "Ken Eckel Jr." <airboy@juno.com>
Message-ID: <Gz4Z7.70035$%u.2282359@typhoon.austin.rr.com>
Source record: 151610

They do work but the cellsite antenna patterns don't pick up the
hand helds unless you are below about 5000 feet. How do I know?
Experimenting in my small airplane

ciao,
Ken

225. Re: NEC 2 program

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 00:54:04 UTC
From: wa2elz <wa2elz@nospamworldnet.att.net>
Message-ID: <M27Z7.2327$fe1.156120@bgtnsc06-news.ops.worldnet.att.net>
Source record: 151611

First, thanks to all who responded with comments and suggestions.

Bill,

I do get WNJT-DT from behind the hill, but it is not strong enough. The Longley-Rice method and the GLOBE terrain database (1 KM resolution) predicts the point to point pathloss between isotropic radiators to be 178db for a 90% confidence and a reliability of 90%; yielding a 2db signal to noise ratio over a 6mhz bandwidth. The ATSC 8VSB modulation method requires about 15 db signal to noise ratio for acceptable picture. A 17 dbi antenna might just work, but a 20+ dbi antenna gain will provide a better margin. My testing with a RadioShack 100" UHF only antenna did not show any surprises as the height was adjusted. My plan is to build the 17.5dbi antenna and test the results. If more gain is needed then I'll go by your suggestion and stack another antenna. It will be interesting to see if all this computer simulation is useful. Again, Thanks.

Robert

"Bill Nelson" <billn@spock.peak.org> wrote in message
news:a0rtgmdto6@quark.scn.rain.com...
>
> That hill could be a real problem. Do you get any signal at all now?
> Have you tried moving all over, up and down, with a test antenna.
> Sometimes just moving a foot or two can make a large difference in
> signal strength.
>
> --
> Bill Nelson (billn@peak.org)
>

226. Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 01:42:25 UTC
From: kc2hmn@cs.comnospam
Message-ID: <20020103204225.14772.00002905@mb-bj.news.cs.com>
Source record: 151612

I have a 100' x 190' lot full of 50' to 65' trees. (Good supporting limbs at approx. 35' to 40' ft.)

In your experience, if you had to choose only one wire antenna to erect...what would it be? EDZ, doublet, Crolina Windom, bi-square, G5RV, etc...? All opinions valued and appreciated, thanks. :-)

73 de Bert
KC2HMN

227. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 01:43:50 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <gr1a3u4a0n1tvgd1ig5ftr2g89uvedsad0@4ax.com>
Source record: 151613

On Thu, 03 Jan 2002 21:25:28 GMT, Bob Miller <bamiller@texas.net>
wrote:

>"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote:
>
>>Not while in the air. They DON'T work.
>
>Can you explain, technically, how the Gods immobolize cell phones so they "DON'T
>work," while an airliner is in the air?
>
>Bob
>k5qwg

Hi Bob,

From the air, the cell phone can see several cell's antennas. Each
combines in a network that helps for local roaming. To connect at
several at once with nearly equal power (almost certain from the air)
is probably rejected by the system (as it would certainly confuse
which cell "owned" the connection and cause them to go into an
infinite reconnect protocol - which is otherwise known as collision
resolution.)

73's
Richard Clark, KB7QHC

228. Gap Titan DX (How is it?)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 02:09:54 UTC
From: n4jzh@knology.net
Message-ID: <3c350e28.15067758@news.knology.net>
Source record: 151614

Hey Gang,
I am thinking about a Gap Titan DX..
any pros or cons, users, abusers
email me with your comments or post them here for a heated
discussion.

n4jzh@knology.net Donnie

229. Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 02:17:08 UTC
From: Lee Mairs <lmairs@cox.rr.com>
Message-ID: <Eg8Z7.35831$8e2.12573846@typhoon.southeast.rr.com>
Source record: 151615

I'm moving to a retirement QTH on 40+ acres in the West Virginia mountains. For the first time in my life I will have the space to play with an antenna farm. I want to put up a multi-band antenna to use until my tower is installed later this summer. I have about 400' available outside the shack with support trees about 50-60 feet to their tops.

What are the group's suggestions?

73 de Lee, KM4YY

--
Let us not look back in anger or forward in fear, but around in awareness.
-- James Thurber

230. Re: Gap Titan DX (How is it?)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 02:46:23 UTC
From: Stahr <w6nyc@earthlink.net>
Message-ID: <3I8Z7.1789$zw3.321691@newsread1.prod.itd.earthlink.net>
Source record: 151616

Donnie:

We just went through this a few lines down in this news group....

It's a compromise, but if you have restricted space and no room for radials
(like many of us), it's worth considering.

Here is the review section on eham.net.

http://www.eham.net/reviews/detail/315

And an on-air test by Mike Banz

http://www.qsl.net/aa3rl/titandtl.html

I love mine!

Dennis - W6NYC

****
"Donnie (N4JZH)" <n4jzh@knology.net> wrote in message
news:3c350e28.15067758@news.knology.net...
> Hey Gang,
> I am thinking about a Gap Titan DX..
> any pros or cons, users, abusers
> email me with your comments or post them here for a heated
> discussion.
>
> n4jzh@knology.net Donnie

231. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 02:49:35 UTC
From: Stahr <w6nyc@earthlink.net>
Message-ID: <3L8Z7.1798$zw3.322338@newsread1.prod.itd.earthlink.net>
Source record: 151617

Yes they did use their personal cel phones, and you are an idiot!

Dennis

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
news:u3990s96ulmt40@corp.supernews.com...
> They didn't use cell phones. They used the in-flight phones mounted in
the
> seat backs. These are wired into the aircraft and to an antenna on the
> outside of the fuselage.
>
> They couldn't have used a cell phone due to the interference it would have
> caused being in range of so many towers. The cell phones wouldn't have
> worked.
>
> Man - the level of ignorance on Usenet astounds me sometimes!
>
>
> --
> Nick: Hey in there! Don't you want your doorknocker?
> Catherwood: I already have a doorknocker.
> Nick: But this is yours!
> Catherwood: See, I told you!
>
> "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> news:3C349622.4281A893@blackhole.net...
> >
> > When the planes were hijacked on Sept. 11, according to reports many
> > people on the plane used cell phones. How do these phones work through
> > the aluminum skin of the aircraft, which seems to surround them
> > completely? I apologize for the ignorance that this question reveals,
> > but I don't have a cell phone and I haven't flow for about ten years.
> >
> > --
> > john
>
>
>

232. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 03:26:41 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u3a98o212b0048@corp.supernews.com>
Source record: 151520

Ken and Richard are correct.

--
Out of the fog, into the smog,
At Fourth and Drucker he turns left.
At Drucker and Fourth he turns right.
He crosses McArthur Park and walks into a great sandstone building.
"Oof! My Nose!"

"Bob Miller" <bamiller@texas.net> wrote in message
news:C8s0PHNTqHJa4bnfnaO9KUy+i835@4ax.com...
> "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote:
>
> >Not while in the air. They DON'T work.
>
> Can you explain, technically, how the Gods immobolize cell phones so they
"DON'T
> work," while an airliner is in the air?
>
> Bob
> k5qwg
>

233. Re: Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 03:27:10 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C352104.48612F80@icok.net>
Source record: 151618

Bert,
I would put up the largest loop I could, feed it with ladder
line through a tuner. If I could use every bit of your 580 feet
circumference, I would. It wouldn't be resonant on any
particular
ham band, but who cares. I do know it works...
'Doc

234. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 03:27:56 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u3a98pkgcs7q49@corp.supernews.com>
Source record: 151521

Did not!

"Stahr" <w6nyc(remove this to email)@earthlink.net> wrote in message
news:3L8Z7.1798$zw3.322338@newsread1.prod.itd.earthlink.net...
>
> Yes they did use their personal cel phones, and you are an idiot!
>
> Dennis
>
>
> "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
> news:u3990s96ulmt40@corp.supernews.com...
> > They didn't use cell phones. They used the in-flight phones mounted in
> the
> > seat backs. These are wired into the aircraft and to an antenna on the
> > outside of the fuselage.
> >
> > They couldn't have used a cell phone due to the interference it would
have
> > caused being in range of so many towers. The cell phones wouldn't have
> > worked.
> >
> > Man - the level of ignorance on Usenet astounds me sometimes!
> >
> >
> > --
> > Nick: Hey in there! Don't you want your doorknocker?
> > Catherwood: I already have a doorknocker.
> > Nick: But this is yours!
> > Catherwood: See, I told you!
> >
> > "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> > news:3C349622.4281A893@blackhole.net...
> > >
> > > When the planes were hijacked on Sept. 11, according to reports many
> > > people on the plane used cell phones. How do these phones work through
> > > the aluminum skin of the aircraft, which seems to surround them
> > > completely? I apologize for the ignorance that this question reveals,
> > > but I don't have a cell phone and I haven't flow for about ten years.
> > >
> > > --
> > > john
> >
> >

> >
>
>

235. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 03:33:42 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C35228B.28DB11DD@icok.net>
Source record: 151519

Lee,
I'd try a loop antenna fed with ladder line. As large as
I could make it, and as high as I could get it. Feed it through
a good tuner, and you can make it 'go' anywhere, and even realize
some gain out of it on some frequencies. Not ~the~ best antenna
for all bands, but it does remarkably well on most of them.
'Doc

236. Re: Gap Titan DX (How is it?)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 03:55:00 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020103225500.01665.00003650@mb-ch.aol.com>
Source record: 151522

I have one mounted on my roof. I thought it was a pretty good antenna - a lot better than my Cushcraft R7000. That is, until I put up a 102 foot wire antenna at 60 feet in the trees. It is a top fed L with one side horizontal and the other vertical. Center fed with ladder line through a tuner, it beats the vertical on all bands and with a lot less noise.

Just a thought.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

237. Status of NFPA Lightning Protection Code?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 03:55:42 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c352b71_3@news1.prserv.net>
Source record: 151523

The ongoing questions about lightning protection prompt me to ask the following: NFPA used to issue a Lightning Protection Code, NFPA 78, but it has not appeared in their catalog for many years. The most recent version I have been able to turn up is dated in the early 90s, which is way out of date for an NFPA code. For a short time it was included in the Building Construction Codes, but then it also disappeared from there. I heard (urban legend?) that there had been a great deal of disagreement inside the committee which was to update it, and that some technical data has been developed which tends to refute some of the premises of the existing code, causing NFPA to let it expire and wait for some other agency to issue a new lightning protection code. Anyone have any factual information on this? Maybe it was reissued under a different number?

--
Crazy George
Remove NO and SPAM from return address

238. Re: Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 03:58:54 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020103225854.01665.00003652@mb-ch.aol.com>
Source record: 151524

Doc's got a good idea with the loop. I have had very good results from a top fed inverted L. The center is at 60 feet with 51 feet horizontal and 51 feet vertical. Fed with ladder line through a tuner. Check out Cebik's website http://www.cebik.com/ for an education on antennas including the top fed L.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

239. Re: info needed for Ringo 2mtr antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 04:04:42 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C3529A5.F8A64994@tampabay.rr.com>
Source record: 151525

just go to www.cushcraft.com and go to the tech library and they should have
the manuals there for the ringo

"aa8wl@home.com" wrote:

> I lost my info on the lengths for the Ringo 2mtr antenna and would like
> to find the dimensions for it. It is the colinear one with out radials.
> Thanks in advance. DE AA8WL Sam

240. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 04:46:19 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <jTE1PLedf7kZxgzboDe8ccFGi7TV@4ax.com>
Source record: 151526

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote:

>Did not!

Wellllll, I don't disagree with what Richard and Ken have said, that the cell phones don't work properly at elevations above 5000 feet; but I seem to recall that the hijackers were flying low on the flights toward Washington to avoid radar, which means callers on the flights may have been low enough to pick up individual cell towers while using their personal cell phones...

Bob
k5qwg

>
>
>"Stahr" <w6nyc(remove this to email)@earthlink.net> wrote in message
>news:3L8Z7.1798$zw3.322338@newsread1.prod.itd.earthlink.net...
>>
>> Yes they did use their personal cel phones, and you are an idiot!
>>
>> Dennis
>>
>>
>> "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
>> news:u3990s96ulmt40@corp.supernews.com...
>> > They didn't use cell phones. They used the in-flight phones mounted in
>> the
>> > seat backs. These are wired into the aircraft and to an antenna on the
>> > outside of the fuselage.
>> >
>> > They couldn't have used a cell phone due to the interference it would
>have
>> > caused being in range of so many towers. The cell phones wouldn't have
>> > worked.
>> >
>> > Man - the level of ignorance on Usenet astounds me sometimes!
>> >
>> >
>> > --
>> > Nick: Hey in there! Don't you want your doorknocker?
>> > Catherwood: I already have a doorknocker.
>> > Nick: But this is yours!
>> > Catherwood: See, I told you!
>> >
>> > "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message

>> > news:3C349622.4281A893@blackhole.net...
>> > >
>> > > When the planes were hijacked on Sept. 11, according to reports many
>> > > people on the plane used cell phones. How do these phones work through
>> > > the aluminum skin of the aircraft, which seems to surround them
>> > > completely? I apologize for the ignorance that this question reveals,
>> > > but I don't have a cell phone and I haven't flow for about ten years.
>> > >
>> > > --
>> > > john
>> >
>> >
>> >
>>
>>
>

241. Re: Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 05:15:58 UTC
From: jflanders2@home.com
Message-ID: <3c353a57.31603331@NEWS>
Source record: 151527

see:

http://www.qsl.net/w5dxp/notuner.htm

Jerry W4UK

On 04 Jan 2002 01:42:25 GMT, kc2hmn@cs.comnospam (Bert Craig) wrote:

>I have a 100' x 190' lot full of 50' to 65' trees. (Good supporting limbs at
>approx. 35' to 40' ft.)
>
>In your experience, if you had to choose only one wire antenna to erect...what
>would it be? EDZ, doublet, Crolina Windom, bi-square, G5RV, etc...? All
>opinions valued and appreciated, thanks. :-)
>
>73 de Bert
>KC2HMN

242. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 06:08:04 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <pcga3ukhhrh5r2pd5fgl0u5h5ug8u7oed9@4ax.com>
Source record: 151528

On Tue, 1 Jan 2002 20:09:49 +0000 (UTC), "Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
>Gary, I agree with everything you say.
>
>Different conductivities and permittivities must be expected in soils at
>different depths. Are they not different soils, the products of different
>processes ?

Yes, they certainly are. Soil is not homogeneous like copper.

>But regarding independence of G and K of depth, the depth I referred to was
>not the depth of the soil below the surface but the depth of penetration of
>3 MHz radio waves.

The topsoil layer is from 9 to 12 inches in cultivated areas. Below that is hardpan,
compacted and relatively lacking in organic matter, undisturbed for 100 years
or more. Deeper still, about 3 feet and greater, is the true subsoil, which is even
more compacted, and containing negligible organic matter (in nonforested areas).
This has been undisturbed for thousands of years. Below that is rock, granite here,
limestone up at my farm (the exact depth down to rock varies. It can be as much
as 50 feet in some areas, darn near the surface in others).

Skin depth at 3 MHz is roughly 12 to 20 feet depending on the exact composition,
moisture content, and thickness of these layers. Note it requires several skin depths
to reduce a RF signal down to negligible levels.

Gary

>==================================
>Gary Coffman wrote in message
>news:lat33u065mloqbaa127n0kchb5cu0ujr89@4ax.com...
>> On Tue, 1 Jan 2002 13:47:19 +0000 (UTC), "Reg Edwards"
><g4fgq.regp@btinternet.com> wrote:
>> >The conductivity of copper (for example) is independent of the skin depth
>in
>> >copper. It is a property of the material itself.
>>
>> True. Copper is a homogeneous solid.
>>
>> >The conductivity and permittivity of soil are also properties of the soil
>> >itself and independent of the depth to which 3 MHz radio frequency
>currents
>> >penetrate into it.
>>
>> Not true. Soil is a nonhomogeneous aggregate, and its properties vary with
>location
>> and depth. Topsoil has a large percentage of organic material while

>subsoils have
>> much less organic material. Subsoils are also much more compacted, and may
>contain
>> large rock inclusions. The percentage of water in soils of differing
>compositions and
>> compaction also differs. Soil composition also varies widely from one spot
>to another,
>> even in the same field or yard. It is nothing like a solid block of
>copper.
>>
>> Because of the compaction issue, measurements need to be made in situ
>unless
>> you can duplicate the compaction in a bench press. Because of the ionic
>nature
>> of the fluids in soil, measurements made at DC (or near DC) will be wildly
>different
>> from measurements made at higher frequencies. Etc.
>>
>> Gary
>>
>

243. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 07:11:32 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201032311.1c503a7b@posting.google.com>
Source record: 151529

Richard Clark <kb7qhc@attbi.com> wrote in message
>
> Hi Mark,
>
> Your effort was enourmous, your correction was vast beyond that.
>
> 73's
> Richard Clark, KB7QHC

Didn't take very long really. Maybe 20-30 min. I'm still wondering about the results. I expect there is a "hook" somewhere in the results of the short radials. But there is no doubt the area beneath the antenna is the most critical place for copper. I was confused on the NEC-4 and the name of the NEC4WIN program. I assumed it used that engine with that name it has. I had downloaded it months ago, and had never tried it yet. I am going to try a set of 120 short radials on my 160 inv L but I want to do some tests first to find out where I stand now to make a fairly accurate comparison. Even 120 3 ft radials is a bit of wire to cut and lay out. Will take a while. I could make a mat of chicken wire or whatever, but I worry about the crossweaving of the wires. With all the wires extending out normally from the antenna, you would have a higher density of copper at the antenna compared to chicken wire which would be the same everywhere. I think I'd be better off with normal copper radials. I have two 160 antennas right now. A T and an L. The T is usually best, but if the radials did as well as modeled, it should be enough to push the L into the lead. Or I would think anyway. If it doesn't pan out, something is wrong with the short radial theory. What makes me suspicious is that no one has really touted large amounts of short radials in the past to get near optimum results. "4.5 dbi range" Surely this has already been tested I would think. MK

244. Re: Status of NFPA Lightning Protection Code?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 08:14:36 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201040014.235abb5e@posting.google.com>
Source record: 151530

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:<3c352b71_3@news1.prserv.net>...
> The ongoing questions about lightning protection prompt me to ask the
> following: NFPA used to issue a Lightning Protection Code, NFPA 78, but it
> has not appeared in their catalog for many years. The most recent version I
> have been able to turn up is dated in the early 90s, which is way out of
> date for an NFPA code. For a short time it was included in the Building
> Construction Codes, but then it also disappeared from there. I heard (urban
> legend?) that there had been a great deal of disagreement inside the
> committee which was to update it, and that some technical data has been
> developed which tends to refute some of the premises of the existing code,
> causing NFPA to let it expire and wait for some other agency to issue a new
> lightning protection code. Anyone have any factual information on this?
> Maybe it was reissued under a different number?

I have no idea really, but I do know they have been doing a lot of
testing on actual mock houses etc, to find the best ways to protect
them. I taped a TV program that showed them doing it. They fire
rockets up over the house with leader wires and zap em. They had a
house all set up with electric wiring, TV's, Phones, etc, etc to find
out the weak spots I guess. They may be waiting for some of that data.
Seems it could be pretty valuable I bet. They have been doing a lot of
lightning research since the early 90's. Out in New Mexico, etc.
It may well be time for an update. MK

245. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 08:43:16 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201040043.78b5982a@posting.google.com>
Source record: 151531

richardharrison@webtv.net (Richard Harrison) wrote in message news:<18660-
>
> Then, at the SW broadcast plant where I worked, birds trying to land on
> the 600-ohm transmission lines carrying 100 KW simply evaporated in a
> plume of flame. So, it`s just a question of enough volts to light a
> fire.
>
> Best regards, Richard Harrison, KB5WZI

I guess some trees are better than others. I've never seen one actually light on fire here though. I've only seen the branch scorching once when I had the bare wire end tangling though the tree branch. I was running about 1300-1400 w when I did that. I had never had a problem with it before, or with it since though at normal ham power levels though. The insulated wire seems to nip it in the bud fairly well even though you would think the high voltage would punch through the 600v rated plastic. About the closest to fireworks I've ever had was when one leg of my 40 dipole fell down on my grounded guy wire, and I was talking for a good while and didn't notice it. I had someone knock on the door all excited that I had a fire on my roof. It must have made huge sparks. I was doing a KW plus at that time also. I would't have noticed if they hadn't said anything. The amp didn't flinch. I'm surprised it didn't bark and spark at me in disgust. But it just kept on humming along. :) I need to get it going again before the tubes totally gas up on me. I've got it partially dismantled and I want to put new caps in it before I put it back together. It's been sitting so long I'm going to burn the tubes in again a day or two before I put high voltage to it. I really want to buy or build a solid state amp for my 706. I only need about 500w for average everyday use. But I like the henry as a match for my 830. Good pair...A good tree fryer too. MK

246. Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 09:50:52 UTC
From: Rich <amateur@blueyonder.co.uk>
Message-ID: <a13ttn$o0o2l$2@ID-117712.news.dfncis.de>
Source record: 151532

What sort of protection, if any, do people use against lightening striking the antenna ?
I must admit I have never heard of this happening but there does seem to be quite a lot of gear out there such as Gas Surge Protectors which the adverts say are ' vital '.
Are they necessary ? do they work ? Doesn't just unplugging the antenna still leave the problem of the current being able to enter the house ? Would a switcher box with a 'spare' connection connected to earth be of use ?

Richard

247. windom style antenna working FB for me..de ve3ab

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 09:58:05 UTC
From: ve3ab@mondenet.ca
Message-ID: <3c357aad.1463140@news.mondenet.com>
Source record: 151534

I just got my tower up before the snow fell this year and the beam
will have to wait till spring..but the wire antenna i put up..the
windom style antenna i put up is getting out real well for me.
With 100 w from my diminutive atlas 210x I got some 20 and 25 over
reports on 20m ssb. Was working and heard JA(off the long end
wire).must have some directivity off that end particulary on 10 mtrs.
10 mtrs works fb as well.
I use a Johnsons match box and about 50 ft of 450 ohm ladder line
(#14 guage stranded hd stuff). With the johnsons match box..
I dont always get a perfect 1.1 to 1 swr..sometimes 1.5 to 1 in that
range of a dip..but the rig likes it and it gets out well.
I was tempted to drop the two ends as verticals and have a 66 ft
flattop..thus creating a half square type antenna fed off center..but
the trees werent in the right location. (from what ive been
reading..this configuration works fb too..) 73 Earl VE3ab

248. Re: Best Antenna for FRG-100

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 09:58:10 UTC
From: Martin <mab@delete-this.capita.nildram.co.uk>
Message-ID: <u3auo4hklh6s12@corp.supernews.com>
Source record: 151533

Yes, I am talking from personal experience, but don't get me wrong - I was not
trying to imply that the FRG-100 is a poor receiver - I am very fond of mine! The fact
does remain that, like most modern mid-priced boxes, it has very little front-end
selectivity - if you check the circuit diagram, you will find that it just switches in one
of about half a dozen different band-pass filters as you tune around. The old generation
of valved superhets usually had some measure of tuning in the front-end - oh for
multi-gang variable capacitors!

When I first got mine, in a hurry to try it out I just hooked a few metres of wire into the hi-res
input and played - it worked great!. Later, I decided to get more serious about antennas
and started putting up more and more wire in more complex configurations. You soon
reach a point (at least on the lower frequencies) where each extra bit of wire raises the
noise level by near enough as much as it raises the signal level. Its not cross-talk in the
sense that you hear strong adjacent signals splattering through - its just a general high
noise floor which, I have read, is a symptom of overloading in the front-end - if anyone
knows better, I am prepared to stand corrected!

It is worth noting that most of the local signal sources you mention are VHF or higher.
I have seen it said on a number of occasions that the situation for SW reception in
Europe is rather different than it is for the US - we tend to have a higher concentration
of local MW and HF stations than you guys!

Martin

"Jeff Santee" <Jeff352@home.com> wrote in message
news:nd3Z7.62909$va.32958422@news2.rdc1.mi.home.com...
>
> >
> > Like most relatively budget prices HF receivers, the front end of the

> > FRG-100 is pretty wide
> > and suffers from noise and overloading from strong signals - I tried a
...
> > that you have some attenuation switched in a
> > lot of the time.
>
> > Martin (G8FXC)
>
>
> Martin
>
> I was wondering if you are speaking from personal experience with
the FRG 100
> or just "what you have heard". Because my experience with the FRG 100
does not
> reflect this statement at all. I have one and I also have all kinds of
commercial broadcast
> towers around me, one as close as 1000' from my house. I have a state
police repeater
> tower about as close, and all kinds of pager and what not antennas close
to me. I have
> yet to have any images show up on mine. Not even any A.M. station
crosstalk when I'm
> in the A.M. band. My experience with the FRG 100 is that it has a pretty
good front end
> and is quite sensitive. I will agree with your first statement that all
you need is about 10
> to 15 meters of wire and a good earth grd.
>
>
> Jeff
>
>

249. Re: 2m Horizontal Loop Antenna Plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 11:02:27 UTC
From: Kim & Steve Merrill <buck0@mediaone.net>
Message-ID: <3C358D24.B49E9A5D@mediaone.net>
Source record: 151537
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have done some work in designing simple antennas for emergency communications on 2-Meters.

This is a link to my Ham page: http://people.ne.mediaone.net/buck0/hampage.htm
It contains designs for 4 different 2-meter collinear antennas, a 2-meter SSB Halo, and some information on Go-Kits.
The ARRL Website also has a link to this page located:
http://www.arrl.org/tis/info/Yagi-V.html

This HALO design is not ground dependent and can be mounted atop a section of PVC. See comments! Easy to build. Cheep$$$

Some of my antenna designs are posted on the Erie County Chapters of ARES and RACES Website:
http://hamgate1.sunyerie.edu/races/antenna.htm
The ARRL Website also has a link to this page located in their Technical Information Pages: http://www.arrl.org/tis/info/JPole-V.html

Have fun building!
73s
Steve KB1DIG ;-)

Jason Dugas wrote:

> Hi,
>
> I've heard that these small 2m horizontal loop antennas (sometimes stacked 2
> or 4 at a time) (also known as sqkloops?) are excellent for sideband. I see
> them offered for relatively cheap by KB6KQ(.com). However, my Dad and I are
> interested in building one for fun. Does anyone know if the plans for this
> type of antenna can be found in QST or in the Antenna book?
>
> We are interested in using one or two of them for 2m SSB (we're just getting
> started).
>
> Thanks for any help you can provide,
>
> Jason
> KB5URQ

250. Re: 2m Horizontal Loop Antenna Plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 11:08:21 UTC
From: Kim & Steve Merrill <buck0@mediaone.net>
Message-ID: <3C358E85.C14E6B2C@mediaone.net>
Source record: 151538
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have done some work in designing simple antennas for emergency
communications
on 2-Meters.

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Have fun building!
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> interested in building one for fun. Does anyone know if the plans for this
> type of antenna can be found in QST or in the Antenna book?
>
> We are interested in using one or two of them for 2m SSB (we're just getting
> started).
>
> Thanks for any help you can provide,
>
> Jason
> KB5URQ

251. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 11:56:21 UTC
From: Joe O <jenjoeo@zianet.com>
Message-ID: <3c359aa1.0@oracle.zianet.com>
Source record: 151539

I concur that a large horizontal loop is a good start. I have a 480 ft loop up at 35 ft and I often work JA/ZL on 12 Meters(Low angle of radiation). On 75/40 I have been told that my signal is exceptionally strong on State/regional nets(High Angle of radiation).
For a second antenna I suggest a full wave vertical loop for 40 M. Feed the loops with open/ladder line , extend to as close to the shack as possible then a current balun and low loss coax into the building . End the transmission line with a High Power ATU.
I love loops.
73s Joe O KI5FJ
'Doc <w5lz@icok.net> wrote in message news:3C35228B.28DB11DD@icok.net...
> Lee,
> I'd try a loop antenna fed with ladder line. As large as
> I could make it, and as high as I could get it. Feed it through
> a good tuner, and you can make it 'go' anywhere, and even realize
> some gain out of it on some frequencies. Not ~the~ best antenna
> for all bands, but it does remarkably well on most of them.
> 'Doc

252. Re: Smaller versions of screwdrivers??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 12:51:08 UTC
From: pa3duv@planet.nl
Message-ID: <9bef0c37.0201040451.345ed396@posting.google.com>
Source record: 151540

Hi Max,
Check for the StealthII-2.5/40 at
http://www.qth.com/hiqantennas/
or
http://www.qth.com/stealthantennas/
It is a nice and sleek looking yet rugged and high quality
screwdriver.
You can run 1 kW with this antenna.
I have very good experience with the Stealth II-3 antenna. They are
not the cheapest on the market but as always, you get what you pay for
and Charlie is very easy to deal with.
Check also http://www.eham.net/reviews/detail/1452
Good luck and happy mobiling!
Dick PA3DUV

"Max" <ve3tmt@rac.ca> wrote in message
news:<pytY7.6387$A67.1724873@news20.bellglobal.com>...
> A couple of years ago I was using a BB3 screwdriver mounted on the trailer
> hitch of my '99 Intrepid. Although it worked not bad, honestly I thought
> the antenna was just too big for the car. On a F350 or tractor trailer they
> might look ok, but it looked out of place on the back of the car. Is there
> a smaller version available, say to cover 40-10m? I don't do too much on 75
> anyway, but I guess I would if I had the antenna right? Just curious if
> anyone makes or can make a smaller version, meaning not as tall or as big a
> diameter to cover 40 and up?
>
> Thanks,
>
> Max ve3tmt@rac.ca

253. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 12:52:16 UTC
From: richardharrison@webtv.net
Message-ID: <2379-3C35A580-2@storefull-115.iap.bryant.webtv.net>
Source record: 151541

Gary Coffman wrote:
"Skin depth at 3 MHz is roughly 12 to 20 feet depending on the exact composition, moisture content, and thickness of these layers. Note it requires several skin depths to reduce a RF signal dowen to negligible levels."

Good to hear from Gary again. I`ve missed his informed contributions for awhile.

RF soil penetration (skin depth) is where current has fallen to 1/e of the surface current, or 37%. Depth declines as the reciprocal of the square root of frequency. 90% of loss is within one skin depth.

Best regards, Richard Harrison, KB5WZI

254. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 13:38:56 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C35B03A.748CD3D2@tampabay.rr.com>
Source record: 151542

hey rich
i live in central florida where its the lightening capital of the country and i so far have never had a direct hit to an antenna so i dont use any thing for protection other than unhooking the feedline from the radio if mother nature wants your antenna there isnt much out there that will save the antenna

Rich wrote:

> What sort of protection, if any, do people use against lightening striking
> the antenna ?
> I must admit I have never heard of this happening but there does seem to be
> quite a lot of gear out there such as Gas Surge Protectors which the adverts
> say are ' vital '.
> Are they necessary ? do they work ? Doesn't just unplugging the antenna
> still leave the problem of the current being able to enter the house ? Would
> a switcher box with a 'spare' connection connected to earth be of use ?
>
> Richard

255. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 13:56:17 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C35B481.E7DE488@IEEE.org>
Source record: 151543

Reg Edwards wrote:
> Your amendments now make sense. They come from elementary transmission line
> analysis and relate SWR and Reflection Coefficient to each other. They
> assume line Zo is purely resistive which is reasonable for ordinary lines at
> HF.

I've looked at that formula a little closer. The elementary terms in the formula are a=(Pin/Pout) for a matched line and Rho^2=(P-/P+) for a line with standing waves. Now it makes sense.
--
cheers, CAM http://www.qsl.net/w5dxp

256. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 13:58:28 UTC
From: richardharrison@webtv.net
Message-ID: <13471-3C35B504-31@storefull-117.iap.bryant.webtv.net>
Source record: 151544

Mark Keith wroote:
"Even 120 3-ft radials is a lot of wire to cut and lay out."

The broadcast stations I`ve worked in used sheets of copper around their towers for radial connections. Current density is greatest at the tower. Any resistance here produces the greatest loss. Eddy currents are possible in solid copper which allows lateral conduction in addition to radial conduction but the conductivity is so high that eddy current loss is low.

Using the wire you have in shorter lengths to provide more radials has proved to be more efficient in manycases, Broadcast ground system designers are aware of this but the FCC says at least 120 1/4-wave radials so the designer complies. Many designers add another 120 short radials interspersed with the 1/4-wave radials as they want the biggest signal they can get. The FCC stipulates minimum requirements.

Brown, Lewis, and Epstein reported in 1937 that the effective length of radials decreases as the number of radials decreases. The converse would also be true. More radials means more effective length for the radials.

Best regards, Richard Harrison, KB5WZI

257. 30m delta loop issues

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 14:31:57 UTC
From: DXer <DXer@DXcentral.com>
Message-ID: <E7EE74A4551D5BB6.EA702D185E9173AD.223303ACBCD92A1D@lp.airnews.net>
Source record: 151545

I use a delta loop on 80/40m and added 30m yesterday. 80/40m both have very low swr and are fairly broad.

However, the 30m loop is not cooperating. Its bandwidth is very narrow and swr is 3:1 at resonant freq. The analyzer doesn't show anything abby normal either ....

Any ideas as to why this particular loop and band is behaving this way?

--
Lee - Kr5f
Have we qso'd - Find out at http://www.kr5f.com

258. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 14:34:06 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <y3jZ7.219$M4.115242@paloalto-snr2.gtei.net>
Source record: 151546

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:3C35B03A.748CD3D2@tampabay.rr.com...
> hey rich
> i live in central florida where its the lightening capital of the country
and i
> so far have never had a direct hit to an antenna so i dont use any thing
for
> protection other than unhooking the feedline from the radio if mother
nature
> wants your antenna there isnt much out there that will save the antenna
>

Maybe not, but a little extra effort sure can save your equipment, and
maybe even your life. Where do you think that a couple million amps of
electric current will go once it gets to the end of the coax laying at your
feet ?

73 de W6DKN

259. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 14:43:34 UTC
From: richardharrison@webtv.net
Message-ID: <8519-3C35BF96-23@storefull-116.iap.bryant.webtv.net>
Source record: 151548

I wrote:
"Depth declines as the reciprocal of the square root of frequency."

I meant that depth decreases as frequency increases, but only as the square root of the frequency. Here is the formula for skin depth in meters (S).

S = 1 / sq rt 4pi times frequency times permeability times 10,000

Permeability is in electromagnetic units.

Frequency is in Hertz.

Skin depth is 1/2 the wavelength of the r-f`s velocity in the soil, for whatever that is worth.

Best regards, Richard Harrison, KB5WZI

260. Re: 30m delta loop issues

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 15:13:23 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C35C693.CEA8FDBA@IEEE.org>
Source record: 151547

DXer wrote:
>
> I use a delta loop on 80/40m and added 30m yesterday. 80/40m both have very
> low swr and are fairly broad.
>
> However, the 30m loop is not cooperating. Its bandwidth is very narrow and
> swr is 3:1 at resonant freq. The analyzer doesn't show anything abby normal
> either ....
>
> Any ideas as to why this particular loop and band is behaving this way?

Of course, assuming you are feeding them in parallel. Your 80m loop,
being operated near its third harmonic, is soaking up enough of your
signal on 30m to affect the impedance. Third harmonic responses often
upset paralleled elements. 80m/30m, 40m/15m, and 30m/10m are the
usual HF gotchas.
--
cheers, CAM, W5DXP

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Check out our new Unlimited Server. No Download or Time Limits!
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261. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 16:15:56 UTC
From: richardharrison@webtv.net
Message-ID: <2379-3C35D53C-6@storefull-115.iap.bryant.webtv.net>
Source record: 151551

W6DKN wrote:
"Where do you think a couple of million amps of electric current will go once it gets to the end of coax laying at your feet?"

You`re not quite as vulnerable as old Ben Franklin flying his Kite.

I hope my feet won`t be in the lightning`s path. The shorter path to ground is at my feet, but under the coax, and I hope it is more attractive. The flash may still burn my shoes off.

A drain for lightning on the coax should have been made outside the building.

The broadcast stations I`ve worked in used coax, openwire lines, and skeletal coax wirelines.

Coax was either buried or grounded at both ends and/or multiple points.

The openwire lines were protected with arc-gaps at both ends.

The skeletal coax was supported by many poles topped with brackets to maintain spacing for the wires forming the "coax". Each support pole was buried to a considerable depth and the outer wires of the "coax" were directly clamped to the bracket.

None of these transmission lines ever let a trace of lightning into the insideplant.

Best regards, Richard Harrison, KB5WZI

262. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 16:23:11 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a14lsn$ne07r$1@ID-124126.news.dfncis.de>
Source record: 151549

Unless numbers are forthcoming in these supposed erudite newsgroup messages they are nothing more than a collection of bafflegabs usually associated with fractals, cross-fields, EH, amps in the middle of dipoles, SWR on non-existent transmission lines, conjugate matches, etc.

It is a fact, in 1937, a measurement of the vitally important ground resistivity was omitted because none of the trio had a clear idea of what it was all about. It was just a job to find employment. When the money and wire ran out they stopped. Nothing wrong with that! That's the normal state of affairs on this planet.

Again I say, do not decry the very practical value of their work at that time in the evolution of radio broadcasting. But we should not use their results to draw conclusions they, themselves, did not conclude. Particularly we should be careful about extending their results to other parts of the spectrum used by us amateurs. Their papers do not constitute a bible and they are neither disciples nor the three wise men.

A vast amount of practical information has been accumulated since 1937, most of it just logical common sense, economics and statistics (much neglected subjects) which apply just as much to amateurs as they do to broadcasters of soap.

I am everlastingly dumfounded by the use of high-technology satellite and light-fibre communication systems just to sell germ-free toilet cleansers.

But they who own and control the world's communications circuits and systems, satellite, terrestrial, analogue, digital, LF & VHF radio, interactive TV, telephone, internet, will rule this Earth.

Is there any travel company taking bookings for Andromeda ?

****
Regards, Reg G4FGQ
Radio Modelling Programs.
Have a free lunch.
Http://www.g4fgq.com
****

263. Re: 30m delta loop issues

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 16:34:35 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a14lss$ne07r$2@ID-124126.news.dfncis.de>
Source record: 151550

The important question to ask is "does it work ?"

If it works what's the complaint ?

Are your measurents incorrect (the most likely problem) and leading your
thoughts on the subject astray ?
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

264. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 16:50:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a151m8$oa6mb$1@ID-124126.news.dfncis.de>
Source record: 151566

Rich, you've got your knickers in a twist again. ;o)

265. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 17:15:12 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C35E320.AF34C8E2@IEEE.org>
Source record: 151552

Reg Edwards wrote:
> Is there any travel company taking bookings for Andromeda ?

Maybe a better target would be Alpha Centuri?
--
cheers, CAM, W5DXP

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266. Re: Antennas for Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 17:18:54 UTC
From: perryr@aol.com
Message-ID: <20020104121854.05951.00002859@mb-fl.aol.com>
Source record: 151553

```
please send catalog to ronald perry
346 derwyn rd
lansdowne pa 19050
thanks jerry kb3cur
email perryr@aol.com
```

267. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 18:04:24 UTC
From: raiar@slacc.com.nospam
Message-ID: <3c35ea0a.72360743@news.galilei.com>
Source record: 151554

Astro

Although in most cases cellphones are inoperable while flying above the 1 mile mark, the airliners that were hijacked were flying very low to avoid radar and there were celltowers located atop the WTC buildings to provide adequate service to those in nearby skyscrapers.

It is not unfeasible at all for a cellphone to work from a commercial airliner at low altitude, especially an airliner that is approaching below the height of the antenna.

It also depends upon which cellphones you are talking about, their output power and the location of that companies celltower.

TTUL
Gary

268. Re: windom style antenna working FB for me..de ve3ab

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 18:12:16 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a14r78$37u$1@news.tribune.com>
Source record: 151555

Hi Earl.
Sounds like you got a good antenna there.
I have a Doublet fed with 400 ohm (home brew) and by a Johnson Matchbox.

If my rig loads I am happy, but I could not load it on 30, so I was not happy.

I read the stuff on W4RNL web site (cebik.com) and added an additional variable cap to
my Matchbox. It now matches all bands well.

KA9CAR at arrl dot net.

John

Earl Andrews <ve3ab@mondenet.ca> wrote in message news:3c357aad.1463140@news.mondenet.com...
> I just got my tower up before the snow fell this year and the beam
> will have to wait till spring..but the wire antenna i put up..the
> windom style antenna i put up is getting out real well for me.
> With 100 w from my diminutive atlas 210x I got some 20 and 25 over
> reports on 20m ssb. Was working and heard JA(off the long end
> wire).must have some directivity off that end particulary on 10 mtrs.
> 10 mtrs works fb as well.
> I use a Johnsons match box and about 50 ft of 450 ohm ladder line
> (#14 guage stranded hd stuff). With the johnsons match box..
> I dont always get a perfect 1.1 to 1 swr..sometimes 1.5 to 1 in that
> range of a dip..but the rig likes it and it gets out well.
> I was tempted to drop the two ends as verticals and have a 66 ft
> flattop..thus creating a half square type antenna fed off center..but
> the trees werent in the right location. (from what ive been
> reading..this configuration works fb too..) 73 Earl VE3ab

269. Is 3 ft far enough for no antenna fires?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 18:21:12 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C35F298.5F5D9989@capnet.com>
Source record: 151556

If I keep the dipole at least 3 ft away from anything combustable
will that be safe.
All this antenna fire starting is making me real nervous.

270. Attic HF Setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 18:33:20 UTC
From: danbrew <danbrew@hotmail.com>
Message-ID: <u3bt7qea78mqd6@corp.supernews.com>
Source record: 151557

This has to have been hashed out here many times... I did a cursory examination of the posts, so could have missed something...

I'm in a heavily deed restricted community (my choice, I know, I know), and am considering an antenna solution in my attic - it will be completely enclosed and shielded by a standard new construction roof (wood, shingles - but no metal).

I've had my ham ticket for a number of years but went dark a few years ago and now am getting back into the sport - i'm a no-code tech now, but am working on both the code and the general exam. I'm most interested (for now...!) in 6, 10, 20 meters. Any ideas on stealth antennas would be appreciated - everything must be inside.

73's,

danbrew

271. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 18:46:25 UTC
From: danbrew <danbrew@hotmail.com>
Message-ID: <u3bu0b2u4ihvdf@corp.supernews.com>
Source record: 151558

Richard has it right - it has to do with multiple sites picking up the signal. Someone else said if you were above 5000' they wouldn't work - kinda sorta, but not really - otherwise nobody in Denver would be able to use a cell phone!

Some switches will drop a call if multiple towers on the same system get a signal from the same ecn. Most do not - thus allowing the call to go through. The cell biz bullied the FCC into making it illegal to use phones inflight because they don't want to tie up multiple towers/circuits.

fwiw.

"Bob Miller" <bamiller@texas.net> wrote in message
news:jTE1PLedf7kZxgzboDe8ccFGi7TV@4ax.com...
> "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote:
>
> >Did not!
>
> Wellll, I don't disagree with what Richard and Ken have said, that the
cell
> phones don't work properly at elevations above 5000 feet; but I seem to
recall
> that the hijackers were flying low on the flights toward Washington to
avoid
> radar, which means callers on the flights may have been low enough to pick
up
> individual cell towers while using their personal cell phones...
>
> Bob
> k5qwg
>
>
> >
> >
> >"Stahr" <w6nyc(remove this to email)@earthlink.net> wrote in message
> >news:3L8Z7.1798$zw3.322338@newsread1.prod.itd.earthlink.net...
> >>
> >> Yes they did use their personal cel phones, and you are an idiot!
> >>
> >> Dennis
> >>
> >>
> >> "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
> >> news:u3990s96ulmt40@corp.supernews.com...
> >> > They didn't use cell phones. They used the in-flight phones mounted

in
> >> the
> >> > seat backs. These are wired into the aircraft and to an antenna on
the
> >> > outside of the fuselage.
> >> >
> >> > They couldn't have used a cell phone due to the interference it would
> >have
> >> > caused being in range of so many towers. The cell phones wouldn't
have
> >> > worked.
> >> >
> >> > Man - the level of ignorance on Usenet astounds me sometimes!
> >> >
> >> >
> >> > --
> >> > Nick: Hey in there! Don't you want your doorknocker?
> >> > Catherwood: I already have a doorknocker.
> >> > Nick: But this is yours!
> >> > Catherwood: See, I told you!
> >> >
> >> > "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> >> > news:3C349622.4281A893@blackhole.net...
> >> > >
> >> > > When the planes were hijacked on Sept. 11, according to reports
many
> >> > > people on the plane used cell phones. How do these phones work
through
> >> > > the aluminum skin of the aircraft, which seems to surround them
> >> > > completely? I apologize for the ignorance that this question
reveals,
> >> > > but I don't have a cell phone and I haven't flow for about ten
years.
> >> > >
> >> > > --
> >> > > john
> >> >
> >> >
> >> >
> >>
> >>
> > >
>

272. Re: Attic HF Setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 18:48:07 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <rvtb3u0i33bunjdp9p9rnag5vo81v35f30@4ax.com>
Source record: 151559

For 6-meters you might have enough room to swing a small beam. For 10
and 20 just use dipoles. You could even feed them at a common point
with just one feedline. Another thought would be to use an automatic
antenna tuner, like SGC, Icom, etc. and end feed a wire antenna.
Don't know how you would get back to ground. Depends on your
building's construction.

Dick - W6CCD

On Fri, 4 Jan 2002 12:33:20 -0600, "danbrew" <danbrew@hotmail.com>
wrote:

>
>This has to have been hashed out here many times... I did a cursory
>examination of the posts, so could have missed something...
>
>I'm in a heavily deed restricted community (my choice, I know, I know), and
>am considering an antenna solution in my attic - it will be completely
>enclosed and shielded by a standard new construction roof (wood, shingles -
>but no metal).
>
>I've had my ham ticket for a number of years but went dark a few years ago
>and now am getting back into the sport - i'm a no-code tech now, but am
>working on both the code and the general exam. I'm most interested (for
>now...!) in 6, 10, 20 meters. Any ideas on stealth antennas would be
>appreciated - everything must be inside.
>
>73's,
>
>danbrew
>

273. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 18:51:25 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <3C35F9AD.6624EB32@west.raytheon.com>
Source record: 151560

Richard Harrison wrote:
>
[]

> Here is the formula for skin depth in
> meters (S).
>
> S = 1 / sq rt 4pi times frequency times permeability times 10,000
>
> Permeability is in electromagnetic units.
>
> Frequency is in Hertz.

I am no longer familiar with the electromagnetic system of units but I think they are essentially a scaled version of CGS. Of course most engineering these days uses the MKS system of units which has some significant differences when it comes to electromagnetic calculations. Either way, your equation for skin depth is not generally true since it does not account for permitivity or conductivity.

Conventionally, the skin depth is defined as the depth where the magnitude of the current density has decayed to 1/e of the surface value. This is numerically equal to the reciprocal of the real part of the propagation constant.

The propagation constant, gamma = alpha + j * beta.

The real part, alpha, is the attenuation in nepers per unit distance and is the reciprocal of the conventional skin depth.

The imaginary part, beta, is the phase constant in radians per unit distance.

(MKS system of units)

gamma = sqrt(j*omega * sqrt(mu * epsilon) * sqrt(1 - j* sigma/(omega * epsilon))

omega is the angular frequency in radians / second
mu is the permeability in Henrys / meter
epsilon is the permitivity in Farads / meter
sigma is the bulk conductivity in Siemens / meter

In the special case of a good conductor, that is when sigma / (omega * epsilon) >> 1 ,
or in another words, displacement current is negligible compared to

conduction current, the skin
depth equals:

delta = 1/sqrt(pi * f * mu * sigma)

where:

delta is the skin depth in meters
f is the frequency in Hertz = 2 * pi * omega

Typical soils have a value of sigma/(omega*epsilon) ranging from less
than one to 20 or so. Solid rock can be much smaller making it
inadvisable to use the good conductor approximations without carefully
determining the applicability of the approximations and the
consequences of misuse.

> Skin depth is 1/2 the wavelength of the r-f`s velocity in the soil, for
> whatever that is worth.

From the above conventional definition, the wavelength of a plane wave
propagating in the medium is equal to 2 * pi / beta. In the case of a
good conductor where alpha = beta (approximately), then the wavelength
is equal to 2 * pi * delta, not 2 * delta as you claim. I would be
very surprised if this discrepancy was the result of using EMU instead
of MKS. The difference in systems of units does explain for a factor
of sqrt(4) and the different scaling of mu and epsilon, but not the
relationship between skin depth and wavelength.

bart
wb6hqk
>
> Best regards, Richard Harrison, KB5WZI

274. Re: 30m delta loop issues

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 19:01:51 UTC
From: David Ornee <daveornee@mindspring.com>
Message-ID: <a14u8ovav1@slb0.atl.mindspring.net>
Source record: 151561

If it is not the parallel feed issue it may also be a proximity issue,
especially to the 80 Meter loop,... for reasons similar to the one mentioned
in the previous post.
73, KQ9W, David Ornee
"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C35C693.CEA8FDBA@IEEE.org...
> DXer wrote:
> >
> > I use a delta loop on 80/40m and added 30m yesterday. 80/40m both have
very
> > low swr and are fairly broad.
> >
> > However, the 30m loop is not cooperating. Its bandwidth is very narrow
and
> > swr is 3:1 at resonant freq. The analyzer doesn't show anything abby
normal
> > either ....
> >
> > Any ideas as to why this particular loop and band is behaving this way?
>
> Of course, assuming you are feeding them in parallel. Your 80m loop,
> being operated near its third harmonic, is soaking up enough of your
> signal on 30m to affect the impedance. Third harmonic responses often
> upset paralleled elements. 80m/30m, 40m/15m, and 30m/10m are the
> usual HF gotchas.
> --
> cheers, CAM, W5DXP
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> Check out our new Unlimited Server. No Download or Time Limits!
> -----== Over 80,000 Newsgroups - 19 Different Servers! ==-----

275. AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 19:04:39 UTC
From: Alex <alex99@peoplepc.com>
Message-ID: <a14u8c$q665@eccws12.dearborn.ford.com>
Source record: 151565

Help! I work in an office building in the Detroit area and listen to an am/fm extended range radio. I try to listen to various am stations but either don't get them or they come in very poor with a lot of hissing/crackling noise. If I bring the radio close to a window, reception is perfect. Unfortunately I sit about 25 feet from a window and CAN'T bring my radio any closer.

Can anyone offer suggestions on how to improve my reception and get rid of some of the hissing/crackling????

276. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 19:07:42 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <cdvb3u8l41uj2cfmpavesck0fpk26orh99@4ax.com>
Source record: 151562

On Thu, 3 Jan 2002 13:47:57 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Dear Richard,
>
>I'm surprised you appear unable to solve such a trivial problem in
>electrical measurements for youself. People have been making conductivity
>measurements ever since Michael Faraday. And HE didn't have a 259.
>
>Just concentrate on it. Start at DC and work your way up.
>
>I'll give you a clue - if your soil sample is a cube, 39.37 inches along
>each edge, you can measure conductivity (or resistivity) directly. But your
>XYL is unlikely to welcome half a ton of damp dirt into the kitchen. ;o)
>---

Ah Punchinello!

Your surprise is delightfully manufactured to the highest of
specifications.

Your Faraday reference is a wonderful example of neo-classical grave
robbing: dressing up the corpse as citation, another one of those
amusing Old Wive's habits that struggles for the appearance of
respectability.

And did we get a clue as to this veiled mystery process that is so
much better than direct measure? Noooo, I don't think so.

I look at the quote above and it doesn't really say anything does it?
You don't respond to those superior methods you are writing through,
so apparently there is no critique nor downside in them that you can
offer in technical rebuttal. Yet, still and all there is your mumbled
tale for children and small animals of a "better way." It has all of
the appeal of the old Stalinist dogma - or the church's promise of
eventual reward. ALL are best left outside the laboratory door as
these tales are generally served around a warm stove in the kitchen.

Our Little Old Wife jealously huddles over her cache of recipes in her
domain of the kitchen. As we approach to look, they are suddenly
swept under her apron. What appears to be a steaming bucket full of
mud awaits analysis - or are those cookies baked for the kids?

Who can tell, Faraday? (See? I can lift his arm and make him look
like he's waving back at you Punchinello!)

73's
Richard Clark, KB7QHC

277. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 19:38:48 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <axnZ7.384$M4.478845@paloalto-snr2.gtei.net>
Source record: 151563

Exactly my point. The original poster implied that other than unplugging
the coax from the rig, nothing else was necessary...

73 de W6DKN

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:2379-3C35D53C-6@storefull-115.iap.bryant.webtv.net...
> W6DKN wrote:
> "Where do you think a couple of million amps of electric current will go
> once it gets to the end of coax laying at your feet?"
>
> You`re not quite as vulnerable as old Ben Franklin flying his Kite.
>
> I hope my feet won`t be in the lightning`s path. The shorter path to
> ground is at my feet, but under the coax, and I hope it is more
> attractive. The flash may still burn my shoes off.
>
> A drain for lightning on the coax should have been made outside the
> building.
>
> The broadcast stations I`ve worked in used coax, openwire lines, and
> skeletal coax wirelines.
>
> Coax was either buried or grounded at both ends and/or multiple points.
>
> The openwire lines were protected with arc-gaps at both ends.
>
> The skeletal coax was supported by many poles topped with brackets to
> maintain spacing for the wires forming the "coax". Each support pole was
> buried to a considerable depth and the outer wires of the "coax" were
> directly clamped to the bracket.
>
> None of these transmission lines ever let a trace of lightning into the
> insideplant.
>
> Best regards, Richard Harrison, KB5WZI
>

278. What will work for QRP?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 19:54:49 UTC
From: blair thompson <blairt@shaw.ca>
Message-ID: <3i1c3us1ad99klcrd6jarkb1l6bi8cur91@4ax.com>
Source record: 151564

I lurk about this list, and also scan the QRP-L archives and
am wondering what I really need to join this select cabal, at least to
participate in their Cub fox hunts, which seem like great fun. I
posted this same question on the QRP-Canada list, but didn't get back
any real antenna suggestions.
I operate CW only and make most contacts at 10W with my TS-50.
I've worked some DX from 10-50 watts. On my hard drive are
instructions for turning the TS-50 down to 5W, which I will do one
of these days. My limitations are in my antenna, I think.
I live in a townhome and run a 100 ' end-fed wire (about as
thick as hook-up wire) out a second-storey window, over the roof to a
Ponderosa Pine tree. At its highest point, it is only up about 23
feet. I have a single 100' counterpoise and can operate on most bands
using an MFJ 949D. It's nice living alone, because it enables me to
snake that 100' counterpoise all over the floor of 3 rooms without any
XYL QRN :)
I monitor on CubFox nights, and also those blisteringly-quick
operators during the regular Fox hunts(Thursdays), but I only
occasionally can hear much action (fox or hounds) which is kinda
frustrating. I presume some of my problems originate with the low
elevation of my wire, but could it also have something to do with
being way out here on the "wet" coast (British Columbia)? Should I try
a resonant counterpoise wire, for the bands I want to work,
especially, 40M (foxhunt), or would that be a waste of time?
My antenna is sort of stealthy, and I would like to keep it
that way (my townhouse is an end-unit). So, I guess my question to
this list would be: does anyone have any suggestions for a better
antenna for QRP operations? An indoor "attic" wire is not an option,
but I'm not averse to some sort of quick, up-and-down, portable,
outdoor-indoor thingie, provided band-switching isn't too much of a
hassle. The convenience of that end-fed tuner antenna has spoilt me :)
Thanks for listening.
73
Blair VE7HHH.

279. Re: AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 20:13:55 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C360CF3.CA7A5C6C@icok.net>
Source record: 151567

Alex,
The 'easy' answer is to get promoted to a corner office. The
more realistic(?) answer is that you probably aren't going to be
able to do anything without the cooperation of the business or
the
building's owners. If you can get that 'permission', you have
several options ranging from running a wire to, and out of the
nearest window, to some type of 'active' antenna.
Good luck...
'Doc

280. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 20:18:25 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C360DEB.1A97A0B5@tampabay.rr.com>
Source record: 151568

well i would assume it would go to ground since when i unhook the feedline from the rig i connect it to a coax connection that is hooked to a ground rod outside
and trust me if lightening wants your gear it will find a way in
a friend of mine had a bolt of lightening hit a tree in his front yard short to ground travel to the house and came into the house thru the ground side of the electric service took out everything in the house that was still plugged in so what good would those expencive lightening SUPPRESSORS do
nothing will stop a direct hit anyways

W6DKN wrote:

> "Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
> news:3C35B03A.748CD3D2@tampabay.rr.com...
> > hey rich
> > i live in central florida where its the lightening capital of the country
> and i
> > so far have never had a direct hit to an antenna so i dont use any thing
> for
> > protection other than unhooking the feedline from the radio if mother
> nature
> > wants your antenna there isnt much out there that will save the antenna
> >
>
> Maybe not, but a little extra effort sure can save your equipment, and
> maybe even your life. Where do you think that a couple million amps of
> electric current will go once it gets to the end of the coax laying at your
> feet ?
>
> 73 de W6DKN

281. Re: Is 3 ft far enough for no antenna fires?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 20:23:37 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C360F23.2796C5C2@tampabay.rr.com>
Source record: 151469

i dont know where you heard a dipole starting a fire
but think about all the hams ruinning dipoles in there attics and never
caught ablaze
and with the full legal limit of 1500 watts it just doesnt get that hot

StarGazer wrote:

> If I keep the dipole at least 3 ft away from anything combustable
> will that be safe.
> All this antenna fire starting is making me real nervous.

282. Re: Attic HF Setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 20:24:19 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C360F66.7B7BD790@icok.net>
Source record: 151470

Dan,
I guess it depends on the size of your attic. The
possibilities
run from a random length wire to a small beam. Probably the
'easiest'
antenna would be dipoles on each band. The dipoles would negate
the
need for a ground to a large extent too. What would be 'best'?
Beats
me, you'll have to try them to find out...
'Doc

283. Re: Is 3 ft far enough for no antenna fires?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 20:29:54 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C3610B3.ABDC6072@icok.net>
Source record: 151471

StarGazer,
Unless your running quite a bit of power, an antenna fire
is one of the last things in the world I'd worry about. They
just don't happen that often. After 20 years in the fire
service, I have never heard of an antenna fire (other than from
lightning).
But to answer your question, 3 feet should be plenty of
separation...
'Doc

284. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 20:46:35 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C36149B.4336B8B0@icok.net>
Source record: 151472

Rich,
Lightning protection isn't as 'vital' as you may think. That
does not mean that it isn't desirable, though! The gas-dischange
protectors are good (but expensive) and naturally should be
mounted
out side of the house. The old 'spark-gap' protectors are next
to
useless. By the time they do discharge a surge, the surge has
already reached your equipment. Disconnecting the antenna and
putting
the end of the feedline outside is probably the simplest
protection.
Putting the end of the feed line in a glass jar is as bad as not
disconnecting to start with. For 'small' surges it's okay, but
if
you should ever have a 'for real' lightning strike, the jar makes
a very nice hand grenade (hope your not in the room)! Using an
antenna
switch box that shorts the antennas when not in use is probably
the
most 'common' lightning protection. And it works to an extent,
but
still isn't the 'best' alternative. In most cases, nothing will
stop a direct lightning strike, but ~anything~ might 'help'.
'Doc

285. Re: Attic HF Setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 21:02:30 UTC
From: derswede@aol.comspam.com
Message-ID: <20020104160230.25750.00005897@mb-fi.aol.com>
Source record: 151474

>and
>am considering an antenna solution in my attic - it will be completely
>enclosed and shielded by a standard new construction roof >(wood, shingles-but
no metal).

Ended up with a similar situation...got my ticket after buying a house in a similarly restricted neighborhood...the 6M J-Pole holds a birdhouse (not a SINGLE word from the neighbors so far!! or from the birds, for that matter) and got a G5RV (yea, I know...not the best but ya work with what you have) for the attic. The attic is long enough to hold the majority of the G5RV, the ends drop down off the side of the house (two story and on side of hill) towards the low side of the house. Loads FB on 6M, works well on 10/15/20, haven't tried 40/80 (for those that care, my bro's a General class licensee, I'm currently Tech).

A 2M 5 element beam is mounted in the rafters with a 440 yagi underneath, TV rotator to swing them. Seems to work well. As it is suspended below the G5RV, I was concerned about RF problems, but so far no major interference. Separation is at maximum 8 feet, so it is close. When my brother is using the old FTdx560, I disconnect the 2/440 antennas.

My setup is N/S oriented, have worked South America on 10 watts on 6M, my brother had a nice chat with a Uruguayian station the other day, 5/9+ from the old Ftdx560. Not a tribander, but works.

Cheers;
Andrew

286. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 21:02:31 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <HLoZ7.106583$Y6.10414696@news1.rdc1.ct.home.com>
Source record: 151473

Strange, but in all of FM, AM and TV stations I worked at, none of the transmitter
sites were ever knocked of the air or damaged by lightning hits. And, they did happen.

Pete

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message news:3C360DEB.1A97A0B5@tampabay.rr.com...
> well i would assume it would go to ground since when i unhook the feedline from
> the rig i connect it to a coax connection that is hooked to a ground rod
> outside
> and trust me if lightening wants your gear it will find a way in
> a friend of mine had a bolt of lightening hit a tree in his front yard short to
> ground travel to the house and came into the house thru the ground side of the
> electric service took out everything in the house that was still plugged in so
> what good would those expencive lightening SUPPRESSORS do
> nothing will stop a direct hit anyways
>
> W6DKN wrote:
>
> > "Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
> > news:3C35B03A.748CD3D2@tampabay.rr.com...
> > > hey rich
> > > i live in central florida where its the lightening capital of the country
> > and i
> > > so far have never had a direct hit to an antenna so i dont use any thing
> > for
> > > protection other than unhooking the feedline from the radio if mother
> > nature
> > > wants your antenna there isnt much out there that will save the antenna
> > >
> >
> > Maybe not, but a little extra effort sure can save your equipment, and
> > maybe even your life. Where do you think that a couple million amps of
> > electric current will go once it gets to the end of the coax laying at your
> > feet ?

> >
> > 73 de W6DKN
>

287. Re: Is 3 ft far enough for no antenna fires?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 21:54:58 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201041354.6c85fa5f@posting.google.com>
Source record: 151475

StarGazer <pti@capnet.com> wrote in message news:<3C35F298.5F5D9989@capnet.com>...
> If I keep the dipole at least 3 ft away from anything combustable
> will that be safe.
> All this antenna fire starting is making me real nervous.

I would think one inch would be plenty. You are talking about
something that is fairly rare really. At least to get to the "flames"
level. I've run wire antennas though trees, touching trees in many
places, and running high power amps for years. I rarely see any
problems with this. Actually, only once and it never got close to
flames because the branch was too green. And if you do, it's usually
only at the ends. As long as the antenna is not actually touching
branches at the ends with bare wire, you should be ok. I always try to
keep the ends clear of branches. The rest of the antenna, I don't even
worry about. MK

288. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 21:56:00 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <QxpZ7.106584$Y6.10414872@news1.rdc1.ct.home.com>
Source record: 151476

Although not aplicable in the case of life and death emergencies, FCC rules
forbid using cellphones in aircraft.

Pete

"danbrew" <danbrew@hotmail.com> wrote in message
news:u3bu0b2u4ihvdf@corp.supernews.com...
> Richard has it right - it has to do with multiple sites picking up the
> signal. Someone else said if you were above 5000' they wouldn't work -
> kinda sorta, but not really - otherwise nobody in Denver would be able to
> use a cell phone!
>
> Some switches will drop a call if multiple towers on the same system get a
> signal from the same ecn. Most do not - thus allowing the call to go
> through. The cell biz bullied the FCC into making it illegal to use
phones
> inflight because they don't want to tie up multiple towers/circuits.
>
> fwiw.
>
>
> "Bob Miller" <bamiller@texas.net> wrote in message
> news:jTE1PLedf7kZxgzboDe8ccFGi7TV@4ax.com...
> > "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote:
> >
> > >Did not!
> >
> > Wellllll, I don't disagree with what Richard and Ken have said, that the
> cell
> > phones don't work properly at elevations above 5000 feet; but I seem to
> recall
> > that the hijackers were flying low on the flights toward Washington to
> avoid
> > radar, which means callers on the flights may have been low enough to
pick
> up
> > individual cell towers while using their personal cell phones...
> >
> > Bob
> > k5qwg
> >
> >
> > >
> > >
> > >"Stahr" <w6nyc(remove this to email)@earthlink.net> wrote in message

> > >news:3L8Z7.1798$zw3.322338@newsread1.prod.itd.earthlink.net...
> > >>
> > >> Yes they did use their personal cel phones, and you are an idiot!
> > >>
> > >> Dennis
> > >>
> > >>
> > >> "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
> > >> news:u3990s96ulmt40@corp.supernews.com...
> > >> > They didn't use cell phones. They used the in-flight phones
mounted
> in
> > >> the
> > >> > seat backs. These are wired into the aircraft and to an antenna on
> the
> > >> > outside of the fuselage.
> > >> >
> > >> > They couldn't have used a cell phone due to the interference it
would
> > >have
> > >> > caused being in range of so many towers. The cell phones wouldn't
> have
> > >> > worked.
> > >> >
> > >> > Man - the level of ignorance on Usenet astounds me sometimes!
> > >> >
> > >> >
> > >> > --
> > >> > Nick: Hey in there! Don't you want your doorknocker?
> > >> > Catherwood: I already have a doorknocker.
> > >> > Nick: But this is yours!
> > >> > Catherwood: See, I told you!
> > >> >
> > >> > "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> > >> > news:3C349622.4281A893@blackhole.net...
> > >> > >
> > >> > > When the planes were hijacked on Sept. 11, according to reports
> many
> > >> > > people on the plane used cell phones. How do these phones work
> through
> > >> > > the aluminum skin of the aircraft, which seems to surround them
> > >> > > completely? I apologize for the ignorance that this question
> reveals,
> > >> > > but I don't have a cell phone and I haven't flow for about ten
> years.
> > >> > >
> > >> > > --
> > >> > > john
> > >> >
> > >> >

> > >> >
> > >>
> > >>
> > >
> >
>
>

289. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 22:30:44 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u3cb933dha3c5c@corp.supernews.com>
Source record: 151478

I'd like to see a reference to an authoritative news article that says that some passengers were using cell phones.

--
Nick: "She lay there spread eagled on the floor. I wrapped her dress around her head to keep her warm and pressed my body next to hers to keep me warm. I beat the eagle off..."

"Peter J. Bertini" <commquart@home.com> wrote in message news:QxpZ7.106584$Y6.10414872@news1.rdc1.ct.home.com...
> Although not aplicable in the case of life and death emergencies, FCC rules
> forbid using cellphones in aircraft.
>
> Pete
>
> "danbrew" <danbrew@hotmail.com> wrote in message
> news:u3bu0b2u4ihvdf@corp.supernews.com...
> > Richard has it right - it has to do with multiple sites picking up the
> > signal. Someone else said if you were above 5000' they wouldn't work -
> > kinda sorta, but not really - otherwise nobody in Denver would be able to
> > use a cell phone!
> >
> > Some switches will drop a call if multiple towers on the same system get a
> > signal from the same ecn. Most do not - thus allowing the call to go
> > through. The cell biz bullied the FCC into making it illegal to use
> phones
> > inflight because they don't want to tie up multiple towers/circuits.
> >
> > fwiw.
> >
> >
> > "Bob Miller" <bamiller@texas.net> wrote in message
> > news:jTE1PLedf7kZxgzboDe8ccFGi7TV@4ax.com...
> > > "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote:
> > >
> > > >Did not!
> > >
> > > Wellllll, I don't disagree with what Richard and Ken have said, that the
> > cell
> > > phones don't work properly at elevations above 5000 feet; but I seem to

> > recall
> > > that the hijackers were flying low on the flights toward Washington to
> > avoid
> > > radar, which means callers on the flights may have been low enough to
> pick
> > up
> > > individual cell towers while using their personal cell phones...
> > >
> > > Bob
> > > k5qwg
> > >
> > >
> > > >
> > > >
> > > >"Stahr" <w6nyc(remove this to email)@earthlink.net> wrote in message
> > > >news:3L8Z7.1798$zw3.322338@newsread1.prod.itd.earthlink.net...
> > > >>
> > > >> Yes they did use their personal cel phones, and you are an idiot!
> > > >>
> > > >> Dennis
> > > >>
> > > >>
> > > >> "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
> > > >> news:u3990s96ulmt40@corp.supernews.com...
> > > >> > They didn't use cell phones. They used the in-flight phones
> mounted
> > in
> > > >> the
> > > >> > seat backs. These are wired into the aircraft and to an antenna
on
> > the
> > > >> > outside of the fuselage.
> > > >> >
> > > >> > They couldn't have used a cell phone due to the interference it
> would
> > > >have
> > > >> > caused being in range of so many towers. The cell phones
wouldn't
> > have
> > > >> > worked.
> > > >> >
> > > >> > Man - the level of ignorance on Usenet astounds me sometimes!
> > > >> >
> > > >> >
> > > >> > --
> > > >> > Nick: Hey in there! Don't you want your doorknocker?
> > > >> > Catherwood: I already have a doorknocker.
> > > >> > Nick: But this is yours!
> > > >> > Catherwood: See, I told you!
> > > >> >

> > > >> > "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> > > >> > news:3C349622.4281A893@blackhole.net...
> > > >> > >
> > > >> > > When the planes were hijacked on Sept. 11, according to
reports
> > many
> > > >> > > people on the plane used cell phones. How do these phones work
> > through
> > > >> > > the aluminum skin of the aircraft, which seems to surround them
> > > >> > > completely? I apologize for the ignorance that this question
> > reveals,
> > > >> > > but I don't have a cell phone and I haven't flow for about ten
> > years.
> > > >> > >
> > > >> > > --
> > > >> > > john
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290. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 22:30:57 UTC
From: Adrian Brentnall <amb_quality@dial.pipex.com>
Message-ID: <VA.00003a1d.0045dc31@dial.pipex.com>
Source record: 151477

Hi Joe

I'm in a similar situation to Lee (the original poster) - although I've only got _one_ acre to play with - rather than his 40!

I'm trying to keep amateur RF away from the domestic TV aerials - and the one acre I've got is up behind the bungalow - so a centre-fed doublet multi-band with ladder feeder (which I've used before) isn't going to be very easy to do.

I was thinking of an end-fed wire, fed as a zepp - but your suggestion of a loop has got me thinking....

The field is about 90m long by 30m wide - do you think it would be better to go for a 'square' horizontal loop (say 120m total) - or just go for as much wire as possible (which would be rectangular). It'd be most convenient to feed it at a corner with ladder line...

Thanks
Adrian G0THW
Suffolk UK

291. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 22:32:17 UTC
From: richardharrison@webtv.net
Message-ID: <4742-3C362D71-74@storefull-118.iap.bryant.webtv.net>
Source record: 151479

Bart caught me. Thanks Bart.
Frequency, permitivity, and conductivity all reduce r-f penetration into the soil (skin depth).
I omitted the conductivity as a multiplier in the denominator.
Sorry.
Best regards, Richard Harrison, KB5WZI

292. Re: Is 3 ft far enough for no antenna fires?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 22:47:39 UTC
From: kenneth m cubilo <kce@NO-SPAM.freeway.net>
Message-ID: <3c36311d$0$35616$2c3e98f8@news.voyager.net>
Source record: 151480

don't know where you heard this, i have had dipoles inside trees running
legal limit and never burnt one down yet, in fact never even killed any
birds that happened to be roosting on it when transmitting
ken w8ob

StarGazer wrote:
>
> If I keep the dipole at least 3 ft away from anything combustable
> will that be safe.
> All this antenna fire starting is making me real nervous.

--
PLEASE REMOVE THE NO-SPAM AFTER THE @ IN EMAIL ADDRESS IF IT IS PRESENT!

293. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-04 23:36:04 UTC
From: K7SAM <2smoore@nemontel.net>
Message-ID: <tXqZ7.142672$lV4.24254566@e420r-atl1.usenetserver.com>
Source record: 151481

That's 5000' AGL (Above Ground Level) **NOT** 5000' ASL (Above Sea Level) -
think about it

294. WTB: R5 15 meter trap

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 00:24:08 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C3647A8.8F51211B@capnet.com>
Source record: 151482

Cushcrap no longer supports traps. Big surprise considering how
shitty they were.
Anyone got one?

reply on this newsgroup

295. How come American Hams can't use HF freqs that Canadians can?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 00:27:16 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C364864.23C400D1@capnet.com>
Source record: 151483

I get so pissed off when I hear Canadian hams using phone
on the CW part of the band. Americans should be able to
use phone where they can.
How come the ARRL doesn't make themselves useful and
lobby for this. Its BS.

296. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 00:32:31 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <yQrZ7.436$M4.1144301@paloalto-snr2.gtei.net>
Source record: 151484

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:3C360DEB.1A97A0B5@tampabay.rr.com...
> well i would assume it would go to ground since when i unhook the
feedline from
> the rig i connect it to a coax connection that is hooked to a ground rod
> outside ...

> <<< SNIP >>>

In your original post, you stated "i dont use any thing for protection
other than unhooking the feedline from the radio" (see below) ... which
was what prompted my comments in the first place... :>)

73 de W6DKN

>
> W6DKN wrote:
>
> > "Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
> > news:3C35B03A.748CD3D2@tampabay.rr.com...
> > > hey rich
> > > i live in central florida where its the lightening capital of the
country
> > and i
> > > so far have never had a direct hit to an antenna so i dont use any
thing
> > for
> > > protection other than unhooking the feedline from the radio if mother
> > nature
> > > wants your antenna there isnt much out there that will save the
antenna
> > >
> >
> > Maybe not, but a little extra effort sure can save your equipment, and
> > maybe even your life. Where do you think that a couple million amps of
> > electric current will go once it gets to the end of the coax laying at
your
> > feet ?
> >
> > 73 de W6DKN
>

297. Re: AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 00:40:45 UTC
From: mike.luther@ziplog.com
Message-ID: <u3cisd8tt6fkfd@corp.supernews.com>
Source record: 151485

In <a14u8c$q665@eccws12.dearborn.ford.com>, "Alex" <alex99@peoplepc.com> writes:

Please, I've never tried this! But for TV in the mountains it works to
an extent so I'll post it!

>Help! I work in an office building in the Detroit area and listen to an
>am/fm extended range radio. I try to listen to various am stations but
>either don't get them or they come in very poor with a lot of
>hissing/crackling noise. If I bring the radio close to a window, reception
>is perfect. Unfortunately I sit about 25 feet from a window and CAN'T bring
>my radio any closer.

>Can anyone offer suggestions on how to improve my reception and get rid of
>some of the hissing/crackling????

In the old days of TV before satellite dishes and so on, people in the
mountains who lived down the hill sometimes could do this! They could
put up a decent antenna on TOP the hill that looked at the TV station!
Then they could couple it to a low loss feed line. Then they could put
up another antenna on the downhill side that looked at THEM. They would
tie it to that same feed line that went to the antenna which could see
the TV station that was 'visible' from the hill top, but not down in
the valley!

Now this is pure speculation! Before you give up on life, you MIGHT be
able to tape a decent antenna to the window! You just might be able to
tie it to a decent feed line and then go back to where you are and
either tie it directly to that extended receiver - or - play the TV game
and fire it toward you inside the building with another decent antenna
going back toward you. Frankly, I sorta doubt that the two antenna deal
with the joint feed line will help, but one that fed your BC receiver
directly to antenna terminals on it would do WONDERS for you I bet.

I do admit that the TV games I know about were played with what are
called rhombics and no, ain't *NO* way that's ever going to happen to
you at AM broadcast frequencies! They would be likely to be bigger than
your building at hundreds of feet on a side for rhombics for AM radio!

But putting some metal up there or even a very good loopstick in the
window and running a feed line to it to your radio will make a huge
difference!

Good luck!

--> Sleep well; OS/2's still awake! ;)

W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

298. Re: info needed for Ringo 2mtr antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 00:41:44 UTC
From: "aa8wl@home.com" <aa8wl@home.com>
Message-ID: <3C3676DF.1319896F@home.com>
Source record: 151486

Thanks to all who provided help. 73' DE AA8WL

"aa8wl@home.com" wrote:
>
> I lost my info on the lengths for the Ringo 2mtr antenna and would like
> to find the dimensions for it. It is the colinear one with out radials.
> Thanks in advance. DE AA8WL Sam

299. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 00:46:27 UTC
From: mike.luther@ziplog.com
Message-ID: <u3cj737u0njha5@corp.supernews.com>
Source record: 151487

In <2379-3C35D53C-6@storefull-115.iap.bryant.webtv.net>, richardharrison@webtv.net (Richard Harrison) writes:

Yes indeedy!

>I hope my feet won`t be in the lightning`s path. The shorter path to
>ground is at my feet, but under the coax, and I hope it is more
>attractive. The flash may still burn my shoes off.

>Best regards, Richard Harrison, KB5WZI

Ask the Bryan, Texas power line worker who was working on elevating the 69KV primary mains down Texas Ave., in Bryan two weeks ago! They are moving that line up from about 60 feet on wood poles to about 80 feet on concrete poles! He was a bucket rider and all that, but either let one leg of it brush a ground lead or on a lower voltage 6900 volt bus. The paper said it was against a ground lead.

He was treated and released at one of the local hospitals here for a MASSIVE case of what was just like sunburn! The plasma arc is sorta like getting close to the bolt, but not being hit by it!

--> Sleep well; OS/2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

300. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 00:51:21 UTC
From: mike.luther@ziplog.com
Message-ID: <u3cjg91u73tm23@corp.supernews.com>
Source record: 151488

In <HLoZ7.106583$Y6.10414696@news1.rdc1.ct.home.com>, "Peter J. Bertini"
<commquart@home.com> writes:

Well, ask Bill Watkins of WTAW about this!

>Strange, but in all of FM, AM and TV stations I worked at, none of the
>transmitter
>sites were ever knocked of the air or damaged by lightning hits. And, they
>did happen.

>Pete

Insurance paid for the first two rebuilds of the sister AM station at
Lufkin, Texas. However on the third strike, it also burned the building
down and the insurance boys refused to pay off!

So it went dark.

In each of the three cases, it came in on the POWER mains and went back
out to the antenna ground system. Not the other way around. The site
was in a strange, I am told, physical location. I never actually got to
see the whole deal, only know about it from him. Long before that I
used to be the chief enginner there..

--> Sleep well; OS/2's still awake! ;)

W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

301. Re: How come American Hams can't use HF freqs that Canadians can?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 01:17:22 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C3653F9.AB685C52@tampabay.rr.com>
Source record: 151489

the ARRL got into enough BS when they helped reduce the code speed down
to 5WPM the old timers like there CW parts of the band and dont want any
one running voice there

StarGazer wrote:

> I get so pissed off when I hear Canadian hams using phone
> on the CW part of the band. Americans should be able to
> use phone where they can.
> How come the ARRL doesn't make themselves useful and
> lobby for this. Its BS.

302. Re: Status of NFPA Lightning Protection Code?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 01:18:01 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c365a40_3@news1.prserv.net>
Source record: 151490

Lightning research has been going on since Ben Franklin. The problem is that much of it is not scientifically based, and rarely is it properly instrumented. Who, for example, was performing the "research" you saw on TV? I know many researchers who will not allow entertainment media to even observe normal scientific experiments because they never understand it and always mis-report it. To restate the question, were the experiments being conducted by a committee or sub-committee of the standards writing branch of the National Fire Protection Association, or some other equally recognized standards writing organization?

I might casually mention that the organization I used to work for did extensive lightning exposure research for NASA in the 70s and early 80s in New Mexico (altitude), Florida (lots of strikes), and Mississippi (the site was cheap). It was used to develop the launch/don't launch criteria now in use at the Cape. But none of it was ever on TV. And, since the goal was to develop software to predict strikes from static field measurements, NO work was done on protection techniques or hardware. NASA did that in-house.

--
Crazy George
Remove NO and SPAM from return address
Mark Keith <nm5k@wt.net> wrote in message
news:25eb70d7.0201040014.235abb5e@posting.google.com...
> "Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:<3c352b71_3@news1.prserv.net>...
> > The ongoing questions about lightning protection prompt me to ask the
> > following: NFPA used to issue a Lightning Protection Code, NFPA 78,
but it
> > has not appeared in their catalog for many years. The most recent
version I
> > have been able to turn up is dated in the early 90s, which is way out of
> > date for an NFPA code. For a short time it was included in the Building
> > Construction Codes, but then it also disappeared from there. I heard
(urban
> > legend?) that there had been a great deal of disagreement inside the
> > committee which was to update it, and that some technical data has been
> > developed which tends to refute some of the premises of the existing
code,
> > causing NFPA to let it expire and wait for some other agency to issue a
new
> > lightning protection code. Anyone have any factual information on this?
> > Maybe it was reissued under a different number?
>
> I have no idea really, but I do know they have been doing a lot of
> testing on actual mock houses etc, to find the best ways to protect

> them. I taped a TV program that showed them doing it. They fire
> rockets up over the house with leader wires and zap em. They had a
> house all set up with electric wiring, TV's, Phones, etc, etc to find
> out the weak spots I guess. They may be waiting for some of that data.
> Seems it could be pretty valuable I bet. They have been doing a lot of
> lightning research since the early 90's. Out in New Mexico, etc.
> It may well be time for an update. MK

303. Re: How come American Hams can't use HF freqs that Canadians can?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 01:47:26 UTC
From: Max <ve3tmt@rac.ca>
Message-ID: <%VsZ7.110612$Ad5.4464540@news20.bellglobal.com>
Source record: 151491

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:3C3653F9.AB685C52@tampabay.rr.com...
> the ARRL got into enough BS when they helped reduce the code speed down
> to 5WPM the old timers like there CW parts of the band and dont want any
> one running voice there

Speaking as one Canadian ham, I understand perfectly your point. The daily Trans-Provincial net on 7.055 is one example. But quite a few US hams check in on CW. I myself don't check into nets or use voice in any portion of an HF CW segment, but the Canadian hams aren't the ones to be pissed off at, it is the Canadian Ministry of Transportation and Communications. Yes we have more voice priveledges than many other ham nations, but it isn't the doing of the hams themselves.

73,

Max ve3tmt@rac.ca

304. Any used ATAS-100's for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 01:48:42 UTC
From: Max <ve3tmt@rac.ca>
Message-ID: <bXsZ7.110613$Ad5.4465379@news20.bellglobal.com>
Source record: 151492

Looking for above antenna. Please state price in first reply.

Thanks,

Max ve3tmt@rac.ca

305. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 02:11:21 UTC
From: macve3gro@aol.com
Message-ID: <20020104211121.04130.00003272@mb-ct.aol.com>
Source record: 151493

Here's a cheap choke balun. Run your coax through a plastic tube, say 2-3 inches in diameter, 9-10 inches long. Stuff tube with fine steel wool, keeping coax in the centre of the tube. It works! You're welcome! 73. harry, VE3GRO

Harry MacLean, VE3GRO
500 Riverside Drive, London, ON N6H 2R7
(519) 473-1668

306. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 02:27:03 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <BmM2PBulXxEF63d98vF8RyMHSkdz@4ax.com>
Source record: 151494

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote:

>I'd like to see a reference to an authoritative news article that says that
>some passengers were using cell phones.

Well, it happened 4 months ago, so I can't point you to a specific article, but
virtually all of the cable tv news shows, as well as newspapers and magazines,
mentioned passengers were using personal cell phones.

I guess you don't spend much time with the news.

You're certainly welcome to do a Google.com search and catch up.

Bob
k5qwg

307. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 02:29:08 UTC
From: Robert McConnell <rmcconne.NOSPAM@lightlink.com>
Message-ID: <h5oc3uol781238b64hb8hf9qdhdo45u7p2@4ax.com>
Source record: 151495

On Fri, 04 Jan 2002 21:02:31 GMT, "Peter J. Bertini"
<commquart@home.com> wrote:

>Strange, but in all of FM, AM and TV stations I worked at, none of the
>transmitter
>sites were ever knocked of the air or damaged by lightning hits. And, they
>did happen.
>
>Pete
>

Hi Pete,

A number of years ago, I reviewed the preliminary survey of a direct lightning hit on a 50KW tower near Portland, OR. The coax had three inch holes in it at every point where it was adjacent to a cross beam. The lighting system had melted. Much of the paint was gone, and many of the guylines were reduced to marbles or completely disappeared. The transmitter was toast, and they were still checking to see if any of the auxiliary equipment would even power up.

When I asked the engineer about the radials I thought he was going to cry. He hadn't even thought to check them. I didn't want to be there when he did.

Fortunately, no one was close to it when the lightning struck, so there were no injuries. They were off the air for several months.

Bob McConnell
N2SPP

308. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 02:38:15 UTC
From: Robert McConnell <rmcconne.NOSPAM@lightlink.com>
Message-ID: <s1pc3ugcqh4uo44pkq151689dt8kicjqrf@4ax.com>
Source record: 151496

On Fri, 04 Jan 2002 02:17:08 GMT, "Lee Mairs" <lmairs@cox.rr.com>
wrote:

>I'm moving to a retirement QTH on 40+ acres in the West Virginia mountains.
>For the first time in my life I will have the space to play with an antenna
>farm. I want to put up a multi-band antenna to use until my tower is
>installed later this summer. I have about 400' available outside the shack
>with support trees about 50-60 feet to their tops.
>
>What are the group's suggestions?
>
>73 de Lee, KM4YY

Hi Lee,

If you want some directional capabilities, end fed rhombics are quite
useful. Ladder line to one point, and a 50 ohm load at the opposite
point. If I remember correctly from my days at Lualualei (NAVCOMSTA
Honolulu) they each covered about 60 degrees of arc. So we had six
sets circling each building. They were a couple hundred feet from feed
point to load, but only 15 - 20 feet off the ground, and could be
tuned across the full 2-30MHz short wave band.

Of course we were using 10 and 40 KW transmitters, but we didn't
actually need full power most of the time.

Bob McConnell
N2SPP

309. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 02:50:35 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <%RtZ7.38231$Z03.25051292@news1.rdc1.mi.home.com>
Source record: 151497

> If you want some directional capabilities, end fed rhombics are quite
> useful. Ladder line to one point, and a 50 ohm load at the opposite
> point. If I remember correctly from my days at Lualualei (NAVCOMSTA
> Honolulu) they each covered about 60 degrees of arc. So we had six
> sets circling each building. They were a couple hundred feet from feed
> point to load, but only 15 - 20 feet off the ground, and could be
> tuned across the full 2-30MHz short wave band.
>
> Of course we were using 10 and 40 KW transmitters, but we didn't
> actually need full power most of the time.
>
> Bob McConnell
> N2SPP

I remember you guys!

I put in a buried seismic alarm system just on the other side of the road
from your western fenceline.
Had a fun time filtering out your transmitter. :)

I used to get interesting tone sequences, just at the edge of my hearing,
over open inputs on my stereo too.
I always figured they were coming from your rigs.

Rumour had it the VLF output was 1MW.

When were you there? I was there from 72 through 87.

--
--
Dave's Engineering Page: http://www.dvanhorn.org

Got a need to read Bar codes? http://www.barcodechip.com
Bi-directional read of UPC-A, UPC-E, EAN-8, EAN-13, JAN, and Bookland, with
two or five digit supplemental codes, in an 8 pin chip, with NO external
parts.

310. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 03:10:24 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <A8uZ7.9181$MK.139673@rwcrnsc54>
Source record: 151498

I suppose that every AM broadcast station has two or three backups for every piece of gear and expect to replace them several times a year? It would get a little expensive, wouldn't it. Yes, a station can be protected. It is a lot of work and attention to detail is mandatory but it can be, and is, done.
"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message news:3C360DEB.1A97A0B5@tampabay.rr.com...
> well i would assume it would go to ground since when i unhook the feedline from
> the rig i connect it to a coax connection that is hooked to a ground rod
> outside
> and trust me if lightening wants your gear it will find a way in
> a friend of mine had a bolt of lightening hit a tree in his front yard short to
> ground travel to the house and came into the house thru the ground side of the
> electric service took out everything in the house that was still plugged in so
> what good would those expencive lightening SUPPRESSORS do
> nothing will stop a direct hit anyways
>
> W6DKN wrote:
>
> > "Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
> > news:3C35B03A.748CD3D2@tampabay.rr.com...
> > > hey rich
> > > i live in central florida where its the lightening capital of the country
> > and i
> > > so far have never had a direct hit to an antenna so i dont use any thing
> > for
> > > protection other than unhooking the feedline from the radio if mother
> > nature
> > > wants your antenna there isnt much out there that will save the antenna
> > >
> >
> > Maybe not, but a little extra effort sure can save your equipment, and
> > maybe even your life. Where do you think that a couple million amps of
> > electric current will go once it gets to the end of the coax laying at your
> > feet ?
> >

> > 73 de W6DKN
>

311. Re: Hamstick for an aerial? Reccomendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 03:15:40 UTC
From: N4ZN <nevermind@all.com>
Message-ID: <oirc3u4a8r6b1f2dtp2b68d2go4aunmpuk@4ax.com>
Source record: 151499

On Thu, 20 Dec 2001 09:17:35 -0600, "N4IXT" <n4ixt@arrl.net> wrote:

>I was looking at the Hamsticks on their site (www.hamstick.com), very
>inexpensive solution (25 bucks). Was wondering if anyone had used these, or
>if there was some other brand I should be looking at.
>
>Also, since I'll have it way up in the air, and not attached to a vehicle,
>do you think I'll need some sort of counterpoise?

You can use 2 hamsticks per band mounted horizontally feed end to feed
end by bolting 2 of the mirror mount style mounts together and feed
the contraption like a 1/2 wave dipole... kind of a shortened dipole.

Personally, for ease of installation with minimum equipment... I'de go
with a full size 1/2 wave dipole cut for the lowest band I was going
to operate and use a tuner to help it out on the other bands.

312. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 03:17:40 UTC
From: Brian Goldsmith <brian.goldsmith@echo1.com.au>
Message-ID: <ofuZ7.34587$wD1.205441@news-server.bigpond.net.au>
Source record: 151500

"Rich" <amateur@blueyonder.co.uk> wrote in message
news:a13ttn$o0o2l$2@ID-117712.news.dfncis.de...
What sort of protection, if any, do people use against lightening striking
the antenna ?

With all the "lightening" that's been going on,I'm suprised that every
antenna in the USA hasn't just floated away!!!!!!
Brian Goldsmith.

313. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 03:42:26 UTC
From: k1bqt@aol.com
Message-ID: <20020104224226.03697.00002681@mb-fe.aol.com>
Source record: 151502

This idea got published a few years back and has persists despite the fact that it never really worked. Had the author tested his premise with a common-mode current meter, he might have suggested something else.

Rick K1BQT

314. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 03:43:36 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <u3cth6nmkfamba@corp.supernews.com>
Source record: 151501

Several decades ago, when working as a broadcast "engineer" with an old time 1st Phone License, had a big, sudden, lightning storm. This was a two tower, 1 kw AM station. The CB on the transmitter were, apparently, set too tight. Every time a tower would get hit, the power to the transmitter (lovely 813s) would pop. I would pop it right back on and away we would go. Got so I would look out the window and wait for a stroke to hit and then pop the breaker. ---No lasting damage resulted.

Bad part of the job was disposing of roasted mice that got across the current meters at the base of each tower. Had to go out and read the meters, which you had to put inline, several times a day. This is a trade that has about disappeared. What a job for an underage fellow (Federal, not State employment rules) to have. What characters I did see! What sort of well paying job could a fellow get today?
I love RF. 73 Mac N8TT
P.S. My antennas have elaborate earthing systems in place. I still keep fingers crossed.
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net
Office: JCM@McLMcL.Com
"Peter J. Bertini" <commquart@home.com> wrote in message news:HLoZ7.106583$Y6.10414696@news1.rdc1.ct.home.com...
> Strange, but in all of FM, AM and TV stations I worked at, none of the
> transmitter
> sites were ever knocked of the air or damaged by lightning hits. And, they
> did happen.
>
> Pete
>

315. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 03:46:07 UTC
From: Loretta Shuster <simpent@ntelos.net>
Message-ID: <ZFuZ7.8777$2b1.432936@atlpnn01.usenetserver.com>
Source record: 151503

As much wire as possible because then you can operate the lower frequencies
with a more respectable signal.

The formula for overall length for all 4 sides (quad loop) or 3 sides (delta
loop) and mounting it horizontal is fine is

1005 divided by the frequency.

e.g. 1005/1.850 equals 543 feet for a 1 wavelenth loop
divided by 4 which equals 135 feet 9 inches per side
for a quad loop. This is a large 160 meter loop but you should always
make it as big as possible for the lowest frequency you want a good signal
on.

Also, run the coax as straight down and possible from the feed point as you
can and the coax becomes a vertical antenna also.

73 es gud dx de N4SLR, Frank
"Adrian Brentnall" <amb_quality@dial.pipex.com> wrote in message
news:VA.00003a1d.0045dc31@dial.pipex.com...
> Hi Joe
>
> I'm in a similar situation to Lee (the original poster) - although I've
only
> got _one_ acre to play with - rather than his 40!
>
> I'm trying to keep amateur RF away from the domestic TV aerials - and the
one
> acre I've got is up behind the bungalow - so a centre-fed doublet
multi-band
> with ladder feeder (which I've used before) isn't going to be very easy to
> do.
>
> I was thinking of an end-fed wire, fed as a zepp - but your suggestion of
a
> loop has got me thinking....
>
> The field is about 90m long by 30m wide - do you think it would be better
to
> go for a 'square' horizontal loop (say 120m total) - or just go for as
much
> wire as possible (which would be rectangular). It'd be most convenient to
> feed it at a corner with ladder line...
>
> Thanks
> Adrian G0THW

> Suffolk UK
>

316. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 05:23:46 UTC
From: n7ws@yahoo.com
Message-ID: <3c368da9.2194368@news.triconet.org>
Source record: 151504

On 05 Jan 2002 02:11:21 GMT, macve3gro@aol.com (Harry MacLean VE3GRO) wrote:

[snip] It works! [snip]

But what does it do?

317. Re: NEC 2 program

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 05:25:00 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a162ncpdj3@quark.scn.rain.com>
Source record: 151505

wa2elz <wa2elz@nospamworldnet.att.net> wrote:

> might just work, but a 20+ dbi antenna gain will provide a better margin. My
> testing with a RadioShack 100" UHF only antenna did not show any surprises
> as the height was adjusted. My plan is to build the 17.5dbi antenna and test

Try moving the antenna around both horizontally and vertically. Sometimes
moving just a few feet in the horizontal distance can make more difference
than a large change in the vertical.

--
Bill Nelson (billn@peak.org)

318. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 05:49:11 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a1644mpdj4@quark.scn.rain.com>
Source record: 151506

Harry MacLean VE3GRO <macve3gro@aol.com> wrote:
> Here's a cheap choke balun. Run your coax through a plastic tube, say 2-3
> inches in diameter, 9-10 inches long. Stuff tube with fine steel wool, keeping
> coax in the centre of the tube. It works! You're welcome! 73. harry, VE3GRO

You get what you pay for - and often you get far less.

This is a prime example.

--
Bill Nelson (billn@peak.org)

319. Re: How come American Hams can't use HF freqs that Canadians can?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 05:57:28 UTC
From: R E Heath <re.heath@sympatico.ca>
Message-ID: <3C3695C8.A631D8AD@sympatico.ca>
Source record: 151508

I am a Canadian Amateur who has been licensed since 1947 with an advanced class Canadian ticket and an Extra Class USA ticket. I work mostly CW and mostly on 40 metres.

The Canadian government has always given Canadian Amateurs a greater range of frequencies on which to operate voice than has the FCC to American Amateurs. It has often been referred to as a Canadian sub-band and is typically 50 kHz wide just below the bottom of the American phone bands. The original justification for that was that Canadians were not allowed to run as much power as Americans. In the immediate postwar years, Canadians were allowed only about 750 watts input power of carrier on both AM and CW. Americans were allowed a kilowatt. In those days, the American phone band on 75 metres was just wall-to-wall heterodynes with only a few readable signals in the melee. Canadian stations were not nearly as numerous (even on a proportional basis) and were able to operate with reasonable ease in their phone sub-band. In those days, I felt the arrangement was justified and reasonable. At that time 40 metres was entirely CW on both sides of the border.

Things have changed. For reasons I cannot understand, Canadians are still limited to less than 750 W of carrier output power on CW (which is the same as PEP on CW) but are permitted to run more than 2 kW PEP on sideband, provided they have an advanced license, which is easy to get now since only 5 wpm morse is required. But it goes farther than that. About ten years ago, Industry Canada (a catch-all government agency into which the Department of Communications was rolled several years ago) totally deregulated the Canadian Amateur spectrum. Canadians can now operate in any mode, anywhere and on any band. For example, a Canadian can operate 2 kW PEP sideband right in the middle of the CW DX window at the bottom of 40 metres, and do so legally. Fortunately, Canadian Amateurs have, almost overwhelmingly, chosen to continue to stick to the band plan that existed prior to the deregulation.

I can understand your frustration. I'm surprised that more Americans don't complain about it. It appears to me that the reason is pure politics. Canadians want more and the government gives it to them.

On the other side of the coin, the United States plays hardball with Canada in many ways that are not pretty. Most Americans don't hear about that.

73, R E Heath VA3BZ, W8BZ

StarGazer wrote:
>
> I get so pissed off when I hear Canadian hams using phone

> on the CW part of the band. Americans should be able to
> use phone where they can.
> How come the ARRL doesn't make themselves useful and
> lobby for this. Its BS.

320. Re: Icom Wanted, Please read!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 06:04:08 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C36974F.E71DF521@bellatlantic.net>
Source record: 151507
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.swap

You can build a CIV interface for about $10.00

Neil wrote:

> Hi all. I'm looking for the following Icom stuff:
>
> SM-20 Microphone, must be like new, non smoker.
> CT-17 CI-V Interface
> Filters for 746/706/756, what have you?
> Extension cable for 706 front panel
>
> Please email K1VY@arrl.net
> or call Neil at (603) 465-2788, toll free (800) 962-2949
>
> Thanks!

321. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 06:06:29 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a16554pdj5@quark.scn.rain.com>
Source record: 151509

Bob Miller <bamiller@texas.net> wrote:

>Well, it happened 4 months ago, so I can't point you to a specific article, but
>virtually all of the cable tv news shows, as well as newspapers and magazines,
>mentioned passengers were using personal cell phones.

I recall the mention of "cell phones". But they could easily have been the
in-plane phones. Most people don't know the difference.

--
Bill Nelson (billn@peak.org)

322. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 06:13:19 UTC
From: RayOfLight <kelon100>
Message-ID: <s7ga3ugnqfr0gk55pjodnmeg7uuoi2op0s@4ax.com>
Source record: 151440

>It may take a while to take a "test" strike. How much time do you
>allow to be 100% sure?

Some 4-6 months. We have lots of lightning around here abd we have
been moving the equipments over a distance of 50 kms around just to
check :))

323. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 06:16:53 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a165olpdj6@quark.scn.rain.com>
Source record: 151510

Peter J. Bertini <commquart@home.com> wrote:
> Strange, but in all of FM, AM and TV stations I worked at, none of the
> transmitter
> sites were ever knocked of the air or damaged by lightning hits. And, they
> did happen.

True. But all the ones that I have worked on have also had decent lightning
suppression.

--
Bill Nelson (billn@peak.org)

324. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 06:18:57 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a165sgpdj7@quark.scn.rain.com>
Source record: 151511

Robert McConnell <rmcconne.NOSPAM@lightlink.com> wrote:

> A number of years ago, I reviewed the preliminary survey of a direct
> lightning hit on a 50KW tower near Portland, OR. The coax had three
> inch holes in it at every point where it was adjacent to a cross beam.

Coax? Don't you mean hard line?

What did they do - isolate the transmission line from the tower?

--
Bill Nelson (billn@peak.org)

325. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 06:23:42 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a1665epdj8@quark.scn.rain.com>
Source record: 151512

'Doc <w5lz@icok.net> wrote:

> most 'common' lightning protection. And it works to an extent,
> but
> still isn't the 'best' alternative. In most cases, nothing will
> stop a direct lightning strike, but ~anything~ might 'help'.
> 'Doc

Well, there are a heck of a lot of radio/tv stations that just keep on operating, right through heavy lightning - including direct strikes on the antennas.

It IS possible to isolate the radio equipment sufficiently that it is not damaged. It just isn't cheap to do, but a lot less expensive than replacing a $100,000 transmitter.

--
Bill Nelson (billn@peak.org)

326. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 07:32:30 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <i_xZ7.44$Dz3.35430@monger.newsread.com>
Source record: 151513

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:T51Z7.587$RO.131416179@newssvr15.news.prodigy.com...
> John O'Flaherty <wewelcomespam@blackhole.net> wrote:
>
> : When the planes were hijacked on Sept. 11, according to reports many
> : people on the plane used cell phones. How do these phones work through
> : the aluminum skin of the aircraft, which seems to surround them
> : completely? I apologize for the ignorance that this question reveals,
> : but I don't have a cell phone and I haven't flow for about ten years.
>
> They don't get through the skin, but they do get through the
> windows just fine. The wavelengths are comparable to or less
> than the window size, and so the windows present minimal or
> no obstacle.
>
> --
> A layman knows he has to kick it.; An amateur knows where to kick it.; A
> professional knows how hard.

That's not the meaning of Amateur.
The amateur does something for the love of doing it, The professional does it because he wants the money. (Amateur is Latin roughly translated to doing something for the love of doing it). In many fields "some" Amateurs may be more knowledgeable than the professionals.

--
Roger (K8RI - EN73)
WWW.RogerHalstead.com
N833R World's oldest Debonair? (S#CD-2)

327. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 07:34:11 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <T%xZ7.45$Dz3.35315@monger.newsread.com>
Source record: 151514

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
news:u3990s96ulmt40@corp.supernews.com...
> They didn't use cell phones. They used the in-flight phones mounted in
the
> seat backs. These are wired into the aircraft and to an antenna on the
> outside of the fuselage.
>
> They couldn't have used a cell phone due to the interference it would have
> caused being in range of so many towers. The cell phones wouldn't have
> worked.

BS, they work just fine. The regs say you aren't supposed to use them while
airborn and the reason is that they tie ups so many sites, but they do work.
And work well in emergencies.

--
Roger (K8RI - EN73)
WWW.RogerHalstead.com
N833R World's oldest Debonair? (S#CD-2)

>
> Man - the level of ignorance on Usenet astounds me sometimes!
>
>
> --
> Nick: Hey in there! Don't you want your doorknocker?
> Catherwood: I already have a doorknocker.
> Nick: But this is yours!
> Catherwood: See, I told you!
>
> "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> news:3C349622.4281A893@blackhole.net...
> >
> > When the planes were hijacked on Sept. 11, according to reports many
> > people on the plane used cell phones. How do these phones work through
> > the aluminum skin of the aircraft, which seems to surround them
> > completely? I apologize for the ignorance that this question reveals,
> > but I don't have a cell phone and I haven't flow for about ten years.
> >
> > --
> > john
>
>

328. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 07:35:43 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <j1yZ7.46$Dz3.35516@monger.newsread.com>
Source record: 151515

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
news:u39f54fgjl170e@corp.supernews.com...
> Not while in the air. They DON'T work.

They certainly do, but it does depend on altitude. From 35,000 feet the signals and inside an airplane the signals "might" be a bit weak, but they normally do work, even if it is against the regs.

--
Roger (K8RI - EN73)
WWW.RogerHalstead.com
N833R World's oldest Debonair? (S#CD-2)

>
> --
> Nick: Hey in there! Don't you want your doorknocker?
> Catherwood: I already have a doorknocker.
> Nick: But this is yours!
> Catherwood: See, I told you!
>
> "Patrick Croft" <mai@iquest.net> wrote in message
> news:3C34BAD2.8701CD46@iquest.net...
> > Well AstroMan, suggest you take a look around you the next time you're
> > sitting inside a commercial airplane and note the number of individuals
> > USING THEIR CELL PHONES. Man, the level of arrogance displayed astounds
> > us all.
> >
> >
> >
> > AstroMan wrote:
> > >
> > > They didn't use cell phones. They used the in-flight phones mounted
in
> the
> > > seat backs. These are wired into the aircraft and to an antenna on
the
> > > outside of the fuselage.
> > >
> > > They couldn't have used a cell phone due to the interference it would
> have
> > > caused being in range of so many towers. The cell phones wouldn't
have
> > > worked.
> > >
> > > Man - the level of ignorance on Usenet astounds me sometimes!

> > >
> > > --
> > > Nick: Hey in there! Don't you want your doorknocker?
> > > Catherwood: I already have a doorknocker.
> > > Nick: But this is yours!
> > > Catherwood: See, I told you!
> > >
> > > "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> > > news:3C349622.4281A893@blackhole.net...
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> > > > > completely? I apologize for the ignorance that this question
reveals,
> > > > > but I don't have a cell phone and I haven't flow for about ten
years.
> > > > >
> > > > > --
> > > > > john
>
>

329. Butternut HF5V-III matching line length??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 08:04:16 UTC
From: Eric Bourlet <ebourlet@gte.net>
Message-ID: <4syZ7.1365$q46.171332@dfiatx1-snr1.gtei.net>
Source record: 151516

I have a butternut HF5V-III antenna that the 75 Ohm matching section has been lost. If you know the length of this line please let me know. Thanks. WB7OYL

330. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 08:23:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C36B814.1C94AC6@eznec.com>
Source record: 151517

NEC-4 is a program licensed by Lawrence Livermore National Laboratory. Its use is restricted to U.S. citizens and it can't be exported except under special circumstances with application through diplomatic channels. The price is $850, although I believe there is a discount price for universities. NEC-4 can't be downloaded from the Internet.

NEC4Win uses MININEC for its calculating engine. NEC-4 is able to model buried conductors, but MININEC (either the original public domain MININEC or the newer commercially sold MININEC Professional) and NEC-2 can't.

NEC-2 and NEC-2 based programs can accurately model horizontal wires within about 1/1000 wavelength of the ground -- but only above the ground. MININEC and MININEC based programs can accurately model antennas with horizontal wires only higher than about 0.2 wavelength. MININEC Professional can handle horizontal wires as low as about 0.1 wavelength.

Roy Lewallen, W7EL

Mark Keith wrote:
>
> nm5k@wt.net (Mark Keith) wrote in message If I don't , something is
> > wrong with the NEC engine/model. MK
>
> I think I made an error on the program I was using. I don't think it
> used the NEC4 engine after all. I think it is mininec based also. I
> had thought I had downloaded the standard NEC-4 program for some
> reason, and I did a search of all my programs and found a NEC4WIN
> demo. I made the mistake of assuming that this program was based on
> NEC-4 being it had that name, but after reading the help file a bit, I
> think it is also mininec based. So that may be why I'm seeing the
> things I am. The NEC-4 you mention must be a totally different animal.
> So anyway, I'm now probably more confused than when I started as I
> don't know how well mininec deals with various length ground
> radials...:/ MK

331. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 08:46:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C36BD75.BC462217@eznec.com>
Source record: 151518

In another posting I pointed out some differences between common antenna calculating codes. It seems that a lot of people think that NEC4Win is some form of NEC-4 because of its name. Here's some information about what the MININEC or NEC-2 "radial" feature really does.

In MININEC, the ground is considered to be perfect during calculation of currents and impedances. So no losses due to induced or conducted ground currents are ever included in the calculation. This is why MININEC can't accurately model low horizontal wires. If you model a very low dipole with MININEC, you'll get a very low feedpoint impedance (the same as you'd get for two out-of-phase dipoles in free space, spaced twice the distance as the above-ground dipole is above ground) and an incredible field strength. In reality, you see a moderate feedpoint impedance and a low field strength due to ground loss. NEC-2 models this accurately. In EZNEC, you can choose a "MININEC-type" ground model which assumes a perfect ground during impedance and current calculations, or a "High Accuracy" ground model which uses a realistic ground during these calculations, so by comparing the two it's easy to see the limitations of the MININEC approach.

After any of these programs calculates the impedances and currents, it then calculates the pattern. At this point, like the other programs, MININEC uses the ground characteristics you specify to find the strength and phase of the ray reflected from the ground to add to the direct ray to form the pattern. This gives you a realistic pattern shape. If you specify "radials" with MININEC or NEC-2, all it does is modify the conductivity of the ground for this reflection calculation. The antenna efficiency and feedpoint impedance don't change with the number of MININEC or NEC-2 "radials", since the "radials" aren't present during that part of the calculation -- they're used only for the ground reflection.

Surely the NEC4Win manual explains this important limitation.

In EZNEC, I found that users misunderstand what the built-in "radials" do, so years ago I disabled that feature. A user can enable it only by adding a line to the INI file (or for the older DOS versions, set an environment variable). This forces them to read the manual description of the limitations of the "radial" feature in order to find out how to enable it. Anyone having EZNEC 3.0, including the demo version, can find full information about NEC radials by looking in the manual index under "NEC Radial Model".

Roy Lewallen, W7EL

Mark Keith wrote:
>
> nm5k@wt.net (Mark Keith) wrote in message If I don't , something is
> > wrong with the NEC engine/model. MK
>
> I think I made an error on the program I was using. I don't think it
> used the NEC4 engine after all. I think it is mininec based also. I
> had thought I had downloaded the standard NEC-4 program for some
> reason, and I did a search of all my programs and found a NEC4WIN
> demo. I made the mistake of assuming that this program was based on
> NEC-4 being it had that name, but after reading the help file a bit, I
> think it is also mininec based. So that may be why I'm seeing the
> things I am. The NEC-4 you mention must be a totally different animal.
> So anyway, I'm now probably more confused than when I started as I
> don't know how well mininec deals with various length ground
> radials...:/ MK

332. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 10:12:39 UTC
From: Adrian Brentnall <amb_quality@dial.pipex.com>
Message-ID: <VA.00003a1e.02c86222@dial.pipex.com>
Source record: 151419

HI Frank

Thanks for the response.
I was hoping to make an untuned loop (because I will want to use it from 160 - 10) - so I was planning on feeding it with ladder line rather than coax so that I can tune it from the shack.

What's the effect of making the loop 'off square' (as in rectangular)?

It'll be simplest to feed it from the corner - does this have an effect ?

Regards
Adrian
Suffolk UK

333. Re: WTB: R5 15 meter trap

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 10:51:16 UTC
From: kk4bh1@cs.comnospam
Message-ID: <20020105055116.06295.00002832@mb-mh.news.cs.com>
Source record: 151420

>Subject: WTB: R5 15 meter trap
>From: StarGazer pti@capnet.com
>Date: 1/4/02 4:24 PM Pacific Standard Time
>Message-id: <3C3647A8.8F51211B@capnet.com>
>
>Cushcrap no longer supports traps. Big surprise considering how
>shitty they were.
>Anyone got one?
>
>reply on this newsgroup
>
StarGazer,
Are you SURE the trap is bad? I've had a R5 up for over 10 years and on several occasions thought I had trap problems. Turned out to be the antenna needed to be disassembled and cleaned where the tubes slide into each other. Just a thought. Good luck.

73
Ken
KK4BH

334. Re: AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 12:44:24 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <D=I2PAyhB7+KaRjWr4of7d66VzcM@4ax.com>
Source record: 151421

"Alex" <alex99@peoplepc.com> wrote:

>Help! I work in an office building in the Detroit area and listen to an
>am/fm extended range radio. I try to listen to various am stations but
>either don't get them or they come in very poor with a lot of
>hissing/crackling noise. If I bring the radio close to a window, reception
>is perfect. Unfortunately I sit about 25 feet from a window and CAN'T bring
>my radio any closer.
>
>Can anyone offer suggestions on how to improve my reception and get rid of
>some of the hissing/crackling????
>
>
>

If you have connections for an external antenna on the back of your radio, you could place an antenna in the window, and run a line to your radio.

Of course, this may be impractical if the line would cross traffic areas, or if the window is in someone else's office!

But there are some pretty good external antennas you can buy at places that sell to the AM dx crowd, such as C.Crane & Co.

Other than that, I don't know of a way to receive a signal inside a metal office building.

Bob
k5qwg

335. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 13:45:50 UTC
From: Billy Echols <b_echols@bellsouth.net>
Message-ID: <_jDZ7.181226$BX4.10506529@e3500-atl1.usenetserver.com>
Source record: 151422

"Roger Halstead" <rdhalste@tm.net> wrote in message
news:j1yZ7.46$Dz3.35516@monger.newsread.com...
>
> They certainly do, but it does depend on altitude. From 35,000 feet the
> signals and inside an airplane the signals "might" be a bit weak, but they
> normally do work, even if it is against the regs.
>
Let us look at the link budget:

Assume 35,000 feet (6.6 mile or 10.6 km) in the air over a typical
metropolitan service area (MSA)
Assume worst case at 890 MHz cellular frequency
Assume 20 dB loss from inside to outside of typical airplane (about right
considering aperture size of window at 890 MHz)
Assume power out of cell phone is 1/4th watt or 24 dBm
Assume the cell site cable loss and the towertop preamp (TTA) and antenna
gain are unity.
Assume typical cell site receiver sensitivity of -119dBm to -123dBm (this is
typical for non-cryogenically cooled receivers)
Assume no Rayleigh fading because airplane is not obstructed.
Assume minimal Doppler shift because plane is under 770 mph.

Freespace path loss is: 32.44 + 20 LOG(frequency in MHz) + 20 LOG(distance
in kilometers)
32.44 + 20 LOG(890)
+ 20 LOG(10.6)
32.44 + 59
+ 20.5
111.94 dB loss through the air

The link budget is power output minus loss from interior minus freespace
path loss.
If the link budget power is greater than the sensitivity of the cell site
base receiver, the signal will be received.

So:

Link budget = +24dBm - 111.94dB - 20dB
= -107.44dBm

The cell phone has a margin of (119 - 107.44) 11.56dB to (123 - 107.44)
15.56dB.

The cell phone transmission will easily hit multiple cells.

Bill, WA2NYR/QRP

336. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 14:04:32 UTC
From: k1bqt@aol.com
Message-ID: <20020105090432.20456.00002964@mb-cp.aol.com>
Source record: 151423

>But what does it do?<

Polishes the jacket, restoring that original black luster that made intalling
that new antenna an aesthetic experience?

Rick K1BQT

337. Antenna MADE for AO-40

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 14:26:28 UTC
From: Glenn Rollins <glenn@n3iyr.com>
Message-ID: <043e3ucdti2gl3gkbakbv4aknmvs82m7gn@4ax.com>
Source record: 151424

I have a website for the product I have developed and am now offering
in the Amateur community. Please drop by and look around.
This antenna is made especially for AO-40.
It's about time. Hu? It is NOT a BBQ grill trying to be something
else. This is the real thing. Please leave me a comment and tell me
what you think if you like.

http://www.n3iyr.com

Thanks!

338. Re: Butternut HF5V-III matching line length??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 14:40:29 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <xfEZ7.438$Fg6.24092789@newssvr16.news.prodigy.com>
Source record: 151425

I have a pdf file on hf5v III. says 75 ohm line (matching transformer)
should be 1/4 wave on 20 meters. Has no effect on other bands.
"Eric Bourlet" <ebourlet@gte.net> wrote in message
news:4syZ7.1365$q46.171332@dfiatx1-snr1.gtei.net...
> I have a butternut HF5V-III antenna that the 75 Ohm matching section has
> been lost. If you know the length of this line please let me know. Thanks.
> WB7OYL
>
>

339. Re: Butternut HF5V-III matching line length??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 14:42:15 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <bhEZ7.440$Zd6.23934080@newssvr16.news.prodigy.com>
Source record: 151426

I think you can download all the manuals on www.bencher.com
"Jerry" <jerryaa@prodigy.net> wrote in message
news:xfEZ7.438$Fg6.24092789@newssvr16.news.prodigy.com...
> I have a pdf file on hf5v III. says 75 ohm line (matching transformer)
> should be 1/4 wave on 20 meters. Has no effect on other bands.
> "Eric Bourlet" <ebourlet@gte.net> wrote in message
> news:4syZ7.1365$q46.171332@dfiatx1-snr1.gtei.net...
> > I have a butternut HF5V-III antenna that the 75 Ohm matching section has
> > been lost. If you know the length of this line please let me know.
Thanks.
> > WB7OYL
> >
> >
>
>

340. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 15:07:29 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <hh5e3uk8uohsejt90h4r1rg72e7tbo0fg9@4ax.com>
Source record: 151428

Additionally, Walt Maxwell, W2DU, ran a test on this and found it to
be Ineffective. I believe is commented on it in his book Reflections.

Danny, K6MHE

On 05 Jan 2002 03:42:26 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>This idea got published a few years back and has persists despite the fact that
>it never really worked. Had the author tested his premise with a common-mode
>current meter, he might have suggested something else.
>
>Rick K1BQT

341. doppler DF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 15:31:40 UTC
From: alevand@yahoo.com
Message-ID: <e52e470e.0201050731.615e9a20@posting.google.com>
Source record: 151427

I currenty have 4 dipoles center fed with 1/2 wave length of coax.(2 meters) At the ends of the coax there are series diodes switched with quadrature sine waves. In the older Doppler Systems units, a dual gate mosfet is used. One gate the control signal is applied, the other the antenna feed and a 50 ohm shunt resistor for matching. My question is, could one use a mosfet with a 3k shunt resistor on the end of a half wave element. This would simplify the mechancial construction and increase the gate impedance.

Tony
AA9CC

342. Need info on fiberglass masts

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 15:53:40 UTC
From: k9sqg@aol.com
Message-ID: <20020105105340.10219.00002393@mb-cm.aol.com>
Source record: 151429

Anybody have a line on fiberglass masts? Not the $99 model sold at Hamvention, from a German company, but something considerably beefier like a HV hotstick. Looking for info for a friend.

Thanks for reading the posting.

73s,

Evan

343. WTB: MFJ 259B SWR Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 16:18:57 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C372728.6DDC55D0@bellatlantic.net>
Source record: 151430

Anyone got one in Good Condition to sell? Might Consider a non B. I have a 5 band, 4 El Quad that's impossible to tune without one.

'73 KI4Z, mark

344. Re: Is 3 ft far enough for no antenna fires?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 16:24:10 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C372861.354C1A84@bellatlantic.net>
Source record: 151431

I wonder how many birds would roost on a legal limit dipole! I've touched a dipole at a 100 Watts, and I got a RF Burn Blister to prove it. Fire will not be a problem unless something archs over an open pool of gasoline.

'73 KI4Z mark

kenneth m cubilo wrote:

> don't know where you heard this, i have had dipoles inside trees running
> legal limit and never burnt one down yet, in fact never even killed any
> birds that happened to be roosting on it when transmitting
> ken w8ob
>
> StarGazer wrote:
> >
> > If I keep the dipole at least 3 ft away from anything combustable
> > will that be safe.
> > All this antenna fire starting is making me real nervous.
>
> --
> PLEASE REMOVE THE NO-SPAM AFTER THE @ IN EMAIL ADDRESS IF IT IS PRESENT!

345. Re: 30m delta loop issues

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 16:27:08 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C372913.F85B1B6E@bellatlantic.net>
Source record: 151432

probably interaction with the 80/40. The Analyzer should show the funnyness.

;73 KI4Z mark

DXer wrote:

> I use a delta loop on 80/40m and added 30m yesterday. 80/40m both have very
> low swr and are fairly broad.
>
> However, the 30m loop is not cooperating. Its bandwidth is very narrow and
> swr is 3:1 at resonant freq. The analyzer doesn't show anything abby normal
> either ....
>
> Any ideas as to why this particular loop and band is behaving this way?
>
> --
> Lee - Kr5f
> Have we qso'd - Find out at http://www.kr5f.com

346. Re: Suggestions?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 16:35:42 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C372B15.A8FEE0C0@bellatlantic.net>
Source record: 151433

Only antenna worth trying (In my Experience), would be the largest even multiple of 40 meter full wave, horizontal loop, up as high as you can manage, fed with a tuner and open wire. I had a 528' horizontal loop on 40 that was a killer at low height, and worked 15 and 20 quite nicely. Wasn't interested in 80. Never tried an odd multiple, although might of worked even better. Best HF, non-beam antenna I ever had.

'73 KI4Z mark

Bert Craig wrote:

> I have a 100' x 190' lot full of 50' to 65' trees. (Good supporting limbs at
> approx. 35' to 40' ft.)
>
> In your experience, if you had to choose only one wire antenna to erect...what
> would it be? EDZ, doublet, Crolina Windom, bi-square, G5RV, etc...? All
> opinions valued and appreciated, thanks. :-)
>
> 73 de Bert
> KC2HMN

347. FS: Tri-Ex 58' Sky Needle Tower - SoCal Area

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 16:39:36 UTC
From: Paul Lonnquist <paul@dock.net>
Message-ID: <c%FZ7.106$Dz3.56937@monger.newsread.com>
Source record: 151434
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.marketplace,rec.radio.swap

For sale...

Tri-Ex TM-358 Sky Needle tower. Includes 58' three section tubular tower,
newly recabled with SS cable, 10' thickwall mast, complete motor assembly
for controlled extension and retraction (120VAC), CDR sized rotator cage
assembly,
new hinged base, instruction manuals, a 1997 UBC stress analysis,
blueprints, and even the side mounted ladder!!!...the whole enchilada ready
to
grace your property.

Tower is down and next to my home. It is HEAVY (on the order of 1500#), so
it will take a wrecker or 15 very strong men to lift it out of the yard and
onto your car trailer. I will foot the bill to get the wrecker out to lift
it onto your trailer if that works better for you.
To install you will need to manufacture or purchase the re-bar assembly that
goes into
the hole (I have the specs and plans), gather up the gears and thrust
bearings for the rotator assembly (available through Tri-Ex),
and lots of labor!! This is not one of those lightweight and flimsy tubular
towers!

This is the cadillac of tubular towers. Very strong and rated at 12.4
square feet at 60mph, 7.2
square feet at 78mph, and 3.6 square feet at 95mph while fully extended!!
Dead weight capability is 400# including rotor and rotor cage.

Start your new year with a REAL tower that can actually handle realistic
antenna loads
yet still be asthetically pleasing to your neighbors.

Pictures available upon request. Email your questions or interest to
paul@dock.net

$2495.00 cash, cashiers check, postal money orders all OK.

Located in Thousand Oaks, CA (45 miles NW of LAX).

348. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 16:44:08 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C372D0F.B4E17405@bellatlantic.net>
Source record: 151435

I'd go for a horizontal loop.. you should be able to fit at least one wavelength for 80 (260 feet or so). Resonates every wavelength, and is a champ on 40 and above with 50 ohm coax and/or a 1:1 balun. Get's a bit finickey above, but no problem with open wire and a tuner..

'73 KI4Z, mark

ris3 wrote:

> I can't quite fit a 80/40 120 foot dipole. (450 ohm Ladder line)
>
> Is there a commercial one available that is less than about 100
> feet? Or is there some way I could shorten it without traps?
>
> thanks

349. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 16:48:08 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C372DFF.69ECD654@bellatlantic.net>
Source record: 151436

Hmmm.. The brillo pad is interesting, although I've seen way too many of those rusting on side of the sink to try it. Ferrite Choke Baluns don't work??

'73 KI4Z, mark

Bill Nelson wrote:

> Harry MacLean VE3GRO <macve3gro@aol.com> wrote:
> > Here's a cheap choke balun. Run your coax through a plastic tube, say 2-3
> > inches in diameter, 9-10 inches long. Stuff tube with fine steel wool, keeping
> > coax in the centre of the tube. It works! You're welcome! 73. harry, VE3GRO
>
> You get what you pay for - and often you get far less.
>
> This is a prime example.
>
> --
> Bill Nelson (billn@peak.org)

350. Re: WTB: MFJ 259B SWR Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 16:58:45 UTC
From: Siegfried Rambaum <siram@lightlink.com>
Message-ID: <3c3730ce$1@news2.lightlink.com>
Source record: 151437

In article <3C372728.6DDC55D0@bellatlantic.net> , Mark Hall
<vze2mhvc@bellatlantic.net> wrote:

> Anyone got one in Good Condition to sell? Might Consider a non B. I
> have a 5 band, 4 El Quad that's impossible to tune without one.
>
> '73 KI4Z, mark
>

Look also for the gadgets with the VECTRONIC name on it, they are the same
instruments (MFJ owns Vectronics), and they are a lot cheaper. :)

73 de KB2YVC

351. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 17:02:45 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C373169.C85CE693@bellatlantic.net>
Source record: 151438

My Experience than anything that relies on the conductivity of the ground isn't worth messing with. I'd rather have a mile of wire in the air than a crappy 30 some foot pole in the air with miles of radials. Every Veritical I've ever tried on HF is a waste of time. I have had some success with vertical half wave dipoles, but much better luck with horizontal loops.

'73 KI4Z, mark

wf3h@ptd.net wrote:

> Article in most recent QST says those who put in miles of radials
> against a vertical are wasting their time. States that, once you've
> balanced the current with 1/4 wave radials (4 or so), you can't reduce
> ground losses by stringing out more radials.
>
> Since I know many very good EE's who put in miles of radials, makes me
> wonder what's going on here (I'm not an EE and don't even play one on
> TV).
>
> Opinions?
>
> ---------------------
> "This difference between liberalism and conservatism
> must not be obscured by the fact that in the United
> States it is still possible to defend individual
> liberty by defending long-established institutions.
> To the liberal they are valuable not mainly because
> they are long established or because they are
> American but because they correspond to the
> ideals which he cherishes."
>
> F. A. Hayek in "Why I am not a Conservative"

352. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 17:09:12 UTC
From: lbrty4us@aol.com
Message-ID: <205ef942.0201050909.3c80dabf@posting.google.com>
Source record: 151439

Adrian Brentnall <amb_quality@dial.pipex.com> wrote in message
news:<VA.00003a1e.02c86222@dial.pipex.com>...
> What's the effect of making the loop 'off square' (as in rectangular)?

A not-good effect - it will start behaving less like a large loop &
more as a folded dipole hung too low. :-) I already made this
boo-boo. Since a true loop is circular, go for the most enclosed area
you can manage, and you'll have it OK. Obviously, the most enclosed
area you can have if there are only 4 sides, is a square. But it
doesn't have to be symmetrical either, so you could hang it as more
than 4 unequal sides, and it that gives more enclosed area (i.e., is
closer to a circle), so much the better.

> It'll be simplest to feed it from the corner - does this have an effect ?

That's fine & is what most do with horizontal large loops. If the
loop were vertical the feedpoint would matter more (polarization).

353. Re: Help? Is there a shortened 80/40 dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 17:44:42 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a17l9e$om17l$1@ID-124126.news.dfncis.de>
Source record: 151445

If the perimeter of a vertical or horizontal loop, triangular, square or circular, is somewhat shorter than 1/2-wavlength it can be resonated by connecting a tuning capacitor between the ends. Feed the loop opposite the capacitor with a balanced line.

Feedpoint impedance is low, generally less than resistive 20 ohms at resonance and gets very much less as the perimeter length decreases. It finishes as a magloop.

Download program MAGLOOP4 to estinate tuning capacitor values, etc. The program works as well on wire antennas as it does on copper pipes. Unfortunately thin-wire antennas themselves don't.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Mark Hall <vze2mhvc@bellatlantic.net> wrote in message
news:3C372D0F.B4E17405@bellatlantic.net...
> I'd go for a horizontal loop.. you should be able to fit at least one
> wavelength for 80 (260 feet or so). Resonates every wavelength, and is
> a champ on 40 and above with 50 ohm coax and/or a 1:1 balun. Get's a
> bit finickey above, but no problem with open wire and a tuner..
>
> '73 KI4Z, mark
>
> ris3 wrote:
>
> > I can't quite fit a 80/40 120 foot dipole. (450 ohm Ladder line)
> >
> > Is there a commercial one available that is less than about 100
> > feet? Or is there some way I could shorten it without traps?
> >
> > thanks
>

354. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 18:21:28 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201051021.5a7c677a@posting.google.com>
Source record: 151441

Roy Lewallen <w7el@eznec.com> wrote in message In
> EZNEC, you can choose a "MININEC-type" ground model which assumes a
> perfect ground during impedance and current calculations, or a "High
> Accuracy" ground model which uses a realistic ground during these
> calculations, so by comparing the two it's easy to see the limitations
> of the MININEC approach.

I was wondering about the real difference between those different
types. That kind of fills in the gaps. I guess I need to read the
manuals more.
>
> After any of these programs calculates the impedances and currents, it
> then calculates the pattern. At this point, like the other programs,
> MININEC uses the ground characteristics you specify to find the strength
> and phase of the ray reflected from the ground to add to the direct ray
> to form the pattern. This gives you a realistic pattern shape. If you
> specify "radials" with MININEC or NEC-2, all it does is modify the
> conductivity of the ground for this reflection calculation. The antenna
> efficiency and feedpoint impedance don't change with the number of
> MININEC or NEC-2 "radials", since the "radials" aren't present during
> that part of the calculation -- they're used only for the ground
> reflection.

I thought there had to be a hook somewhere. :/
>
> Surely the NEC4Win manual explains this important limitation.

Maybe, but I didn't see it. But then again, I didn't read the whole
manual.
>
> In EZNEC, I found that users misunderstand what the built-in "radials"
> do, so years ago I disabled that feature. A user can enable it only by
> adding a line to the INI file (or for the older DOS versions, set an
> environment variable). This forces them to read the manual description
> of the limitations of the "radial" feature in order to find out how to
> enable it. Anyone having EZNEC 3.0, including the demo version, can find
> full information about NEC radials by looking in the manual index under
> "NEC Radial Model".

I'll look into that. Thanks for the info. MK

355. Re: Status of NFPA Lightning Protection Code?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 18:44:37 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201051044.57da00bf@posting.google.com>
Source record: 151442

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:<3c365a40_3@news1.prserv.net>...
> Lightning research has been going on since Ben Franklin. The problem is
> that much of it is not scientifically based, and rarely is it properly
> instrumented.

I bet that it where they have improved in the past few years.

Who, for example, was performing the "research" you saw on
> TV?

Dunno, I'd have to go back and watch it again. I got the impression
they were in the south somewhere for some reason. Maybe FLA. But not
sure. They had a "shack" with all their instrumentation, and you could
look out a window to a "launch pad of sorts where they had the rockets
and leads, etc set up. Nearby was the house that they had set up as a
guinei pig. I'll check into it again and see if I can find out who
they were.

I know many researchers who will not allow entertainment media to
even
> observe normal scientific experiments because they never understand it and
> always mis-report it.

In this case, this was more like an "open house" where they demo'd
what they could do. They didn't show doing their "real" experiements.
They did show a couple or three rocket launches. One ot two which
resulted in strikes. I noticed one thing in their shack that
interested me quite a bit. They had a digi voltmeter on the wall that
they were measuring the voltage between ground and some elevated point
I'm guessing. They could watch that and get an idea when conditions
were ripe for a strike. I'd like to know how they rigged that up. I
want one here! They also had radar, weather info, etc, etc to know
when to get ready to test.

To restate the question, were the experiments being
> conducted by a committee or sub-committee of the standards writing branch of
> the National Fire Protection Association, or some other equally recognized
> standards writing organization?

I have no idea. But I would think there was some connection being as
they were doing tests on a "mock" house with appliances. Maybe they
mentioned it in the film. I'll get back to you if they did. I'll have
to dig it up and watch it again. MK

356. Re: Tri-Ex 58' Sky Needle Tower - SoCal Area

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 18:46:13 UTC
From: JerryL <jlockett@bak.rr.com>
Message-ID: <VRHZ7.498$O54.703932@typhoon.socal.rr.com>
Source record: 151357
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.marketplace,rec.radio.swap

Thats interesting, prey tell me, where is 'tri-ex' these days? Last time I checked they are totally gone in the wind! (and don't tell me about WillBurt towers, their designs are 'not' the same as the original tri-ex stuff!) So that being said, how/where would one get 'anything' that would fit that tower?
de jerry..
n6jp@arrl.net

"Paul Lonnquist" <paul@dock.net> wrote in message
news:c%FZ7.106$Dz3.56937@monger.newsread.com...
> For sale...
>
> Tri-Ex TM-358 Sky Needle tower. Includes 58' three section tubular tower,
> newly recabled with SS cable, 10' thickwall mast, complete motor assembly
> for controlled extension and retraction (120VAC), CDR sized rotator cage
> assembly,
> new hinged base, instruction manuals, a 1997 UBC stress analysis,
> blueprints, and even the side mounted ladder!!!...the whole enchilada
ready
> to
> grace your property.
>
> Tower is down and next to my home. It is HEAVY (on the order of 1500#),
so
> it will take a wrecker or 15 very strong men to lift it out of the yard
and
> onto your car trailer. I will foot the bill to get the wrecker out to
lift
> it onto your trailer if that works better for you.
> To install you will need to manufacture or purchase the re-bar assembly
that
> goes into
> the hole (I have the specs and plans), gather up the gears and thrust
> bearings for the rotator assembly (available through Tri-Ex),
> and lots of labor!! This is not one of those lightweight and flimsy
tubular
> towers!
>
> This is the cadillac of tubular towers. Very strong and rated at 12.4
> square feet at 60mph, 7.2
> square feet at 78mph, and 3.6 square feet at 95mph while fully extended!!
> Dead weight capability is 400# including rotor and rotor cage.
>

> Start your new year with a REAL tower that can actually handle realistic
> antenna loads
> yet still be asthetically pleasing to your neighbors.
>
> Pictures available upon request. Email your questions or interest to
> paul@dock.net
>
> $2495.00 cash, cashiers check, postal money orders all OK.
>
> Located in Thousand Oaks, CA (45 miles NW of LAX).
>
>
>

357. Re: Attic HF Setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 19:34:13 UTC
From: John DeGood <nu3e@arrl.net>
Message-ID: <VyIZ7.357023$5A3.135608298@news1.rdc2.pa.home.com>
Source record: 151443

I homebrewed a trap dipole in my attic that covers 10/15/20/30/40/80. See:

http://www.nerc.com/~jdegood/coaxtrap

73,

John NU3E

"danbrew" <danbrew@hotmail.com> wrote in message
news:u3bt7qea78mqd6@corp.supernews.com...
> I'm in a heavily deed restricted community (my choice, I know, I know),
and
> am considering an antenna solution in my attic - it will be completely
> enclosed and shielded by a standard new construction roof (wood,
shingles -
> but no metal).

358. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 19:37:43 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <mfle3ug306ctjgeo4bgim0anpagetgbrm4@4ax.com>
Source record: 151447

A brillo pad is not ferrite.

Danny

On Sat, 05 Jan 2002 16:48:08 GMT, Mark Hall
<vze2mhvc@bellatlantic.net> wrote:

>Hmmm.. The brillo pad is interesting, although I've seen way too many of those
>rusting on side of the sink to try it. Ferrite Choke Baluns don't work??
>
>'73 KI4Z, mark

359. Re: MFJ 259B SWR Analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 19:43:44 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <QHIZ7.581$c95.51864744@newssvr16.news.prodigy.com>
Source record: 151444

The Vectronics version and MFJ version are the same price on the MFJ
website. www.wb0w.com has a 259B
on special for $199. They are repututable. I notice that MFJ has raised
their price recently on the 259B
"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message
news:3C372728.6DDC55D0@bellatlantic.net...
> Anyone got one in Good Condition to sell? Might Consider a non B. I
> have a 5 band, 4 El Quad that's impossible to tune without one.
>
> '73 KI4Z, mark
>

360. Re: Need info on fiberglass masts

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 19:57:06 UTC
From: Guy Shields <w4gbu@mindspring.com>
Message-ID: <3C375A92.E41D0D43@mindspring.com>
Source record: 151446

Evan,

Go to http://www.mgs4u.com/
The owner of this company is Alan Bond,
a friend who can direct you if you don't see
what you need..

Guy - W4GBU

K9SQG wrote:

> Anybody have a line on fiberglass masts? Not the $99 model sold at Hamvention,
> from a German company, but something considerably beefier like a HV hotstick.
> Looking for info for a friend.
>
> Thanks for reading the posting.
>
> 73s,
>
> Evan

361. Re: Status of NFPA Lightning Protection Code?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 20:11:08 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3C375DDC.EB2C20D7@hiwaay.net>
Source record: 151448

The piece I saw was on the Weather channel, which (IMHO) is not your common intertainment TV. I think the work was being done by one of the Universities, and a part of it may have been in support of NASA. I know that NASA "Bleeds" off charges by firing rockets that trail wire into clouds, before launch. Otherwise the solid booster exhaust, which is high in acid ions, forms a path.
Bill-W4BSG

Mark Keith wrote:
>
> "Crazy George" <munschNO@attglobal.net.SPAM> wrote in message news:<3c365a40_3@news1.prserv.net>...
> > Lightning research has been going on since Ben Franklin. The problem is
> > that much of it is not scientifically based, and rarely is it properly
> > instrumented.
>
> I bet that it where they have improved in the past few years.
>
> Who, for example, was performing the "research" you saw on
> > TV?
>
> Dunno, I'd have to go back and watch it again. I got the impression
> they were in the south somewhere for some reason. Maybe FLA. But not
> sure. They had a "shack" with all their instrumentation, and you could
> look out a window to a "launch pad of sorts where they had the rockets
> and leads, etc set up. Nearby was the house that they had set up as a
> guinei pig. I'll check into it again and see if I can find out who
> they were.
>
> I know many researchers who will not allow entertainment media to
> even
> > observe normal scientific experiments because they never understand it and
> > always mis-report it.
>
> In this case, this was more like an "open house" where they demo'd
> what they could do. They didn't show doing their "real" experiements.
> They did show a couple or three rocket launches. One ot two which
> resulted in strikes. I noticed one thing in their shack that
> interested me quite a bit. They had a digi voltmeter on the wall that
> they were measuring the voltage between ground and some elevated point
> I'm guessing. They could watch that and get an idea when conditions
> were ripe for a strike. I'd like to know how they rigged that up. I
> want one here! They also had radar, weather info, etc, etc to know
> when to get ready to test.

>
> To restate the question, were the experiments being
> > conducted by a committee or sub-committee of the standards writing branch of
> > the National Fire Protection Association, or some other equally recognized
> > standards writing organization?
>
> I have no idea. But I would think there was some connection being as
> they were doing tests on a "mock" house with appliances. Maybe they
> mentioned it in the film. I'll get back to you if they did. I'll have
> to dig it up and watch it again. MK

362. Re: doppler DF antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 20:27:04 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C376186.CB33A4C0@icok.net>
Source record: 151449

Tony,
Very simply, your asking if changing the impedance matching
method, can antennas with a higher input impedance be used
instead of the center fed dipoles. And the answer is, yes.
'Doc

363. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 20:31:34 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C376294.279E65A9@icok.net>
Source record: 151450

Bill,
Your right, but! As you said, it isn't cheap. In
general, you'll probably never see that kind of lightning
protection in the 'average' amateur radio installation.
If it were 'practical' (meaning if I could afford it) I'd
certainly have one!
'Doc

364. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 20:43:18 UTC
From: Adrian Brentnall <amb_quality@dial.pipex.com>
Message-ID: <VA.00003a22.0509da48@dial.pipex.com>
Source record: 151451

Hi

Thanks for the response
>
> Adrian Brentnall <amb_quality@dial.pipex.com> wrote in message
news:<VA.00003a1e.02c86222@dial.pipex.com>...
> > What's the effect of making the loop 'off square' (as in rectangular)?
>
> A not-good effect - it will start behaving less like a large loop &
> more as a folded dipole hung too low. :-) I already made this
> boo-boo.

I sort of guessed that might be the case - thanks for confirming it <g>

> Since a true loop is circular, go for the most enclosed area
> you can manage, and you'll have it OK. Obviously, the most enclosed
> area you can have if there are only 4 sides, is a square. But it
> doesn't have to be symmetrical either, so you could hang it as more
> than 4 unequal sides, and it that gives more enclosed area (i.e., is
> closer to a circle), so much the better.

I think square will be the answer then - probably about 25 or 30m per side - total of 100m
-
sound reasonable ?

>
> > It'll be simplest to feed it from the corner - does this have an effect ?
>
> That's fine & is what most do with horizontal large loops. If the
> loop were vertical the feedpoint would matter more (polarization).

OK - that's good.
I might put up the 132ft end-fed as well just to compare between them...

Thanks
Adrian
Suffolk UK

365. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 22:11:57 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C377A2D.35E1C99B@coqui.net>
Source record: 151453

'Doc wrote:
>
> Bill,
> Your right, but! As you said, it isn't cheap. In
> general, you'll probably never see that kind of lightning
> protection in the 'average' amateur radio installation.
> If it were 'practical' (meaning if I could afford it) I'd
> certainly have one!
> 'Doc

And that folks, is often where the posted question lies. How should I protect my $100 radio from the fury that may well burn my house down and kill me and my family.
A buddy of mine took a nice surge (I won't say hit) that zapped stuff all over the house. That clock radio probably jumped off the table at the moment of the strike and that moment of bell-ringing from the phones was short-lived and they dripped from the wall afterwards.
At the end of the day he wanted to blame it on ungrounded rotor cables. No, when the juice gets that close, the EEs are dousing water on their diplomas to save them. It will come thru power, phone, cable, grounds, etc.
One has to think in terms of preventing damage from mild-strikes, or even in static-buildup terms, because when the big momma comes to the typical ham-installation, average budget Joe Ham has few options apart from fire extinguishers.
-Bill WX4A

366. Re: 30m delta loop issues

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 22:19:50 UTC
From: DXer <DXer@DXcentral.com>
Message-ID: <4EAFCC1DDD0E0A91.CF86BC12358C25A6.5AFA84A20498B278@lp.airnews.net>
Source record: 151452

First thanks to everyone who reply, both here and with direct email.

After a lot of testing, I was only able to get the swr to 2.0 and never more than a few khz of bandwidth. So, I left the loop in place for the moment as an open element. It is inside the 40m loop.

I finished the 40m addition to the 80m loop that already existed, put the balun's on this morning and went for a test drive.

I want to say that I am not an engineer, can't prove why the antennas are working the way they are, but here is the results from the analyzer and actual on air testing.

Here is the configuration: (the apex is 50 feet)

```
/\
/ \
/ /\ \ The 30m is inside the 40
/ / \ \
/ / \ \
/ --------x \
/---------------y
```

From the side the loops look like this:

```
| \
| \ \
| \ \ \
| \ \
| \
|
```

The 30m open loop is 30 feet back from the 40m and the 40 meter is 36 feet back from the 80m.

The loops are feed on the sides near the corners at x and y. Each loop is feed with 75 ohm cable as a balun to match the loops to 50 ohm. They are not cut to exact length but are very close, the 40m balun is 25 feet, the 80 balun is 50 feet. They are connected to a "TEE". The center of the tee runs to the shack and looks something like this:

```
50' to 80m 25' to 40m
----------------|======|-------------
||
|| 150' 50 ohm to shack
~~
```

Here are the results of the frequency test:

3.500 - 3.600 Swr 1.2 across range
7.000 - 7.300 Swr 1.2 across range
10.000-10.150 Swr 1.4 across range
14.000-14.350 Swr 1.4 across range
18.068-18.168 Swr 1.3 across range
21.000-21.450 Swr 1.4 across range
24.890-24.990 Swr 1.1 across range
28.000-29.140 Swr 1.0 across range

Here is the information from the analyzer: uh = microhenry pf =
picofarad

3.5 R=58 X=22 Xl=.912uh Xc=2242pf Coax Loss=7.0db
7.0 R=61 X=7 Xl=.167uh Xc=3086pf Coax Loss=9.1db
10.0 R=33 X=8 Xl=.133uh Xc=1673pf Coax Loss=6.5db
14.0 R=35 X=9 Xl=.103uh Xc=1247pf Coax Loss=6.3db
18.0 R=51 X=46 Xl=.407uh Xc=188pf Coax Loss=4.0db
21.0 R=39 X=22 Xl=.169uh Xc=338pf Coax Loss=5.6db
24.0 R=50 X=29 Xl=.187uh Xc=217pf Coax Loss=5.6db
28.0 R=57 X=12 Xl=.070uh Xc=454pf Coax Loss=8.7db

The coax is rg-59 and rg-8x

Now, my question: How is this possible with only two loops????

I used it on 12m and received dx reports ranging from 559 to 599.

30m was not open except for short haul communications, I worked a station in
Houston, about 400 miles south of me and got a 599+.

I worked a UT3 on 20m and received a 559.

Finally, I did one antenna comparison with a station on 10m in Reno, Nv. My
loops are pointed east/northeast, about half way between Europe and Africa
and would, I believe, for the most part favor Nv.

My 3 el yagi at 60ft was 2 db better than the delta loop at 50 feet.

The nice thing about the delta loop is that, like the yagi, I do not have to
use a tuner.....

Any explanations would be greatly appreciated, if not, it was an experiment,
killed a weekend and gave me something to do.

Again many thanks to everyone for your advice, suggestions and responses.

/lee - kr5f
Have we Qso'd - Find out at http://www.kr5f.com

367. www.sauderelectronics.com now online!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 23:09:47 UTC
From: Ben Silverman <ben@everyoneflydotcom>
Message-ID: <Xns918DB7330711Ebeneveryoneflycom@209.249.90.101>
Source record: 151454
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Hello all,

Just wanted to let everyone know that Sauder Electronics is now online with a secure catalog. This is the same Sauder Electronics you see at Hamfests and at the Dayton shows. Many of you have spoken with Kathy Sauder about getting a website together and she has finally delivered.

Happy browsing, ordering, etc.

http://www.sauderelectronics.com

-Ben

368. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 23:18:55 UTC
From: AB7RS <ab7rs@arrl.net>
Message-ID: <u3f2f5sn9flcd8@corp.supernews.com>
Source record: 151455

I have not use any so-called protection for the last 6 years nor do I unplug anything and I don't ground my station equipment either.Seems to work well.I do have home owners insurance but have not used it for damaged radio equipment.TG

"Rich" <amateur@blueyonder.co.uk> wrote in message news:a13ttn$o0o2l$2@ID-117712.news.dfncis.de...
> What sort of protection, if any, do people use against lightening striking
> the antenna ?
> I must admit I have never heard of this happening but there does seem to be
> quite a lot of gear out there such as Gas Surge Protectors which the adverts
> say are ' vital '.
> Are they necessary ? do they work ? Doesn't just unplugging the antenna
> still leave the problem of the current being able to enter the house ? Would
> a switcher box with a 'spare' connection connected to earth be of use ?
>
> Richard
>
>

369. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 23:47:08 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a1839s$k5r$6@quark.scn.rain.com>
Source record: 151456

Mark Hall <vze2mhvc@bellatlantic.net> wrote:
> Hmmm.. The brillo pad is interesting, although I've seen way too many of those
> rusting on side of the sink to try it. Ferrite Choke Baluns don't work??

Yes, ferrite beads work fine. They also cost a lot more than a large hunk
of steel wool.

--
Bill Nelson (billn@peak.org)

370. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 23:50:20 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a183fr$k5r$7@quark.scn.rain.com>
Source record: 151457

Roger Halstead <rdhalste@tm.net> wrote:

> BS, they work just fine. The regs say you aren't supposed to use them while
> airborn and the reason is that they tie ups so many sites, but they do work.
> And work well in emergencies.

How can they tie up "so many sites"? By design, the cell phone will only associate with one cell at a time - although it will check the control channel signals from other cells to see if they would produce a better signal.

--
Bill Nelson (billn@peak.org)

371. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-05 23:57:40 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a183tk$k5r$8@quark.scn.rain.com>
Source record: 151458

'Doc <w5lz@icok.net> wrote:

> Bill,
> Your right, but! As you said, it isn't cheap. In
> general, you'll probably never see that kind of lightning
> protection in the 'average' amateur radio installation.
> If it were 'practical' (meaning if I could afford it) I'd
> certainly have one!
> 'Doc

Most Amateurs don't even disconnect their coax outside the
building when a lightning storm approaches. Many don't even
have a ground connection on their equipment - except through
the AC outlet.

You might be amazed at what you could do with a few thousand
dollars. That is less than the cost of many recent top of the
line Ham rigs.

--
Bill Nelson (billn@peak.org)

372. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 00:07:38 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a184g9$k5r$9@quark.scn.rain.com>
Source record: 151459

Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net> wrote:

> And that folks, is often where the posted question lies. How should I
> protect my $100 radio from the fury that may well burn my house down and
> kill me and my family.

And that is the major point - your house and well being are worth far more than the radio equipment. You should spend the lightning suppression funds to protect the house and your life - without regards to the cost of the radio equipment.

> At the end of the day he wanted to blame it on ungrounded rotor cables.
> No, when the juice gets that close, the EEs are dousing water on their
> diplomas to save them. It will come thru power, phone, cable, grounds,
> etc.
> One has to think in terms of preventing damage from mild-strikes, or
> even in static-buildup terms, because when the big momma comes to the
> typical ham-installation, average budget Joe Ham has few options apart
> from fire extinguishers.
> -Bill WX4A

A proper ground window and suppressor on the house mains will keep the strike from entering the house - or at least keep the damage minor. It won't matter whether the lightning strikes your antenna, the tower, the phone lines, the TV cable, a ground rod, or the ground somewhere close by. The hardest to suppress is a strike on the power lines - worst if it hits the feeder to your house.

"Average budget Joe Ham" probably spent over $1000 on his gear and if he has a tower and commercial antenna(s), several thousand dollars more there.

If he cannot afford decent suppression, as well as the gear, then he should buy a cheap rig and use a wire antenna without any tower or other expensive equipment. He could then spend the money where it is critical - protection of the house and occupants.

I never could understand it. A person will spend $20,000 - $40,000 every year or two to buy a new car - but they won't make a one time investment of a few thousand dollars that will minimize the chances of their house burning down.

--
Bill Nelson (billn@peak.org)

373. UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 00:15:17 UTC
From: Robert <robert.61@gmx.at>
Message-ID: <3c3796bc$0$16258$3b214f66@news.univie.ac.at>
Source record: 151460

Does someone know an amplifier, which can selectifely amplify a weak
frequency as
shown on the following picture

http://www.geocities.com/robertosat/ukwscan.html

Thx
Robert
Vienna/Austria/Europe

374. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 00:40:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a18i9d$ov19k$1@ID-124126.news.dfncis.de>
Source record: 151375

Dan Richardson wrote
> A brillo pad is not ferrite.
==========
No, it's mostly wind.

But neither is a solid sleeve of cast iron which would probably do better
than ferrite if it has a higher permeability.

But whatever is used it would be better to space out the individual sleeves
rather than bunch them all together over one relatively short length of
feedline.

Reg, G4FGQ

375. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 00:46:16 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <s7NZ7.14407$MK.228954@rwcrnsc54>
Source record: 151461

I have life insurance though I have never died. What's your point?
--
CW
KC7NOD

"AB7RS" <ab7rs@arrl.net> wrote in message
news:u3f2f5sn9flcd8@corp.supernews.com...
> I have not use any so-called protection for the last 6 years nor do I
> unplug anything and I don't ground my station equipment either.Seems to
work
> well.I do have home owners insurance but have not used it for damaged
radio
> equipment.TG
>
> "Rich" <amateur@blueyonder.co.uk> wrote in message
> news:a13ttn$o0o2l$2@ID-117712.news.dfncis.de...
> > What sort of protection, if any, do people use against lightening
striking
> > the antenna ?
> > I must admit I have never heard of this happening but there does seem to
> be
> > quite a lot of gear out there such as Gas Surge Protectors which the
> adverts
> > say are ' vital '.
> > Are they necessary ? do they work ? Doesn't just unplugging the antenna
> > still leave the problem of the current being able to enter the house ?
> Would
> > a switcher box with a 'spare' connection connected to earth be of use ?
> >
> > Richard
> >
> >
>
>

376. Re: Is 3 ft far enough for no antenna fires?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 01:11:46 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C37A440.19A9C6FA@icok.net>
Source record: 151462

Mark,
About the same number that roost on high voltage
power lines, they just need to have smaller feet...
'Doc

377. Antenna / SWR meters for 2m and higher

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 01:25:35 UTC
From: Robert Fulton <robfult@planeville.tzo.com>
Message-ID: <jINZ7.55956$mp3.25989698@typhoon.southeast.rr.com>
Source record: 151467

Why is it that there are virtually no SWR/Tuners for 2meters or higher? thx.

-Rob

378. Newbie DXing for Israeli broadcasts in UK.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 01:28:48 UTC
From: Z <post@imaZZZZris.demon.co.uk>
Message-ID: <sn7MZ$EQh6N8EwmQ@imaris.demon.co.uk>
Source record: 151463

Sorry I have sent this question to uk.radio.amateur also

I am DXing for Israeli Radio in the UK. I get internet but would prefer to recieve free to air broadcasts.
Kol Israel broadcasts daily on SW. What polarisation are the broadcasts?

Any radio rebroadcast transmitters of Radio Israel in UK? Is Kol Israel broadcast on digital or analogue satellite?

If there are other Israeli radio stations which broadcast internationally which I could DX I would be interested in knowing about them.

I'm not really a radio amateur I'm only looking to receive foreign stations and not to transmit. One of my SW radios (it is not even scanner class let alone amateur class) came with a wind up length of wire to set up as an aerial. This is obviously going to be of limited effectiveness so I want to install a better aerial. Seeing as I live in a block of flats though have a garden the aerial would have to be kind of inconspicuous and outside.

I know a little about Antennas and propagation for FM, UHF, and VHF but I'm not up on SW. I am a Telecomms Engineer, but I took the wireline path rather than the wireless path. What sort of cheap aerial could I start off with? For SW is it just going to be a whip, a folded dipole or something a bit more complex?

For DXing on UHF and VHF should I go with a Yagi Array and rotator? As I have to get an aerial erector to fix Ch1-4 TV aerial, fit a ch5 aerial and mix the two I may as well get all the aerials fitted by the aerial guy at the same time.

What is the highest tower I could fit without planning permission? It would probably vary with location I suppose. I would be getting something straight out of Andrews Corporation catalogue if there is something small enough.

As it's ages since I took RF courses any good sites to bring me back up to speed with Aerials.

Thanks.
--
Z
Remove Zeds in e-mail address to reply.

379. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 01:40:18 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C37AAEF.497155A2@icok.net>
Source record: 151464

Bill,
In theory, I agree with you. In practical circumstances,
I don't. To a large extent lightning protection depends on
where you live. If I lived in Florida, I'd certainly consider
it. In this particular part of Oklahoma where I live, lightning
just isn't ~that~ big a worry. I'm much more concerned about
wind than, lightning. Also, at least with the insurance
companies
I have had dealings with, having more lightning protection than
is normally encountered, means next to nothing (no 'breaks')
since
there are very few lightning related house fires locally. (I'm
not
counting those that are 'blamed' on lightning, only those that
are
~proven~ to be lightning related...big difference!)
So, the 'amount' of lightning protection that is practical
depends on circumstances, and all of us just don't need the
thousands
of dollars of protection that some others do...
'Doc

380. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 01:43:54 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C37ABC9.E7FE72CF@icok.net>
Source record: 151465

CW wrote:
>
> I have life insurance though I have never died. What's your point?
> --
> CW
> KC7NOD

I think you have 'missed' his point, as you stated...
'Doc

381. Re: VHF / UHF Antenna for IC-706???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 02:20:10 UTC
From: Diablo <diablo_42@hotmail.com>
Message-ID: <u3fd84ieivbfde@corp.supernews.com>
Source record: 151466

I'm using a Comet GP-9 for my dual band base antenna. It's a little pricy at $170 from HRO, but it really works well. It was easy to put together, no tuning, and easy to install on a mast or tower stand-off.

Bob WA7VKF

> On Sun, 30 Dec 2001 14:34:15 GMT, Andy Brinkley
> <andy@brinkleyelectronics.com> wrote:
>
> >Hello everyone -
> >
> >I am looking for recommendations for a good dual band base station
> >antenna for my IC-706.
> >Any recommendations other than a discone?
> >
> >Also any suggestions for distance to space away from the tower for side
> >mounting?
> >It will be located about 40 ft up on a Rohn 25.
> >
> >TNX NC4AB
> >
> >---
> >NC Certified Firefighter III / Instructor II / EMT-A
> >FCC Licensed Technician / Amateur Call NC4AB
> >
>

382. Re: Through The Glass - 2Meter & 440

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 02:43:16 UTC
From: Diablo <diablo_42@hotmail.com>
Message-ID: <u3fejlntucm861@corp.supernews.com>
Source record: 151468

Harold,

I've used several different types of glass mount antennas. Most of them will handle up to 50 watts, and worked reasonably well. One thing to consider when mounting the antenna is tinting in the windows. If your windows are tinted with a material containing metal, you will be in for some problems. I had a Larson glass mount antenna on my car that worked very well, but when I had the window tinted, it became virtually useless. I checked with the tinting installer and they told me that there was metal in the tint they used. Also, if you mount the antenna on the back window where there is usually heater wires, either mount the antenna between the wires, or if necessary, centered on one wire.

The down side to the Larson antenna that I had was that I had to trim the antenna to tune it. Not hard, but a little bit of a pain to unscrew it, use a hacksaw to cut it (I need better tools), and then re-check the SWR. The MFJ antennas have a tuning slug on the inside piece that makes tuning a snap, but I imagine the trade off is that a properly cut antenna will perform better than one that is tuned with a circuit.

Good luck,

Bob WA7VKF

Harold <harold_deese@nnscu.org> wrote in message
news:u2nkmmatjq20f0@corp.supernews.com...
> Does anyone have any experience with through the glass antennas? I am
> looking to mount a dual band radio in my Cherokee and don't want to drill
> holes in the body. The dealer I bought my radio from recommended and
> Antrron # GT-2440H. Any feedback on this antenna would be appreciated.
>
> Tnx & 73,
> Harold
>
>

383. K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 03:07:33 UTC
From: Mad Max <SayWhat@DummyGlenn.com>
Message-ID: <a18f15$n5g$0@pita.alt.net>
Source record: 151369
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

Glenn Baxter, K1MAN, is sending this notification. I don't know what he is trying to prove save for wasting his breath. I mean, who cares??
.....
.....

Subject: Re: Broadcasting

AMERICAN AMATEUR RADIO ASSOCIATION (AARA)
INTERNATIONAL AMATEUR RADIO NETWORK (IARN)
K1MAN BULLETIN SERVICE
FULL INFORMATION AT www.K1MAN.com

"AARA is your alternative to ARRL. We sponsor IARN, which is the most experienced amateur radio emergency communications organization in the world."

This is Glenn's claim. He cannot verify it and Who Cares??

"K1MAN bulletins have been heard world wide since 1987. Like W1AW, K1MAN transmissions are perfectly legal under FCC rules. Like W1AW, good amateur practice requires publishing a transmitting schedule and then sticking to it. It is far more disruptive to do otherwise."

And maliciously and deliberately interfering with ongoing QSO's is not "disruptive"? Is not rude? Is not ILLEGAL? And Glenn has the anabashed nerve to mention "good amateur practice"?

"Hams can be very childish and territorial about the use of amateur radio spectrum. Our surveys show that about 1 ham in 10 is against both K1MAN and W1AW one way bulletins. We are sure there are also those who are against contests, nets, etc. This is OK! There is plenty of room for everyone in our Amateur Radio Service. If you have a problem with this, try another hobby; you are probably not cut out for big time Amateur Radio."

Yes, Glenn. You can be "very childish and territorial about the use of amateur radio spectrum." Your surveys are just that....YOURS! No need to use the plural "our", Glenn. MY survey shows that 6 of ten active Amateurs are against the K1MAN broadcasts/intentional interference and my survey is just as valid and likely more accurate than yours. The comment, "you are probably not cut out for big-time radio" is laughable. And what makes you, Glenn, think that you are "big-time radio"? Your silly ego aside, I have news for you. The only thing "big-time" about you is the constant pain-in-the-ass that you are.
Perhaps you should try another hobby. It is quite obvious that you are not

cut out for Amateur Radio and hopefully Riley will make that point painfully clear to you, sooner rather than later.

"An experienced ham knows that if you are trying to talk to another station per a sked, you might have to QSY one or more times during any given hour. If you don't know this and practice this, you are not am experienced Radio Amateur."

You are not talking to another station, Glenn. You are maliciously interfering with good Amateur operators and you do so several times daily. It is YOU who should practice QSY'ing. One must therefore surmise that you are, in your own words, "not an experienced Radio Amateur."

"Actually, our amateur spectrum is UNDERUTILIZED. The commercial guys are drooling over our spectrum and would love to divide us and conquer us. They love to see us squabble and act like babies. There are even evil persons in the FCC (dressed like good guys) who are very subtly promoting and documenting amateur radio disruption under a long term private plan to assist commercial interests take as much amateur spectrum as possible. A primary function of AARA is to warn you about this frequency grab and to expose the corruption that exists within the FCC. Corruption is nothing new in American politics, and if you don't think that our amateur radio spectrum is worth billions upon billions of dollars, you are very naive."

Here we have Glenn's agenda in a nutshell. He's a conspiracy theorist. He thinks Riley is a government agent in the pockets of Big Business. Glenn....ever look up the definition of "delusional"?

"So, join the fun. Listen to K1MAN on 14.275, 7.224, 3.975, and 3.890 MHz. daily and also call in (207 495 2215). See www.K1MAN.com 73!

14.275 MHz. USB and 3.975 LSB at 1:00 AM to 2:30 AM; 3:30 AM to 5:00 AM; 6:30 AM to 8:00 AM; 4:00 PM to 5:30 PM; and also 8:00 PM to 9:30 PM. 7.224 MHz. LSB at 3:30 AM to 5:00 AM. High fidelity amplitude modulation on 3.890 MHz. at 6:30 PM to 8:00 PM.

(All times are in Eastern Local Time - In winter add 5 hours for UTC) Join the fun! Get your unedited viewpoints on the air! 73 de K1MAN"

What "fun"? The real fun will begin when Riley comes knocking on your door! Go, Riley! Go!

384. Re: Antenna / SWR meters for 2m and higher

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 03:24:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C37C37F.A94247AF@eznec.com>
Source record: 151370

Tuners are usually used at the rig to match the rig to a non-50 ohm impedance seen at the input of the feedline. A common application is feeding a nonresonant antenna with low-loss ladder or open wire line, where the SWR on the line can be very high. At VHF and above, feedline loss is higher. When feedline loss is high, elevated SWR causes even more loss. So it's not usually wise to run a feedline with high SWR at VHF and above -- it's better to match the antenna to the feedline's characteristic impedance and keep the feedline SWR low. If you use 50 ohm feedline and it's matched at the antenna, no tuner is necessary. (Actually, I prefer this method even at HF, but there are lots of others that don't.)

Another reason is that while people want to cover multiple HF bands with a single antenna, this often isn't practical at VHF and above. The pattern of many antennas changes with frequency. HF users put up with this, but VHF operators often care which direction their antenna radiates, so can't tolerate radically different patterns on each band. There are some antenna types, like the discone and log periodic, that have a fairly constant pattern on different bands. But these also have a fairly constant impedance on different bands so can be fed with a low-SWR line without a tuner.

Roy Lewallen, W7EL

Robert Fulton wrote:
>
> Why is it that there are virtually no SWR/Tuners for 2meters or higher? thx.
>
> -Rob

385. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 03:27:32 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020105222732.05624.00004841@mb-fo.aol.com>
Source record: 151371

Before you go all loopy, why don't you check out the guru of antennas and see the real loop poop. What he has to tell will convince you to go inverted L.
www.cebik.com
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

386. Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 03:30:19 UTC
From: Kodiak Bear <don_thomson@hotmail.com>
Message-ID: <u3fh975kt7ev7d@corp.supernews.com>
Source record: 151372

I'm considering purchasing an SG-239 Smartuner and wondered if anyone has experince with this tuner good or bad. Does it work as advertised or is it oversold? What gotcha's are there with this piece of equip? Does it work with a Yaesu FT-847? Does it work with an ICOM-706MKIIG?

Thank you,

Don, KC8RDO

387. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 03:35:29 UTC
From: Richard McCollum <rmccollOMA@worldnet.att.net>
Message-ID: <5CPZ7.330050$W8.12613098@bgtnsc04-news.ops.worldnet.att.net>
Source record: 151373
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Mad Max" <SayWhat@DummyGlenn.com> wrote in message
news:a18f15$n5g$0@pita.alt.net...
>
> Glenn Baxter, K1MAN, is sending this notification. I don't know what he
is
> trying to prove save for wasting his breath. I mean, who cares??
>
>

Who cares indeed. So why are you spreading joy and happiness across a
half dozen groups?

Neither the topic nor the writer deserve this much, particularly a bozo
who doesn't know his own name.

Dick N&#65533;BK

388. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 03:52:31 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <3SPZ7.106599$Y6.10421987@news1.rdc1.ct.home.com>
Source record: 151374

Yeah, but you won't know if it is working well until you have a nearby
lightning hit..

I'd rather spend the few hundred bucks and a few weekends and at least make
an
effort to minimize my potential for damage.

Pete

"AB7RS" <ab7rs@arrl.net> wrote in message
news:u3f2f5sn9flcd8@corp.supernews.com...
> I have not use any so-called protection for the last 6 years nor do I
> unplug anything and I don't ground my station equipment either.Seems to
work
> well.I do have home owners insurance but have not used it for damaged
radio
> equipment.TG
>
>

389. Re: Antenna / SWR meters for 2m and higher

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 04:26:16 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a18jl8smi1@helle.btinternet.com>
Source record: 151376

Robert Fulton <robfult@planeville.tzo.com> wrote in message
news:jINZ7.55956$mp3.25989698@typhoon.southeast.rr.com...
> Why is it that there are virtually no SWR/Tuners for 2meters or higher?
thx.
==========
1. There's not much need for them. Just construct VHF antennas and feedlines according to specified dimensions and away you go. Antenna tuners normally associated with SWR meters are not used at VHF. A more simple power meter is adequate to check that all systems go.

2. At VHF they are expensive to manufacture and calibrate with any degree of accuracy and cost too much to buy. Not much of a market for them.

Reg, G4FGQ.

390. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 04:30:51 UTC
From: Mad Max <SayWhat@DummyGlenn.com>
Message-ID: <a18jto$39t$0@pita.alt.net>
Source record: 151377
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Richard McCollum" <rmccollOMA@worldnet.att.net> wrote in message
news:5CPZ7.330050$W8.12613098@bgtnsc04-news.ops.worldnet.att.net...
>
> "Mad Max" <SayWhat@DummyGlenn.com> wrote in message
> news:a18f15$n5g$0@pita.alt.net...
> >
> > Glenn Baxter, K1MAN, is sending this notification. I don't know what he
> is
> > trying to prove save for wasting his breath. I mean, who cares??
> >
> >
>
> Who cares indeed. So why are you spreading joy and happiness across a
> half dozen groups?
>
> Neither the topic nor the writer deserve this much, particularly a bozo
> who doesn't know his own name.
>
> Dick N&#65533;BK
>
Ah...the old refrain "you are posting anonymously, you coward." Is that not
what you imply, Dick?
Maybe you like spam. It may be the only email you get. As for me? I prefer
to keep my real name and email address anonymous due to the lack of quality
that some of these posters have and all of them are Hams.
So there you have it, Big Dick. How I operate is my option, not yours.
73

391. Re: Can a dipole catch a tree on fire??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 04:48:22 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C37D704.E415610B@icok.net>
Source record: 151378

Bart,
Can you furnish the call sign of the person who
had this happen to them?
'Doc

392. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 04:58:10 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c37dd1b_4@news1.prserv.net>
Source record: 151380

Cellphone channel pairs are divided into 6 sets. Each site is assigned a specific set of channels (1/6 of the total available) and the frequency sets are duplicated in a hexagonal pattern. Then there are micro cells, but we won't go into that. The nearest cell will handshake with the airborne phone and carry the call, but the phone signal will be strong enough at all the co-channel sites to eliminate access to the one channel at each of the other sites. One of these isn't bad, but if everybody did it, it would tie up way too many assets.

--
Crazy George
Remove NO and SPAM from return address
Bill Nelson <billn@spock.peak.org> wrote in message
news:a183fr$k5r$7@quark.scn.rain.com...
> Roger Halstead <rdhalste@tm.net> wrote:
>
> > BS, they work just fine. The regs say you aren't supposed to use them
while
> > airborn and the reason is that they tie ups so many sites, but they do
work.
> > And work well in emergencies.
>
> How can they tie up "so many sites"? By design, the cell phone will only
> associate with one cell at a time - although it will check the control
> channel signals from other cells to see if they would produce a better
> signal.
>
> --
> Bill Nelson (billn@peak.org)
>

393. Re: Through The Glass - 2Meter & 440

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 05:00:26 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <53mf3u4t69r10kfh23tb07sbuebg45n3ju@4ax.com>
Source record: 151379

I talked to a cel phone installer in our town. As you know, cel phone antennas are almost all glass mounts. I asked about the 3-M tint on my back window. He said they always use the inside mount as a template and cut the tint film away from the area where the antenna will be installed.

Dick - W6CCD

On Sat, 5 Jan 2002 19:43:16 -0700, "Diablo" <diablo_42@hotmail.com> wrote:

>Harold,
>
>I've used several different types of glass mount antennas. Most of them >will handle up to 50 watts, and worked reasonably well. One thing to >consider when mounting the antenna is tinting in the windows. If your >windows are tinted with a material containing metal, you will be in for some >problems. I had a Larson glass mount antenna on my car that worked very >well, but when I had the window tinted, it became virtually useless. I >checked with the tinting installer and they told me that there was metal in >the tint they used. Also, if you mount the antenna on the back window where >there is usually heater wires, either mount the antenna between the wires, >or if necessary, centered on one wire.

>Good luck,

394. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 05:23:56 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3c37df37$0$1609$1dc6e903@news.corecomm.net>
Source record: 151381

Even though the cell system is designed to only respond from one site at
a time, all sites that can hear the phone still are affected by the
signal. A device called a voter is used to determine which site will
handle the phone and all others are on standby if the signal strength
changes and another site is voted in and the old site is voted off.
It is a fact of radio propagation that the higher the antenna the
further the signal will go. If you are at 10,000 ft you might talk 100
miles but if you are at 20,000 ft you might talk 150 miles. At one site
per 2 to 10 miles you will hit a lot of sites and tie up a lot of
receivers.
Dave Nagel
Bill Nelson wrote:
>
> Roger Halstead <rdhalste@tm.net> wrote:
>
> > BS, they work just fine. The regs say you aren't supposed to use them while
> > airborn and the reason is that they tie ups so many sites, but they do work.
> > And work well in emergencies.
>
> How can they tie up "so many sites"? By design, the cell phone will only
> associate with one cell at a time - although it will check the control
> channel signals from other cells to see if they would produce a better
> signal.
>
> --
> Bill Nelson (billn@peak.org)

395. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 05:50:02 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C37E58A.5C75891F@coqui.net>
Source record: 151382
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

Mad Max wrote:
>
> Ah...the old refrain "you are posting anonymously, you coward." Is that not
> what you imply, Dick?
> Maybe you like spam. It may be the only email you get. As for me? I prefer
> to keep my real name and email address anonymous due to the lack of quality
> that some of these posters have and all of them are Hams.
> So there you have it, Big Dick. How I operate is my option, not yours.
> 73
Truer words have never been spoken. If you present yourself under
fraudulent pretense, the best you can hope for is (are) fraudulent
responses so the whole effort of disguising your email identity is an
exercise of a clown in a transparent changing booth.
There's little purpose in being a crocodile (all mouth and no ears) when
registering posts on Usenet., If what you have to say is relevant
there's no overcoming need to fear spam if you take even the novice
approaches of NOSPAM in your address. Simply shouting shit with your
ears plugged puts you into the category of yammering old cat-women
pushing shopping carts in the middle of a one-way street
Apart from the lack of adapting the same uzenet approach as the
grown-ups, one can only consider you as a kid who snuck into Mom's
bedroom to mess with the computer.
For that reason alone I'll not use my favorite bad words with you lest
there be some law in your area about mouth-whipping stupid pre-teens..

Gethefucklost-youdontbelonghereifyoudonthaveenoughasstobackupyourwank,
lil chile,
Mmmm, kay?.
-ex

396. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 06:14:35 UTC
From: Mad Max <SayWhat@DummyGlenn.com>
Message-ID: <a18q0pjfj0@pita.alt.net>
Source record: 151383
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Your Friend Bill" <"Remove The NO In The Reply To Address"@coqui.net> wrote
in message news:3C37E58A.5C75891F@coqui.net...
> Mad Max wrote:
> >
> > Ah...the old refrain "you are posting anonymously, you coward." Is that
not
> > what you imply, Dick?
> > Maybe you like spam. It may be the only email you get. As for me? I
prefer
> > to keep my real name and email address anonymous due to the lack of
quality
> > that some of these posters have and all of them are Hams.
> > So there you have it, Big Dick. How I operate is my option, not yours.
> > 73
> Truer words have never been spoken. If you present yourself under
> fraudulent pretense, the best you can hope for is (are) fraudulent
> responses so the whole effort of disguising your email identity is an
> exercise of a clown in a transparent changing booth.
> There's little purpose in being a crocodile (all mouth and no ears) when
> registering posts on Usenet., If what you have to say is relevant
> there's no overcoming need to fear spam if you take even the novice
> approaches of NOSPAM in your address. Simply shouting shit with your
> ears plugged puts you into the category of yammering old cat-women
> pushing shopping carts in the middle of a one-way street
> Apart from the lack of adapting the same uzenet approach as the
> grown-ups, one can only consider you as a kid who snuck into Mom's
> bedroom to mess with the computer.
> For that reason alone I'll not use my favorite bad words with you lest
> there be some law in your area about mouth-whipping stupid pre-teens..
>
> Gethefucklost-youdontbelonghereifyoudonthaveenoughasstobackupyourwank,
> lil chile,
> Mmmm, kay?.
> -ex
Oh, my. Aren't we a hoot? Now humor me if you will. Just what the heck is
the bottom line you were attempting to convey?
Name-calling aside, what is your point?
Using no-spam in an email address is so easily thwarted. Is that what you
propose I do? My...how mypopic.
Should I use my call sign? Is that "macho"? Do so if you wish, but gird
yourself for the dedicated stalkers that will look up your call sign and
flood your home mailbox with magazine subscriptions, junk mail and other

sorts of deviltry.
Your choice of words is interesting, though for the most part grammatically rife with errors. You might wish to seriously consider a remedial course in English Composition 101.

397. Re: Is 3 ft far enough for no antenna fires?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 06:16:50 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <3C37DF23.71A4C637@worldnet.att.net>
Source record: 151384

Mark Hall wrote:

> I wonder how many birds would roost on a legal limit dipole! I've touched a
> dipole at a 100 Watts, and I got a RF Burn Blister to prove it. Fire will
> not be a problem unless something archs over an open pool of gasoline.
>
> '73 KI4Z mark
>
> kenneth m cubilo wrote:
>
> > don't know where you heard this, i have had dipoles inside trees running
> > legal limit and never burnt one down yet, in fact never even killed any
> > birds that happened to be roosting on it when transmitting

I wouldn't worry much about setting the trees afire, but you do want to be a bit careful about attic antenna installations, there is a chance of fire and an attic fire is not something you want to cause in your house. I know of a ham who set his attic on fire running 125 watts AM to an attic antenna. Make sure the antenna is well insulated, don't just lay it on rafters or pin it direcctly to them but use end insulators and keep it clear of all structural and metal objects. The high current point is at the center feedpoint on a halfwave dipole with the high voltage appearing at the ends. When arcing occurs, as can happen with haphazardly installed attic antennas in the characteristically dry, dusty atmosphere of an attic, you CAN have a fire result. Take care with your attic installations!

Dick W0EX

398. Re: How come American Hams can't use HF freqs that Canadians can?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 06:32:13 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C37E2BF.6A377F9C@worldnet.att.net>
Source record: 151385

Max wrote:

> "Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
> news:3C3653F9.AB685C52@tampabay.rr.com...
> > the ARRL got into enough BS when they helped reduce the code speed down
> > to 5WPM the old timers like there CW parts of the band and dont want any
> > one running voice there
>
> Speaking as one Canadian ham, I understand perfectly your point. The daily
> Trans-Provincial net on 7.055 is one example. But quite a few US hams check
> in on CW. I myself don't check into nets or use voice in any portion of an
> HF CW segment, but the Canadian hams aren't the ones to be pissed off at, it
> is the Canadian Ministry of Transportation and Communications. Yes we have
> more voice priveledges than many other ham nations, but it isn't the doing
> of the hams themselves.
>
> 73,
>
> Max ve3tmt@rac.ca

That's right, that decision was made LONG ago. And if US hams could use voice in the CW bands, you nor no one else outside the US would have a chance at all of being heard. It was done to protect the few (you) from the many (us). Leave it alone, nothing is to be gained from spreading the QRM across the whole band.

399. Who thinks the Hexbeam sucks??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 06:41:06 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C37F182.66A98CF@capnet.com>
Source record: 151386

.

400. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 07:45:54 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a18v6vdtq1@bob.news.rcn.net>
Source record: 151387
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Mad Max" <SayWhat@DummyGlenn.com> wrote:

> Using no-spam in an email address is so easily thwarted...

Not if done right...

> Should I use my call sign? Is that "macho"?

Yes, and no. Those of us who aren't ashamed of what
we post have no problem identifying ourselves. The rest
of us should go to newusers and read the netiquette FAQ.
If one does not understand the simple concepts stated there,
one should probably not be armed with a computer.

> Do so if you wish, but gird yourself for the dedicated
> stalkers that will look up your call sign and flood your
> home mailbox with magazine subscriptions, junk mail
> and other sorts of deviltry.

That's bull. I've been appending my crudely de-spammed
e-mail address and call sign to my USENET posts for over
ten years, and the little spam that I receive is the result of my
having a domain name (the address is different). It's funny
how anonymous cowards come up with all sorts of reasons
to justify their childish behaviors. Sorry, it just won't wash.

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

401. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 07:49:35 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a18vdtelr1@bob.news.rcn.net>
Source record: 151388

"David G. Nagel" <nagel@core.com> wrote:

> It is a fact of radio propagation that the higher the antenna the
> further the signal will go. If you are at 10,000 ft you might talk
> 100 miles but if you are at 20,000 ft you might talk 150 miles

Almost all systems these days use antennas with downtilt
and really flat lobes. Just look at the published patterns.
Yes, one can hit the cell from an aircraft, but it isn't quite
as severe as some paint the situation because the sites are
rather deaf when one is above them.

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

402. Re: Through The Glass - 2Meter & 440

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 07:52:21 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a18vj1$f35$1@bob.news.rcn.net>
Source record: 151389

"Dick Hughes" <rhughes33@cableone.net> wrote:

> I talked to a cel phone installer in our town. As you know, cel phone
> antennas are almost all glass mounts. I asked about the 3-M tint on
> my back window. He said they always use the inside mount as a
> template and cut the tint film away from the area where the antenna
> will be installed.

I have done the same with good results, but many new cars
now come with glass that itself is very dark; there is now film
that can be removed. Why the automakers don't want people
don't want to see out of their cars is beyond me, but it appears
to be the current gangmemberwannabe fad thing...

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

403. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 07:57:58 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a19024clo10@quark.scn.rain.com>
Source record: 151390

Crazy George <munschNO@attglobal.net.spam> wrote:
> Cellphone channel pairs are divided into 6 sets. Each site is assigned a
> specific set of channels (1/6 of the total available) and the frequency sets
> are duplicated in a hexagonal pattern. Then there are micro cells, but we
> won't go into that. The nearest cell will handshake with the airborne phone
> and carry the call, but the phone signal will be strong enough at all the
> co-channel sites to eliminate access to the one channel at each of the other
> sites. One of these isn't bad, but if everybody did it, it would tie up way
> too many assets.

Actually, it used to be 1/7th. That is no longer true, as there are not
enough frequencies to handle all the calls in densely populated areas.
So two adjacent sites may utilize the same frequencies. But the two sites
would beam their signals away from each other. This greatly increases the
available frequencies.

I am not convinced that the signal in the aircraft would eliminate access
by land based phones - as there would not be any handshake with that cell
from the aerial phone. But there could be a fair amount of interference.

--
Bill Nelson (billn@peak.org)

404. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 08:01:40 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a19093clo11@quark.scn.rain.com>
Source record: 151391

David G. Nagel <nagel@core.com> wrote:
> Even though the cell system is designed to only respond from one site at
> a time, all sites that can hear the phone still are affected by the
> signal. A device called a voter is used to determine which site will
> handle the phone and all others are on standby if the signal strength
> changes and another site is voted in and the old site is voted off.

If there were no voting, what you say is certainly true. But from my
understanding, as long as the signal between the handset and the cell
site is strong - there is no checking through the voting system to find
a better site. That would be a whole lot of unnecessary computation, as
well as a whole lot of unnecessary handoffs.

--
Bill Nelson (billn@peak.org)

405. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 08:06:03 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a190hbclo12@quark.scn.rain.com>
Source record: 151392

'Doc <w5lz@icok.net> wrote:

> In theory, I agree with you. In practical circumstances,
> I don't. To a large extent lightning protection depends on
> where you live. If I lived in Florida, I'd certainly consider
> it. In this particular part of Oklahoma where I live, lightning
> just isn't ~that~ big a worry. I'm much more concerned about
> wind than, lightning. Also, at least with the insurance

Agreed. I was talking about areas where lightning is a real risk.
Here in Western Oregon, the risk is even lower than in Oklahoma.

But I still have about $500 invested in minimal suppression equipment.
It is a one time cost.

--
Bill Nelson (billn@peak.org)

406. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 08:21:29 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C380909.3895CAD@coqui.net>
Source record: 151393
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

Mad Max wrote:

> Oh, my. Aren't we a hoot? Now humor me if you will. Just what the heck is
> the bottom line you were attempting to convey?
> Name-calling aside, what is your point?

That you are simply an anonymous troll-type poster and nothing you have to say means squat because you don't have the balls to personify yourself.
Given that you are 14 years old at best, please don't bother me. Thats illegal. Your Mom will be really pissed that you are using her computer to start a little cross-posted flame war with characters on the monitor screen.

Nite now, mmmkay?

407. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 08:28:46 UTC
From: Mad Max <SayWhat@DummyGlenn.com>
Message-ID: <a191t8$sb2$0@pita.alt.net>
Source record: 151394
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Mark Walsh" <mark@km6xu.die.spam.die.com> wrote in message
news:a18v6vdtq1@bob.news.rcn.net...
> "Mad Max" <SayWhat@DummyGlenn.com> wrote:
>
> > Using no-spam in an email address is so easily thwarted...
>
> Not if done right...
>
> > Should I use my call sign? Is that "macho"?
>
> Yes, and no. Those of us who aren't ashamed of what
> we post have no problem identifying ourselves. The rest
> of us should go to newusers and read the netiquette FAQ.
> If one does not understand the simple concepts stated there,
> one should probably not be armed with a computer.
>
> > Do so if you wish, but gird yourself for the dedicated
> > stalkers that will look up your call sign and flood your
> > home mailbox with magazine subscriptions, junk mail
> > and other sorts of deviltry.
>
> That's bull. I've been appending my crudely de-spammed
> e-mail address and call sign to my USENET posts for over
> ten years, and the little spam that I receive is the result of my
> having a domain name (the address is different). It's funny
> how anonymous cowards come up with all sorts of reasons
> to justify their childish behaviors. Sorry, it just won't wash.
>
> Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com
>
OK, Mark. Call the shots the way you see them. If it makes you feel better
to call names, go for it. Maybe that is what it takes to make you feel
better about yourself....perhaps you feel a need to do this to bolster your
self-image.
I, in the meantime, will continue to carry on as I have done for so many
years now. Your input is inconsequential. Your name-calling is even less
relevant.
I hope you feel better about yourself in the morning.

408. Re: Through The Glass - 2Meter & 440

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 08:51:41 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <xeUZ7.40535$Z03.26271000@news1.rdc1.mi.home.com>
Source record: 151395

> I have done the same with good results, but many new cars
> now come with glass that itself is very dark; there is now film
> that can be removed. Why the automakers don't want people
> don't want to see out of their cars is beyond me, but it appears
> to be the current gangmemberwannabe fad thing...

Or, it could be that it helps keep the car cooler in the summer, and is
easier on the eyes.
Could be.

--
Dave's Engineering Page: http://www.dvanhorn.org

Got a need to read Bar codes? http://www.barcodechip.com
Bi-directional read of UPC-A, UPC-E, EAN-8, EAN-13, JAN, and Bookland, with
two or five digit supplemental codes, in an 8 pin chip, with NO external
parts.

409. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 08:56:04 UTC
From: Roger Dodger <MommyBoy@GlenDale.com>
Message-ID: <a193gt$52o$0@pita.alt.net>
Source record: 151396
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Your Friend Bill" <"Remove The NO In The Reply To Address"@coqui.net> wrote
in message news:3C380909.3895CAD@coqui.net...
> Mad Max wrote:
>
> > Oh, my. Aren't we a hoot? Now humor me if you will. Just what the heck
is
> > the bottom line you were attempting to convey?
> > Name-calling aside, what is your point?
>
> That you are simply an anonymous troll-type poster and nothing you have
> to say means squat because you don't have the balls to personify
> yourself.
> Given that you are 14 years old at best, please don't bother me. Thats
> illegal. Your Mom will be really pissed that you are using her computer
> to start a little cross-posted flame war with characters on the monitor
> screen.
>
> Nite now, mmmkay?

I should refrain from responding to this tripe, but it is late and I rather
enjoy toying with the mentally inept.
Mmmkay. Gnight.

410. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 09:05:28 UTC
From: Roger Dodger <MommyBoy@GlenDale.com>
Message-ID: <a1942v$7qh$0@pita.alt.net>
Source record: 151397
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Your Friend Bill" <"Remove The NO In The Reply To Address"@coqui.net> wrote
in message news:3C380909.3895CAD@coqui.net...
> Mad Max wrote:
>
> > Oh, my. Aren't we a hoot? Now humor me if you will. Just what the heck
is
> > the bottom line you were attempting to convey?
> > Name-calling aside, what is your point?
>
> That you are simply an anonymous troll-type poster and nothing you have
> to say means squat because you don't have the balls to personify
> yourself.

My "troll" obviously bore results. You could not resist responding, could
you?
And speaking of "balls", you of all people are hardly adept at describing
same.

> Given that you are 14 years old at best, please don't bother me. Thats
> illegal. Your Mom will be really pissed that you are using her computer
> to start a little cross-posted flame war with characters on the monitor
> screen.

OK. I will tell my mommy to turn off my account with the express intent of
not bothering you any further.
Also, given the impression that you are yourself rather juvenile and
somewhat limited in your ability to express yourself, I will cease making
you look like the fool you are.
>
> Nite now, mmmkay?
Mmmmkay.

411. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 09:20:15 UTC
From: RayOfLight <kelon100>
Message-ID: <r5ef3ucgkbu17cunf4m7npq5h14qoudfl5@4ax.com>
Source record: 151398

>i live in central florida where its the lightening capital of the country and i
>so far have never had a direct hit to an antenna so i dont use any thing for
>protection other than unhooking the feedline from the radio if mother nature
>wants your antenna there isnt much out there that will save the antenna

I read somewhere that there is no need for a direct hit to get your
antennas or equipments get damaged. If there is heavy cloud - it will
contain lots of static electricity that may pass through your antenna
to your equipment!

The best protection is the lightening rod placed above the antenna
mast. It will direct the electricity to the earth or static
electricity down to earth. i have built up a wire -umbrella-
protection over my antennas and it works perfectly so far. I live in a
reion with lots of rain/lightening all the year!

412. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 09:47:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C381D2A.5EA2223C@eznec.com>
Source record: 151399

Reg Edwards wrote:
>
> Determining soil resistivity from samples in the kitchen sink is the correct
> way of going about it. Some of my most critical measurements have been made
> in galvanised buckets sitting on the floor. (The buckets, dolt - not me.)

How is the antenna analyzer connected to the bucket?

> The derived values are, by definition, independent of the size of the
> sample.
>
> When the sample size is small relative to a wavelength AT THE PROPAGATION
> VELOCITY IN THE SOIL ITSELF measurement errors due to the dimensions of the
> test leads are minimised.
>
> Since the measured impedances (not the derived values) must be in the range
> best accommodated by the impedance measuring instrument there are
> restrictions on the size and shape of the sample. It follows there are
> similar restrictions on the measuring instrument itself.
>
> The advent of hand-held 'antenna analysers' has made HF kitchen sink
> measurements feasible for the amateur. They are the best thing since sliced
> bread. Can be made better.
>
> It now remains only for antenna analysers to provide the sign of plus or
> minus jX.
>
> The necessary technology has been available for 10 or so years. Delays in
> putting such instruments on the market is due solely to the need for
> manufacturers to introduce the facilities in easy graduated phases, so
> maximising the profits.
>
> The profit motive has much to answer for ! ;o)

I'm sure you'll delight in short-circuiting these greedy capitalists by
telling us the simple method you use. A simple example, with the size
and shape of the soil sample, the type of container you use, how the
analyzer is connected, the raw measurement results you got, and the
method you use to determine the actual soil conductivity and
permittivity from it, would yank the rug right out from under those
lowlifes by allowing any of us to make these simple measurements.
Personally, I'm looking forward to developing this ability. The first
thing I'll measure is a saline solution with easily calculated
characteristics, to confirm that the method is really reasonably
accurate as you say. I'm sure you've already done this, but it's always

helpful to have others verify your results when you're interested in making accurate objective measurements.

Thanks in advance for enlightening us!

Roy Lewallen, W7EL

413. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 09:54:04 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.p@kd5nrh.net>
Message-ID: <60C4642E47FF2F3A.259F562555D5382B.3C9B9936D4116A4F@lp.airnews.net>
Source record: 151400
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

On Sun, 6 Jan 2002 01:14:35 -0500, "Mad Max" <SayWhat@DummyGlenn.com>
wrote:

>Using no-spam in an email address is so easily thwarted. Is that what you
>propose I do? My...how mypopic.

Less than 1% of the spam I get daily comes to this address. (or any
of the variants) Most of it comes to my Yahoo address that I haven't
sent anything from in months.

>Should I use my call sign? Is that "macho"? Do so if you wish, but gird
>yourself for the dedicated stalkers that will look up your call sign and
>flood your home mailbox with magazine subscriptions, junk mail and other
>sorts of deviltry.

My call sign is listed with my home address. Everything else goes to
a P.O. box. All of the 'personalized' junk mail (stuff to "Current
Occupant" and "Resident doesn't count, since they obviously haven't
looked anything up) ends up at the post office.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net

414. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 09:56:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C381F5F.5B1753DB@eznec.com>
Source record: 151401

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "At least one problem is that it (simplified analysis) doesn`t account
> for the considerable coupling among radials that takes place."
>
> That puzzled me because I see no relevance.
>
> I went back to Ed Laport who has included much of the findings of Brown,
> Lewis, and Epstein in his "Radio Antenna Engineering". Sure enough,
> Laport has an Appendix III-A which is: "Magnitudes of Mutual Impedance
> Between Identical Thin Vertical Cylindrical Radiators as a Function of
> Height and Spacing" (After G.H. Brown).
>
> This concerns directional arrays, not ground wires.
>
> Best regards, Richard Harrison, KB5WZI

No, this concerns all wires. Just because we bury them and call them radials doesn't magically eliminate coupling. The amount of coupling between wires in a V shaped orientation is of course different from wires which are parallel, so the values in Laport's appendix aren't correct for wires in a V orientation. But the coupling is there, and it's at least as strong.

Please re-read your earlier posting with its logical reasoning as to why radials don't couple. Apply that same reasoning to parallel wires fed in phase. Don't you conclude from that same reasoning that there's no coupling between the parallel wires? If so, do you suppose Laport (and all other authorities) are wrong in saying that there is coupling?

As I mentioned in my earlier posting, the current distribution is different for different numbers of radials. This is clearly shown in Fig. 42 of BLE's paper, and also shows up clearly in an NEC-4 analysis. If there were no coupling, the magnitude of the currents on the radials would be expected to change with the number of radials, but not the distribution (that is, the shape of the plot of current vs distance from the antenna). Yet the distribution does change, rather dramatically. This is due to coupling among the radials.

Roy Lewallen, W7EL

415. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 10:10:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C3822AA.1726C1B5@eznec.com>
Source record: 151402

Reg Edwards wrote:
>
> > Have you published your method? If not,
> > would you post it? I know a number of people
> > who would be very interested in a simpler method
> > that gives reliable and accurate results --
> > or even a good approximation.
>
> I've no wish to start a stampede to the US Patents Office. I had no idea
> that such knowledge was at a premium stateside. But if anybody would like to
> buy the idea I'm open for offers. Roy, I'm sure you could devise a method
> which could be used in the average radio shack if you really tried.
>
> Actually it's not worth all the fuss you make of it. If any measurements are
> needed at all, an accuracy of plus or minus 30 percent is quite good enough
> for radio prediction purposes. Eznec will demonstrate that. With
> experience and freedom from any delusions of accuracy, a visual examination
> of the ground is sufficient.

That's quite an elegant way of saying "no". Well done. But from you I
wouldn't expect less.

I guess we'll just have to keep struggling along as we have been, except
for those occasions when you'll give us the benefit of results you got
with your simple system. Oh, well. I was afraid of that.

> > It's more likely that they realized that a 60 Hz measurement has no real
> > relationship to the characteristics at RF.
>
> Roy, you'll have to face up to the fact that it didn't occur to any of them
> that conductivity measurements at any frequency were of any consequence. It
> would have taken only ten minutes to make measurements at DC, 60 Hz or ELF.
> Other people had been making such measurements for years. Soil conductivity
> was of fundamental importance in understanding what goes on.

The first part of their paper is a theoretical analysis of what happens.
It was shown later to be flawed (they also neglected coupling between
radials), but does clearly show that they knew the effect of ground
conductivity. There are even a series of graphs of theoretical radial
wire currents for four different ground conductivites.

Um, you have read or at least seen the paper, haven't you?

> . . .

Roy Lewallen, W7EL

416. Cubex scorpion II quad antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 10:20:15 UTC
From: eric <F1ISJ@wanadoo.fr>
Message-ID: <a198ju$fu7$1@wanadoo.fr>
Source record: 151404

Hello

Is someone use the Cubex scorpion II quad antenna ?

What do you think of it ?

Thanks

--
73'

Eric
F1ISJ@wanadoo.fr

417. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 10:21:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C38251F.99E8CAE6@eznec.com>
Source record: 151403

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "Am I mistaken, or can you make the same argument for two parallel
> elements fed in phase? It`s easy to demonstrate there is coupling,---."
>
> Yes, if one wire is placed close to a second, the field produced by
> current in one wire will induce voltage in the wire nearby.
>
> If one amp flowing in the first wire induces one volt in the second
> wire, the mutual inductance is one henry.
>
> Is this mutual inductance relevant to ground radials? I think not.
> . . .

You're confusing mutual inductance with coupled inductance, an error I seem to recall happening before. Mutual impedance (which usually contains a real as well as imaginary term) is a function of physical wire length, orientation, and spacing. Coupled impedance is the feedpoint impedance change that occurs as a result of mutual coupling. It depends not only on the mutual impedance but also on the relative magnitudes and phases of the currents flowing in the coupled conductors. You can find a good discussion of these concepts in Jasik or Johnson (in the chapter on medium frequency broadcast antennas), or a more abbreviated discussion in Chapter 8 of the ARRL Antenna book.

Mutual coupling among in any nearby conductors, including radial wires. The radials also couple quite strongly with the radiator. There's nothing magical about radial ground wires that exempts them from the laws of physics that dictate mutual coupling.

Roy Lewallen, W7EL

418. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 10:27:31 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a198m0$54v$1@bob.news.rcn.net>
Source record: 151405
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Mad Max" <SayWhat@DummyGlenn.com> wrote:
> "Mark Walsh" <mark@km6xu.die.spam.die.com> wrote:
> > "Mad Max" <SayWhat@DummyGlenn.com> wrote:

> > Those of us who aren't ashamed of what
> > we post have no problem identifying ourselves. The rest
> > of us should go to newusers and read the netiquette FAQ.
> > If one does not understand the simple concepts stated there,
> > one should probably not be armed with a computer.

> > > Do so if you wish, but gird yourself for the dedicated
> > > stalkers that will look up your call sign and flood your
> > > home mailbox with magazine subscriptions, junk mail
> > > and other sorts of deviltry.

> > That's bull. I've been appending my crudely de-spammed
> > e-mail address and call sign to my USENET posts for over
> > ten years, and the little spam that I receive is the result of my
> > having a domain name (the address is different). It's funny
> > how anonymous cowards come up with all sorts of reasons
> > to justify their childish behaviors. Sorry, it just won't wash.

> OK, Mark. Call the shots the way you see them.

Yes, I call a spade a spade. And the little spam that I have
received is a simple *fact* after a thousand posts over more
than a decade. Your "fear of spam" smokescreen is weak.

> If it makes you feel better to call names, go for it.

Huh?

> I, in the meantime, will continue to carry on as I have done
> for so many years now. Your input is inconsequential.

It is a shame that you refuse to learn from others.
I have learned much from these groups over the years.
Have you read the new users FAQ?

It is your choice to continue to ride your bicycle on the
wrong side of the road, but others will think ill of you for it.
I would have e-mailed you politely and privately,
but you didn't have the decency to provide even a
de-spammed address. Even Joe Mama does that!

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

419. Re: Through The Glass - 2Meter & 440

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 10:34:03 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a19927$5q9$1@bob.news.rcn.net>
Source record: 151406

"Dave VanHorn" <dvanhorn@cedar.net> wrote:

> > I have done the same with good results, but many new cars
> > now come with glass that itself is very dark; there is no film
> > that can be removed. Why the automakers don't want people
> > don't want to see out of their cars is beyond me, but it appears
> > to be the current gangmemberwannabe fad thing...

> Or, it could be that it helps keep the car cooler in the summer,
> and is easier on the eyes.
> Could be.

Perhaps where you live; here it is a iwannalookkewl thing.
Huge effect on safe driving on the freeway at night.
Sunglasses can be removed much more readily.

I had two identical cars, the second having been bought with tint.
Fortunately, the tint was easily removed (it was the stick-on type),
but horror stories abound about folks unpeeling their defroster
wires, so be careful with an uninstall. An on-glass antenna will
work okay if the offending material is removed from the area
where the two halves make contact (before installation, duh).

P.S. Thanks for the bar code info, that was nice!

Mark Walsh ***** mark@km6xu.com ***** http://www.km6xu.com

420. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 11:31:31 UTC
From: Arf! Arf! <DoggieDaze@Liberal.comz>
Message-ID: <a19cmk$ng9$0@dosa.alt.net>
Source record: 151407
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

```
"Mark Walsh" <mark@km6xu.die.spam.die.com> wrote in message
news:a198m0$54v$1@bob.news.rcn.net...
> "Mad Max" <SayWhat@DummyGlenn.com> wrote:
> > "Mark Walsh" <mark@km6xu.die.spam.die.com> wrote:
> > > "Mad Max" <SayWhat@DummyGlenn.com> wrote:
>
> > > Those of us who aren't ashamed of what
> > > we post have no problem identifying ourselves. The rest
> > > of us should go to newusers and read the netiquette FAQ.
> > > If one does not understand the simple concepts stated there,
> > > one should probably not be armed with a computer.
>
> > > > Do so if you wish, but gird yourself for the dedicated
> > > > stalkers that will look up your call sign and flood your
> > > > home mailbox with magazine subscriptions, junk mail
> > > > and other sorts of deviltry.
>
> > > That's bull. I've been appending my crudely de-spammed
> > > e-mail address and call sign to my USENET posts for over
> > > ten years, and the little spam that I receive is the result of my
> > > having a domain name (the address is different). It's funny
> > > how anonymous cowards come up with all sorts of reasons
> > > to justify their childish behaviors. Sorry, it just won't wash.
>
> > OK, Mark. Call the shots the way you see them.
>
> Yes, I call a spade a spade. And the little spam that I have
> received is a simple *fact* after a thousand posts over more
> than a decade. Your "fear of spam" smokescreen is weak.
>
> > If it makes you feel better to call names, go for it.
>
> Huh?
>
> > I, in the meantime, will continue to carry on as I have done
> > for so many years now. Your input is inconsequential.
>
> It is a shame that you refuse to learn from others.
> I have learned much from these groups over the years.
> Have you read the new users FAQ?
>
> It is your choice to continue to ride your bicycle on the
```

> wrong side of the road, but others will think ill of you for it.
> I would have e-mailed you politely and privately,
> but you didn't have the decency to provide even a
> de-spammed address. Even Joe Mama does that!
>
> Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

Markie...you made my point so eloquently! You "would have emailed me"? That was my point exactly. You would have spammed me....that is what unasked-for email is.
You stated, " I would have e-mailed you politely and privately"....
Markie....Markie....get a grip. You have NO business emailing me either politely OR privately.
Markie...do yourself a great big favor...bend over and take a good, long look at yourself.
See that big old brown eye staring you in your face?
That is Mark Walsh in the flesh.

>
>

421. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 11:52:34 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a19dlekvi1@bob.news.rcn.net>
Source record: 151408
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Arf! Arf!" <DoggieDaze@Liberal.comz> wrote:
> "Mark Walsh" <mark@km6xu.die.spam.die.com> wrote:

> > It is your choice to continue to ride your bicycle on the
> > wrong side of the road, but others will think ill of you for it.
> > I would have e-mailed you politely and privately,
> > but you didn't have the decency to provide even a
> > de-spammed address. Even Joe Mama does that!

> Markie...you made my point so eloquently! You "would have emailed me"? That
> was my point exactly. You would have spammed me....that is what unasked-for
> email is.

Instead of answering me here (and worsening the signal
to noise ratio), you could have e-mailed me. I am sorry
to the others in this group that there are those who make
a mess of the USENET. This is like using a linked repeater
system (with many listeners) to talk to the guy just down the road.

> You stated, " I would have e-mailed you politely and privately"....
> Markie....Markie....get a grip. You have NO business emailing me either
> politely OR privately.

So you (and I) make a mess of the newsgroup instead. :-(
By extention, you then have no business responding to my post.
Gosh, what happened to the days when all hams were good
people and good communicators? Like most in this group,
I am proud of who I am and what I have done for amateur radio.
Let's try get this group back to amateur radio. Good night all...

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

422. Re: Is 3 ft far enough for no antenna fires?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 12:07:10 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C383DAF.B6490EC7@bellatlantic.net>
Source record: 151409

Ahhhh yeah.. I did forget to mention I was standing on the ground at
the time!!!

'Doc wrote:

> Mark,
> About the same number that roost on high voltage
> power lines, they just need to have smaller feet...
> 'Doc

423. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 12:33:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C38442B.8F536E86@eznec.com>
Source record: 151410

Roy Lewallen wrote:

> . . .

> Mutual coupling among in any nearby conductors, including radial wires. . .

I meant

Mutual coupling occurs among any nearby conductors, including radial
wires. . .

I apologize for the error.

Roy Lewallen, W7EL

424. Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 13:52:20 UTC
From: rons533@dejazzd.com
Message-ID: <3C385630.3B4D@dejazzd.com>
Source record: 151412

Hello

I live in a home that is very restricted (no room) as to what HF antenna I can install. I was offered a Hustler mobile antenna with the RM 10-15- and 75 meter resinators to put up as my antenna. I plan to chimney mount it. Will I be wasting my time by using this and if not do I have to run a ground from the mount to an earth ground? I have read other posts here about atic, rain spout, and other hidden antennas but I have ruled them out.
Thanks

425. FYI: Fluid Motion Antenna - Remotely Tuned Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 13:58:27 UTC
From: ac6v <ac6v@amsat.org>
Message-ID: <3C385803.DEF8F49C@amsat.org>
Source record: 151411

No pecuniary interest here but FYI and interesting
http://www.fluidmotion.ws/index.htm

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!
http://ac6v.com

426. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:02:35 UTC
From: Stagger Milhaus Romain Fentworth Lee <SLee@houston-hunks.com>
Message-ID: <3C3858FB.587EDB97@houston-hunks.com>
Source record: 151413
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

Mark Walsh wrote:
>
> "Mad Max" <SayWhat@DummyGlenn.com> wrote:
>
> > Using no-spam in an email address is so easily thwarted...
>
> Not if done right...

If it can be done, a spammer can (and will) undo it.

>
>
> That's bull. I've been appending my crudely de-spammed
> e-mail address and call sign to my USENET posts for over

Well, goody for you, Petunia! The rest of us have had diametrically opposed experiences. I've been hanging around Usenet since it started, and never felt the need to disguise either my email address or my identity until the thundering hordes showed up on the Internet during the middle 90's. Just recently, I made an announcement via a moderated announce newsgroup and the spam immediately began (since it was a disposable email address generated JUST for the announcement, I know how the address was obtained by the spammers).

> ten years, and the little spam that I receive is the result of my
> having a domain name (the address is different). It's funny
> how anonymous cowards come up with all sorts of reasons
> to justify their childish behaviors. Sorry, it just won't wash.

Sorry, Petunia, your so-called "reasoning" doesn't wash either. The spamming is only part of it; the other part consists of stalkers.

Example: Two hams who have regularly posted to the rec.radio.amateur hierarchy in the past have harassed other posters by doing such things as calling their employers (even phoning Hawaii in one case), their neighbors, or their ISPs in an attempt at slander. One ham who still posts here under a pseudonym had to obtain a court order in an attempt to put a stop to the harassment. Another has had similar harassment by a non-ham, and is currently experiencing telephone calls and calls by "investigators" to his neighbors, again for the purpose of slander.

The standard response at this point is "take it to the police" or some such other nonsense, but the experienced harassee soon learns that there is actually very little relief to be obtained that way. I don't have

enough patience here to tell you about the failure of a court order to protect at least one ham from stalking. As with all things, an ounce of prevention is worth a pound of cure, and the best way to deal with the creeps who now hang out on Usenet is to never give them the opportunity to stalk you in the first place. The two people currently stalking hams IN THE REC.RADIO.AMATEUR HIERARCHY are both convicted felons.

Nice, eh?

> Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com
------------------------^^^^^^^^^^^^

Hahahahahaha! Continue to dream on, Petunia.

P.S. You need to learn the realities of true anonymous posting (which this is not). Any law enforcement agency can obtain my true identity by contacting my ISP with a subpoena. A truly anonymous post, such as those made through a mixmaster chain, cannot be traced.

427. WTB Cushcraft 416-TB

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:08:31 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C385A23.B7232983@tampabay.rr.com>
Source record: 151414
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Hello everyone]
okay guys go look out in the garage or the aluminum pile
i need the cushcraft 416-TB its the oscar 432MHZ Cross polar yagi
i need it in good shape and must be able to be shipped
thanks

428. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:13:31 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C385B4F.793365B5@tampabay.rr.com>
Source record: 151415

hey ron
i dont know how well that will work cause those things do need grtounds but
i found this antron 8010b its claiming 10-80 meters when used with a tuner
and it doenst need a ground it would work well mounted on the chimney i just
orhers the same antenna waiting for it to arrive myself here is the webiste
i got it from
good luck
http://www.universal-radio.com/catalog/hamants/1410.html

rons533@dejazzd.com wrote:

> Hello
>
> I live in a home that is very restricted (no room) as to what HF antenna
> I can install. I was offered a Hustler mobile antenna with the RM 10-15-
> and 75 meter resinators to put up as my antenna. I plan to chimney mount
> it. Will I be wasting my time by using this and if not do I have to run
> a ground from the mount to an earth ground? I have read other posts here
> about atic, rain spout, and other hidden antennas but I have ruled them
> out.
> Thanks

429. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:22:23 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C385D9F.3B26B987@IEEE.org>
Source record: 151416

Crazy George wrote:
> Cellphone channel pairs are divided into 6 sets.

Have you ever seen a diagram of a cellsite? How does the
telephone company get those hexagon radiation patterns?
--
cheers, CAM http://www.qsl.net/w5dxp

430. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:29:01 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <NaZZ7.106603$Y6.10423263@news1.rdc1.ct.home.com>
Source record: 151417

The antenna structure isn't the only point of entry for lightning damage.
A properly grounded tower can also be the return path (through the
equipment) from a 'hit' on power or phone lines. Lightning protection
requires looking at the whole picture, not just one aspect.

Pete

"RayOfLight @yahoo.com>" <kelon100<NOSPAM> wrote in message
news:r5ef3ucgkbu17cunf4m7npq5h14qoudfl5@4ax.com...
> >i live in central florida where its the lightening capital of the country
and i
> >so far have never had a direct hit to an antenna so i dont use any thing
for
> >protection other than unhooking the feedline from the radio if mother
nature
> >wants your antenna there isnt much out there that will save the antenna
>
> I read somewhere that there is no need for a direct hit to get your
> antennas or equipments get damaged. If there is heavy cloud - it will
> contain lots of static electricity that may pass through your antenna
> to your equipment!
>
> The best protection is the lightening rod placed above the antenna
> mast. It will direct the electricity to the earth or static
> electricity down to earth. i have built up a wire -umbrella-
> protection over my antennas and it works perfectly so far. I live in a
> reion with lots of rain/lightening all the year!

431. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:30:46 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <qcZZ7.106604$Y6.10423293@news1.rdc1.ct.home.com>
Source record: 151418
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

What a ponderous killfile I carry....

Pete

"Your Friend Bill" <"Remove The NO In The Reply To Address"@coqui.net> wrote
in message news:3C37E58A.5C75891F@coqui.net...
> >> Truer words have never been spoken. If you present yourself under
> fraudulent pretense, the best you can hope for is (are) fraudulent
> responses so the whole effort of disguising your email identity is an
> exercise of a clown in a transparent changing booth.
> There's little purpose in being a crocodile (all mouth and no ears) when
> registering posts on Usenet., If what you have to say is relevant
> there's no overcoming need to fear spam if you take even the novice
> approaches of NOSPAM in your

432. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:31:36 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C385FC8.D5F12FB@IEEE.org>
Source record: 151319

Kodiak Bear wrote:
> I'm considering purchasing an SG-239 Smartuner and wondered if anyone has
> experince with this tuner good or bad. Does it work as advertised or is it
> oversold? What gotcha's are there with this piece of equip? Does it work
> with a Yaesu FT-847? Does it work with an ICOM-706MKIIG?

I vaguely remember SGC saying that it will punch holes in the laws of
physics - it won't. It is a good antenna tuner but has lossess just
like any other tuner. It works with any source of RF over a certain
amount (5-10 watts?). What a remote tuner does is eliminate feedline
losses due to SWR > 1:1. For that purpose, it is excellent.
--
cheers, CAM http://www.qsl.net/w5dxp

433. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:34:54 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C38608E.415C08E7@IEEE.org>
Source record: 151320

rons533@dejazzd.com wrote:
>
> Hello
>
> I live in a home that is very restricted (no room) as to what HF antenna
> I can install. I was offered a Hustler mobile antenna with the RM 10-15-
> and 75 meter resinators to put up as my antenna. I plan to chimney mount
> it. Will I be wasting my time by using this and if not do I have to run
> a ground from the mount to an earth ground? I have read other posts here
> about atic, rain spout, and other hidden antennas but I have ruled them
> out.
> Thanks

Running a ground wire won't work very well because it becomes part of your
radiating antenna system. What you need is a 1/4WL counterpoise for each band.
--
cheers, CAM http://www.qsl.net/w5dxp

434. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:35:55 UTC
From: KC8JBO <kc8jbo@alt.net>
Message-ID: <a19v6o$b6n$7@dosa.alt.net>
Source record: 151327
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Mad Max" <SayWhat@DummyGlenn.com> wrote in message
news:a18f15$n5g$0@pita.alt.net...
>
> Glenn Baxter, K1MAN, is sending this notification. I don't know what he is
> trying to prove save for wasting his breath. I mean, who cares??
>
.....
> .....
>
> Subject: Re: Broadcasting
>
>
>
> AMERICAN AMATEUR RADIO ASSOCIATION (AARA)
> INTERNATIONAL AMATEUR RADIO NETWORK (IARN)
> K1MAN BULLETIN SERVICE
> FULL INFORMATION AT www.K1MAN.com
>
> "AARA is your alternative to ARRL. We sponsor IARN, which is the most
> experienced amateur radio emergency communications organization in the
> world."
>
> This is Glenn's claim. He cannot verify it and Who Cares??
>
> "K1MAN bulletins have been heard world wide since 1987. Like W1AW,
> K1MAN transmissions are perfectly legal under FCC rules. Like W1AW,
> good amateur practice requires publishing a transmitting schedule and
> then sticking to it. It is far more disruptive to do otherwise."
>
> And maliciously and deliberately interfering with ongoing QSO's is not
> "disruptive"? Is not rude? Is not ILLEGAL? And Glenn has the anabashed
nerve
> to mention "good amateur practice"?
>
> "Hams can be very childish and territorial about the use of amateur
> radio spectrum. Our surveys show that about 1 ham in 10 is against
> both K1MAN and W1AW one way bulletins. We are sure there are also
> those who are against contests, nets, etc. This is OK! There is
> plenty of room for everyone in our Amateur Radio Service. If you
> have a problem with this, try another hobby; you are probably not cut
> out for big time Amateur Radio."
>

> Yes, Glenn. You can be "very childish and territorial about the use of
> amateur radio spectrum." Your surveys are just that....YOURS! No need to
use
> the plural "our", Glenn. MY survey shows that 6 of ten active Amateurs are
> against the K1MAN broadcasts/intentional interference and my survey is
just
> as valid and likely more accurate than yours. The comment, "you are
probably
> not cut out for big-time radio" is laughable. And what makes you, Glenn,
> think that you are "big-time radio"? Your silly ego aside, I have news for
> you. The only thing "big-time" about you is the constant pain-in-the-ass
> that you are.
> Perhaps you should try another hobby. It is quite obvious that you are not
> cut out for Amateur Radio and hopefully Riley will make that point
painfully
> clear to you, sooner rather than later.
>
>
> "An experienced ham knows that if you are trying to talk to another
> station per a sked, you might have to QSY one or more times during any
> given hour. If you don't know this and practice this, you are not am
> experienced Radio Amateur."
>
>
> You are not talking to another station, Glenn. You are maliciously
> interfering with good Amateur operators and you do so several times daily.
> It is YOU who should practice QSY'ing. One must therefore surmise that you
> are, in your own words, "not an experienced Radio Amateur."
>
>
> "Actually, our amateur spectrum is UNDERUTILIZED. The commercial guys
> are drooling over our spectrum and would love to divide us and conquer
> us. They love to see us squabble and act like babies. There are
> even evil persons in the FCC (dressed like good guys) who are very
> subtly promoting and documenting amateur radio disruption under a
> long term private plan to assist commercial interests take as much
> amateur spectrum as possible. A primary function of AARA is to warn
> you about this frequency grab and to expose the corruption that exists
> within the FCC. Corruption is nothing new in American politics, and
> if you don't think that our amateur radio spectrum is worth billions
> upon billions of dollars, you are very naive."
>
> Here we have Glenn's agenda in a nutshell. He's a conspiracy theorist. He
> thinks Riley is a government agent in the pockets of Big Business.
> Glenn....ever look up the definition of "delusional"?
>
> "So, join the fun. Listen to K1MAN on 14.275, 7.224, 3.975, and 3.890
> MHz. daily and also call in (207 495 2215). See www.K1MAN.com 73!
>
> 14.275 MHz. USB and 3.975 LSB at 1:00 AM to 2:30 AM;

> 3:30 AM to 5:00 AM; 6:30 AM to 8:00 AM; 4:00 PM to
> 5:30 PM; and also 8:00 PM to 9:30 PM. 7.224 MHz.
> LSB at 3:30 AM to 5:00 AM. High fidelity amplitude
> modulation on 3.890 MHz. at 6:30 PM to 8:00 PM.
>
> (All times are in Eastern Local Time - In winter add 5 hours for UTC)
> Join the fun! Get your unedited viewpoints on the air! 73 de K1MAN"
>
>
> What "fun"? The real fun will begin when Riley comes knocking on your
door!
> Go, Riley! Go!

Riley's already sent him a letter about it to cease and desist.

435. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:37:41 UTC
From: KC8JBO <kc8jbo@alt.net>
Message-ID: <a19v6p$b6n$8@dosa.alt.net>
Source record: 151328
Cross-posted to: alt.radio.scanner.flame_fest,rec.radio.amateur.misc,alt.2600,rec.radio.shortwave,rec.radio.amateur.antenna

"Stagger Milhaus Romain Fentworth Lee" <SLee@houston-hunks.com> wrote in
message news:3C3858FB.587EDB97@houston-hunks.com...
> Mark Walsh wrote:
> >
> > "Mad Max" <SayWhat@DummyGlenn.com> wrote:
> >
> > > Using no-spam in an email address is so easily thwarted...
> >
> > Not if done right...
>
> If it can be done, a spammer can (and will) undo it.
>
> >
> >
> > That's bull. I've been appending my crudely de-spammed
> > e-mail address and call sign to my USENET posts for over
>
> Well, goody for you, Petunia! The rest of us have had diametrically
> opposed experiences. I've been hanging around Usenet since it started,
> and never felt the need to disguise either my email address or my
> identity

Anonymous coward and all-around fuckwit
"Stagger Milhaus Romain Fentworth Lee" <SLee@houston-hunks.com>
revealed what a hypocrite he is in message
news:3C36FDCC.76EC185D@houston-hunks.com :

"Therefore, I find your story difficult to believe. Your own anonymous
status makes the story even less credible."

436. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 14:39:03 UTC
From: KC8JBO <kc8jbo@alt.net>
Message-ID: <a19v6q$b6n$9@dosa.alt.net>
Source record: 151329
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Roger Dodger" <MommyBoy@GlenDale.com> wrote in message
news:a1942v$7qh$0@pita.alt.net...
>
> "Your Friend Bill" <"Remove The NO In The Reply To Address"@coqui.net>
wrote
> in message news:3C380909.3895CAD@coqui.net...
> > Mad Max wrote:
> >
> > > Oh, my. Aren't we a hoot? Now humor me if you will. Just what the heck
> is
> > > the bottom line you were attempting to convey?
> > > Name-calling aside, what is your point?
> >
> > That you are simply an anonymous troll-type poster and nothing you have
> > to say means squat because you don't have the balls to personify
> > yourself.
>
> My "troll" obviously bore results. You could not resist responding, could
> you?
> And speaking of "balls", you of all people are hardly adept at describing
> same.

You don't have any except the ones from your dog in your mouth.

> > Given that you are 14 years old at best, please don't bother me. Thats
> > illegal. Your Mom will be really pissed that you are using her computer
> > to start a little cross-posted flame war with characters on the monitor
> > screen.
>
> OK. I will tell my mommy to turn off my account with the express intent of
> not bothering you any further.
> Also, given the impression that you are yourself rather juvenile and
> somewhat limited in your ability to express yourself, I will cease making
> you look like the fool you are.
> >
> > Nite now, mmmkay?
> Mmmmkay.

Anonymous coward and all-around fuckwit
"Stagger Milhaus Romain Fentworth Lee" <SLee@houston-hunks.com>
revealed what a hypocrite he is in message
news:3C36FDCC.76EC185D@houston-hunks.com :

"Therefore, I find your story difficult to believe. Your own anonymous status makes the story even less credible."

437. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 16:07:31 UTC
From: AB7RS <ab7rs@arrl.net>
Message-ID: <u3gtic51hmgm9a@corp.supernews.com>
Source record: 151321

You could spend thousands of hours and dollars and not make a bit of
difference.TG

"Peter J. Bertini" <commquart@home.com> wrote in message
news:3SPZ7.106599$Y6.10421987@news1.rdc1.ct.home.com...
> Yeah, but you won't know if it is working well until you have a nearby
> lightning hit..
>
> I'd rather spend the few hundred bucks and a few weekends and at least
make
> an
> effort to minimize my potential for damage.
>
> Pete
>
> "AB7RS" <ab7rs@arrl.net> wrote in message
> news:u3f2f5sn9flcd8@corp.supernews.com...
> > I have not use any so-called protection for the last 6 years nor do I
> > unplug anything and I don't ground my station equipment either.Seems to
> work
> > well.I do have home owners insurance but have not used it for damaged
> radio
> > equipment.TG
> >
> >
>
>

438. Re: Through The Glass - 2Meter & 440

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 16:15:55 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <3ftg3uk85s49p78n7360d8bu8auask0tu6@4ax.com>
Source record: 151323

If you live in a southern state (Arizona, Texas, Louisiana, etc.)
glass tint helps to keep you from cooking like a lobster. Most states
have laws stating the maximum tint by window. Here in Arizona only
the rear and rear side windows can have the maximum tint allowed.
Both of our cars have the maximum allowed on all windows. I assure
you there is no negative effect regarding safe driving at night if you
are within the law. You really don't even notice the tint when you
are on the inside looking out. Sunglasses don't keep the sun off the
rest of your body.

Dick - W6CCD

On Sun, 6 Jan 2002 02:34:03 -0800, "Mark Walsh"
<mark@km6xu.die.spam.die.com> wrote:

>"Dave VanHorn" <dvanhorn@cedar.net> wrote:

>Perhaps where you live; here it is a iwannalookkewl thing.
>Huge effect on safe driving on the freeway at night.
>Sunglasses can be removed much more readily.

>Mark Walsh ***** mark@km6xu.com ***** http://www.km6xu.com
>

439. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 16:24:53 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201060824.57f5b44@posting.google.com>
Source record: 151322

RayOfLight <kelon100<NOSPAM>@yahoo.com> wrote in message
news:<s7ga3ugnqfr0gk55pjodnmeg7uuoi2op0s@4ax.com>...
> >It may take a while to take a "test" strike. How much time do you
> >allow to be 100% sure?
>
> Some 4-6 months. We have lots of lightning around here abd we have
> been moving the equipments over a distance of 50 kms around just to
> check :))

Thats not very long. I went 20 years without a direct strike, and then had two direct strikes to my mast in the past three years or so. We also have mucho lightning here. "Houston". I didn't have any damage as I was grounded out. MK

440. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 16:25:55 UTC
From: richardharrison@webtv.net
Message-ID: <10429-3C387A93-24@storefull-112.iap.bryant.webtv.net>
Source record: 151326

Roy Lewallen wrote:
"Please re-read your earlier posting with its logical reasoning as to why radials don`t couple."

Wires have mutual inductance. Close-spaced, parallel wires have a lot of mutual inductance. Radials are wires so they have mutual inductance. What does mutual inductance do? It either adds to or subtracts form a wire`s self-inductance. More inductance in a radial produces more impedance in a radial.

Inductance doesn`t allow current to change instantly, so more inductance in a radial means slower wave propagation. More inductance in a radial makes the radial appear longer.

Concerning symmetrical radial distributions, I said that voltages at the same point on adjacent radials are equal, thus no impetus should exist for current in the ground between radials.

Mutual impedance between radials may affect propagation velocity in them. If the radials are symmetrically arrayed, the radials may appear longer (I am repeating).

The more radials used, the closer they are together, and so the more coupling. Counter emf is of the same polarity as that imposed on an inductance so that current into the inductance is minimized. In a radial, self inductance and mutual inductance are additive and wave progress in the radials is retarded by mutual inductance (I am repeating again).

Mutual inductance between the radials in a ground system is small in its effect. Richard Clark opined that tighter coupling equalized behavior among radials.

The function of a set of buried radials is to produce a low impedance earth connection. Reactance in the earth connection can be tuned out as we tune the antenna system. What we want is low ground system loss.

There is an ARRL book, "Low-Band DXing" by ON4UN which includes much of what you might want to know about radials. Table 9-2 in that book gives the equivalent resistance of radials buried in good soil. Values range from 28.6-ohms for two radials of 0.15-wavelength to 0.1-ohm for 120 radials of 0.4-wavelength.

Best regards, Richard Harrison, KB5WZI

441. Re: Icom Wanted, Please read!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 16:32:42 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201060832.f0155e7@posting.google.com>
Source record: 151324
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.swap

ehsjr@bellatlantic.net wrote in message news:<3C36974F.E71DF521@bellatlantic.net>...
> You can build a CIV interface for about $10.00

Yep. Two versions..A transister version, and a "deluxe" version using
the MAX232 chip. You could make a "psuedo" SM-20 mike from a rat shack
electret condensor element and save more big $$$. After looking at the
healthy prices they want for a simple cable for the faceplates, I'm
thinking of making one of those myself also if I can find some usable
end connectors. MK

442. Re: What will work for QRP?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 16:44:33 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201060844.347a748a@posting.google.com>
Source record: 151325

blair thompson <blairt@shaw.ca> wrote in message
> I monitor on CubFox nights, and also those blisteringly-quick
> operators during the regular Fox hunts(Thursdays), but I only
> occasionally can hear much action (fox or hounds) which is kinda
> frustrating. I presume some of my problems originate with the low
> elevation of my wire, but could it also have something to do with
> being way out here on the "wet" coast (British Columbia)? Should I try
> a resonant counterpoise wire, for the bands I want to work,
> especially, 40M (foxhunt), or would that be a waste of time?

If you are not hearing them with a 100 ft wire, sounds like the band
cdx are not very good. If there was a signal to receive, I would think
a 100 ft wire would do. Is noise a problem? I don't know what
distances you are talking or time of day. That will make a lot of
difference on 40m. MK

443. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 16:51:34 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c38844f_1@news1.prserv.net>
Source record: 151330

One of the most readable and correct for its time discussion of the cellular system appeared in one of the early Cheek Scanner Modification Books, of all places.

Now, Cecil, I want you to go back and look carefully at your question. Diagram=? Service power diagram? Yes. Site internal wiring diagram? Yes. Signal flow diagram? Yes. Logic diagram, yes I've seen one, but don't pretend to understand it, and most of the techs don't either. Were you attempting to ask something which ended up at cell radiation patterns? If so, those are available from the hardware manufacturers, and both Bogner and Kathrein published some really good papers in the 80s on those. Beam forming for PCS is much easier than cellular, but look around, you see both panel antennas and the old cylindrical type antennas in use at various sites, so there is no fixed answer. And few cell or PCS operations are run by "The Phone Company" anymore, even under a different disguise.

--
Crazy George
Remove NO and SPAM from return address
CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C385D9F.3B26B987@IEEE.org...
> Crazy George wrote:
> > Cellphone channel pairs are divided into 6 sets.
>
> Have you ever seen a diagram of a cellsite? How does the
> telephone company get those hexagon radiation patterns?
> --
> cheers, CAM http://www.qsl.net/w5dxp

444. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 17:03:46 UTC
From: "Peter J. Bertini" <commquart@home.com>
Message-ID: <Sr%Z7.106607$Y6.10423723@news1.rdc1.ct.home.com>
Source record: 151331

Yes, you could spend thousands of dollars and not make a difference, but
that assumes the money and effort were wasted on uproven techniques.

A properly installed grounding window does make a difference.

It may not provide total protection, but it will minimize what damage takes
place in the structure--in more instances that it wouldn't.

"AB7RS" <ab7rs@arrl.net> wrote in message
news:u3gtic51hmgm9a@corp.supernews.com...
> You could spend thousands of hours and dollars and not make a bit of
> difference.TG
>
> "Peter J. Bertini" <commquart@home.com> wrote in message
> news:3SPZ7.106599$Y6.10421987@news1.rdc1.ct.home.com...
> > Yeah, but you won't know if it is working well until you have a nearby
> > lightning hit..
> >
> > I'd rather spend the few hundred bucks and a few weekends and at least
> make
> > an
> > effort to minimize my potential for damage.
> >
> > Pete
> >
> > "AB7RS" <ab7rs@arrl.net> wrote in message
> > news:u3f2f5sn9flcd8@corp.supernews.com...
> > > I have not use any so-called protection for the last 6 years nor do I
> > > unplug anything and I don't ground my station equipment either.Seems
to
> > work
> > > well.I do have home owners insurance but have not used it for damaged
> > radio
> > > equipment.TG
> > >
> > >
> >
> >
> >
> >
>

445. CUSHCRAFT 719 70CM YAGI FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 17:05:24 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3c3883dd$0$37108$2c3e98f8@news.voyager.net>
Source record: 151332

cushcraft 719 yagi as new purchased in oct/01 up for 1 month. want
$100 shipped conus to your door. contact kce@freeway.net
--
SUPPORT RADIO TELEGRAPH THE VOICE OF PROFESSIONAL RADIO OPS.!!!
Member of FISTS #7242 QCWA #30270 SOWP # 5648-M QRPARCI AND OTHERS

446. Wind Load Calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 17:15:51 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <fy%Z7.144929$lV4.24934532@e420r-atl1.usenetserver.com>
Source record: 151333

I'm going to put up a simple doublet and want to have my technical facts prepared for when/if my local housing authority disapproves. I'm interested in calculating the wind load and other factors of an antenna. This could be a major factor in the event of a moderate hurricane.
Antenna is as follows:
30ft x 1 1/4" steel mast mounted vertically
450 Ohm (poly) ladder line feeder
14 ga. copper wire, mounted as an inverted V
Inv. V Apex at 30ft
Inv. V Ends at 10ft

I'm asking for you to *teach me how* to do it or direct me to a source vice fish for me. I may be as simple as a data table that accounts for diameter & length or as complicated as a basic formula. I appreciate any help I can get as well as additional info since this is a learning opportunity. TIA.
73's
Drink, WP3JQ

447. Re: Butternut HF5V-III matching line length??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 18:06:17 UTC
From: edvanc@mediaone.net
Message-ID: <tm0_7.18585$yC.1991224@typhoon.mn.mediaone.net>
Source record: 151334

In article <4syZ7.1365$q46.171332@dfiatx1-snr1.gtei.net>, ebourlet@gte.net says...
>
>I have a butternut HF5V-III antenna that the 75 Ohm matching section has
>been lost. If you know the length of this line please let me know. Thanks.
>WB7OYL
>
>
Have replaced mine twice with sections of RG-11 I had around the shack. It's a quarter wave long
on 20 Meters. You will need to pick a frequency for the calculation, I used 14.150MHz. Be sure
to allow for the velocity factor of the 75 Ohm coax you choose to use. May also I suggest that
you measure the VF and the electrical length of your matching section before putting it in line.
The published VF values were not consistent with the cable I actually cut. An MFJ-259B was used
for this work.

I also opted to put put a coax connector across the Butternut feed point so I could maximize
watertightness of the coax by using a PL-259 or N connector at the end of the matching section
instead of openning it up for direct connection to the vertical. That should add some life to
the matching section. My original matching section's center connector kept breaking. Repairs
allowed water to enter the coax, so I had to replace it, despite my best attempts to seal the
line against the elements. Hope this helps.

Ed, W0VC

448. ARNewsline 1273 - Jan 4 2002

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 19:14:02 UTC
From: radionews@aol.com
Message-ID: <20020106141402.08107.00000029@mb-fi.aol.com>
Source record: 151335

AMATEUR RADIO NEWSLINE(tm) REPORT #1273 - January 4 2004
(Total Running Time with RAIN Promo: 24:48)

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A NOTE TO THOSE WHO ONLY “READ” AMATEUR RADIO NEWSLINE(tm)

For those of you who only know of the Amateur Radio Newsline (tm) as a text newsletter we would like to invite you to listen to the audio version. This Amateur Radio Newsline (tm) script is actually written for the “spoken word.” It is recorded each by professional broadcasters and is available for private listening or rebroadcast over your repeater. Three methods of delivery are available: Streaming audio using RealAudio, FTP RealAudio, FTP MP3 or dial-in telephone. Please visit our website at http://www.arnewsline.org for a list of telephone numbers (you have to pay your own long distance charges) and links to audio servers providing our voice newscast. On site free FTP Downloads are available at our site by clicking on the newscast number at the top of the page.

de
The Newsline Production Team

==========

Amateur Radio Newsline report number 1273 with a release date of Friday, January 4 2002 to follow in 5-4-3-2-1.

The following is a Q-S-T. A “V-E team” finds a way to test kids in one of the most remote regions of the country and the FCC again says no to expanding PRB-. These stories are first on Amateur Radio Newsline report number 1273 coming your way right now.

(Billboard Cart Here)

**

HAM RADIO TESTING REACHES WHITE MOUNTAIN ALASKA

Ham radio examinations have finally come to one of the remotest areas of the nation. This, after a team of examiners from the W5YI VEC perform a fly-in examination session in White Mountain Alaska. Amateur Radio Newsline’s Norm Seeley, KI7UP, has the details:

--

White Mountain is a remote fishing village in the far North-West of Alaska. It’s major claim to fame is that its the next to the last checkpoint for the famed Iditarod dog sled race. And it wanted someone to come in and give ham

radio exams.

The closest big city is Nome. White Mountain is only about sixty miles from Nome but its over some rather treacherous terrain. There are no roads in or out and all supplies to White Mountain have to be delivered by plane or boat.

But White Mountain does ham a ham radio operator for its mayor. He is reindeer farmer Tom Gray KL0CQ. And one of its school board members is Eric Morris KL7HT. Both will tell you that a temperature of minus 40 degrees Fahrenheit and a wind-chill factor of minus 100 degrees is not uncommon in winter. These were the conditions faced by a four member W5YI VEC test team when it chartered a plane and flew in on December 11th to administer exams to four adults and fourteen youngsters who were determined to make ham radio a part of their life.

The trip which cost $800 for the flight alone was sponsored by the Seward Peninsula Amateur Radio Club. Braving the weather were examiners Ramon Gandia AL7X, Michael Nurse KL7UJ, Scott Webber AL7RJ and Thomas Busch NL7H. Al four are from Nome. Most of those to be tested came from the Bearing Strait School District’s only inland school. They had all been studying for their Amateur license as part of a search and rescue course. Neither the applicant or the VE team were disappointed. All eighteen passed the Technician class exam.

For the Amateur Radio Newsline, I’m Norm Seeley, KI7UP.

--

Those involved in ham radio testing are keenly aware of the problems faced by remote areas of Alaska. At last July’s VEC Conference in Gettysburg Pennsylvania Jim Wiley KL7CC told the group that many applicants in Alaska are denied n Amateur Radio license exam due to the inaccessibility of their locations or the high cost of travel in that state. (W5YI)

**

HAM RADIO AND THE LAW: FCC SAYS NO ON PRB-1 EXPANSION REQUEST

Ham radio has lost yet another battle against deed restrictions, but the war is not over yet. At least that’s what the ARRL appears to be saying in a bulletin that describes the latest skirmish with the FCC over this politically volatile issue.

In the latest round, the FCC has affirmed a November 2000 staff-level decision that declined to include privately imposed deed covenants, conditions and restrictions under the limited federal preemption known as PRB-1. That’s the federal government policy requires municipalities to ''reasonably accommodate'' amateur communication in antenna-related zoning and regulation.

The ARRL last year appealed to have the full FCC review the earlier denial. The Commission turned down the League's Application for Review December 18 in a Memorandum Opinion and Order released December 26. As a result, it now looks as if the ARRL will bypass any further dealings on this issue with the FCC and will look for congressional relief instead.

The FCC itself even hinted that Congressional action by the ham community might be a next logical step. Its memorandum, opinion and order of dismissal did note that if Congress were to see fit to enact a statutory directive mandating the expansion of the FCC’s reasonable accommodation policy that the Commission would expeditiously act to fulfill its obligation there under. Translated: If Congress tells the FCC to include deed restrictions under the provisions of PRB-1, it will be more than happy to do so. (ARRL)

**

HAM RADIO IN SPACE: PROJECT JJ - HE EAGLE HAS LANDED

AMSAT-NA's newest satellite project, known as Project JJ for the past year, now has a new and official name. This, as AMSAT North America President Robin Haighton, VE3FRH, announces that effective January 1, 2002, the satellite will officially be known as 'Eagle'.

The name Eagle was submitted by Bill Allen, W7US, of Tucson, Arizona. It was selected from a list of forty-five names submitted by twenty-nine satellite operators.

For his winning suggestion, W7US will receive a free dinner at the annual AMSAT dinner held during the Dayton Hamvention. We will have more ham radio space related news later on in this weeks Amateur Radio Newsline report. (AMSAT-NA, ANS)

**

BREAK 1

Welcoming in the new year with ham radio news coming to you from the United States of America. We are the Amateur Radio Newsline, heard on bulletin stations around the world, including the N7VGS repeater serving the Salt River Star Valley Wyoming and congratulating 13 year old Devin Cassity, on becoming the youngest ham in South West Wyoming. Devin is now KD7PHN.

(5 Sec Pause Here)

**

EMERGENCY PREPAREDNESS: NORTHERN CAL TOWN CHOOSES HAM RADIO

Ham radio started the year with some very positive public exposure in the Los Angeles Times. The January 1st edition featured an in depth article about a Northern California town that will tap into older technology to prepare for future emergencies.

Worried that a disaster will knock out e-mail and cell phones, Los Altos Hills has decided to turn to its local ham radio community and make it the primary back-up to normal disaster preparedness communications. And as you might expect, the hams are more than ready to oblige

The complete story can be read at the Los Angeles Times website. The complex URL is http://www.latimes.com/news/local/la-000000203jan01.story. (Highlighted by ARNewsline™)

**

AMERICA AT WAR: POPCOMM COLUMNISTS SAYS “DONT TURN THE OTHER CHEEK”

Popular Communications writer Eric Force has some strong words that are obviously aimed at the pacifists who oppose the United States military retaliation against Osuma bin Laden and his al-Quida terrorist network. As a response to those he calls the “do-gooders of the world” who promote turning the other cheek, Force says to look, really look at the attack that brought down New York City’s World Trade Center twin towers. He then says that it could have struck a lot closer to them.

Force says and we quote: “Consider that it could have been you, your mom, dad, brother, sister other relative or a close friend in those planes and buildings who were terrorized, murdered and buried in the rubble.” He adds that just thinking about the incomprehensible terror, suffering and losses incurred by innocent human beings a the cowardly hands of international thugs continues to tear at his heart.

Force has dedicated his latest I-Waves column to the sights and sounds of September 11th that are available on the Internet and to the victims of the tragedy. Its a very compelling article. You can find it starting on page 66 of the January edition of Popular Communications Magazine that’s on newsstands right now. (PopComm)

**

AMERICA AT WAR: FEDS TO AID NYC TV STATION REBUILD

New York television stations will be getting federal help rebuilding transmitters that were destroyed in the September 11th terrorist attack on the World Trade Center. A total of ten New York area stations will receive eight point two million to offset the thirty million to forty million dollar price tag for purchasing and
constructing a new transmission facility.

According to the Broadcasting and Cable newsletter, Senator Charles Schumer managed to secure the funding as addition to emergency aid appropriation for victims of the attacks. As previously reported, there is some speculation that the replacement transmitting facility could be a 1500 to 2000 foot high stand-alone tower constructed near the former site of the Twin Towers. (Broadcasting & Cable)

**

ENFORCEMENT: NAL CANCELED

The FCC has canceled a proposed ten thousand dollar fine that it had issued to Jeffrey Alan Pettrey, This, for his apparent violation of Section 301 of the Communications Act involving operation of an unlicensed radio transmitter.

Back on July 30, 2001, the District Director of the Commission's Columbia, Maryland Field Office issued a Notice of Apparent Liability for Forfeiture in the amount of $10,000 to Pettrey for the infraction. Pettrey filed a response to the N-A-L on August 7, 2001 accompanied by documentation regarding his

inability to pay the proposed fine. After reviewing Pettrey's response, the FCC conclude that cancellation of the proposed $10,000 forfeiture is warranted based on Pettrey’s inability to pay. (FCC)

**

ENFORCEMENT: FCC CANCELS CONVICTED HAMS LICENSE

The FCC has canceled the Amateur license of Kenneth P. Kelly, WT2FBI, of Greensboro North Carolina after Kelly failed to show up for a re-examination. But at the time of the FCC retest order Kelly was otherwise occupied. He was fighting criminal charges in relation to a jamming case in Ohio. We have this report:

--
On November 30, 2001, Kenneth Kelly, the ex-WT2FBI was sentenced to 5 years probation by the Judge H. J. Bressler in a Butler County Ohio court. He had previously been indicted on a 4 th degree felony charge of disrupting public service by his jamming and talking on the Middletown Ohio police radio system.

At his hearing, Kelly agreed to a plea bargain. He admitted his guilt to a reduced charge attempted disrupting public services. At the time the FCC pulled his ham radio ticket Kelly was being held in the Butler County Ohio Jail pending sentencing.

By way of background, a person later proven to be Kelly was first noticed on the Middletown police radio channel the third week of July 2001. Initially the police dispatch radio system was not recording him but that was soon remedied by city radio technicians. After several days of taping, it was observed that the voice on the police radio was similar to one heard on the local 2 meter Amateur frequencies.

Several members of the Dial Radio Club then assisted police by monitoring and taping Kelly on the 2 meter band. Tapes from 2 meters and from the police were then voice printed the aid of computers to check similarities. Dial club members also tried to direction find and locate the signal both on 2 meters and on the police channel.

Through some luck, detectives working with a metro housing police officer and discovered that Kelly was now living in their jurisdiction. After they interviewed him, they felt that he was the person interfering. As the investigation progressed, he admitted to detectives that he may have accidentally transmitted on their frequency by accident. He claimed that his signal may have been mixing with an FM broadcast station and another ham repeater.

But Police did not believe it was accidental, because he was taped trying to talk directly to the police dispatcher and the cars. Later Kelly did admit his guilt and entered into the plea bargain. Now sentence has been passed by both the local court and the FCC.

For the Amateur Radio Newsline, I’m Burt Hicks, WB6MQV, reporting.

--

When he was finally caught Kelly had a Yaesu VX-5 hand held in his possession that had been modified to transmit out of band. The assistance of the Dial Radio Club members is credited with helping to solve this case.

Note: Information and documents from the case can be obtained from the Butler County Ohio Clerk's office or online at: http://www.butlercountyclerk.org/ Click on Butler County Court Records Search. Then enter Kenneth Kelly. (FCC, Dial ARC, others)

**

ENFORCEMENT: MITNICK TO FIGHT TO KEEP HIS HAM LICENSE

Another ham who appears to be getting ready to do battle with the FCC is former computer hacker turned talk show host Kevin David Mitnick, N6NHG. Amateur Radio Newsline’s Bill Pasternak, WA6ITF has the latest:

--

As reported last week, the FCC is challenging Kevin David Mitnick's request to renew his ham radio license. The agency claims that his criminal background raises a substantial and material question of fact as to whether Mitnick possesses the requisite character qualifications to be and remain a commission licensee.

Now, N6NHG has told the U-K Newspaper the Register: "It's just another example of them trying to harass me. Now I've got to spend money to keep a ham license."

Mitnick insists that he has totally abandoned his former ways. The Register article notes that that he was recently called to testify before Congress on federal computer security matters. Also that he spent two days briefing the U-S Commission on National Security on these issues. Mitnick tells the Register that he cannot understand why the government is now questioning his character.

Mitnick is currently the host of the radio program called The Dark Side of the Internet. It airs in the Los Angeles area from 5 to 7 a.m. Sunday mornings over radio station KFI 640 AM. And in a recent appearance on Coast to Coast A-M hosted by Art Bell, W6OBB, Mitnick said that he is hoping for a career in computer security once his term of supervised release from prison has been completed.

For the Amateur Radio Newsline, I’m Bill Pasternak, WA6ITF.

--

The complete Register story and interview with Mitnick is on the web at a rather long and complex U-R-L. You will find it at http://www.theregister.co.uk/content/55/23494.html (Adapted from the Register)

**

INTERNET SECURITY: CIA GOES OUT OF ENCRYPTION COMPANY FUNDING

And speaking of Internet security, word that a Central Intelligence Agency funded company that allowed Web surfers to browse anonymously has closed. According to news reports, Emeryville California based SafeWeb enabled Internet users to gain access to the World Wide Web and browse sites through its encrypted service. This made their on-line habits and history untraceable. In the 2000 - 2001 fiscal year, SafeWeb received one million dollars in funding from the U-S Central Intelligence Agency's venture capital arm. (published reports)

**

BREAK 2

From the United States of America, we are the Amateur Radio Newsline, with links to the world from our only official website - www.arnewsline.org.

(5 sec pause here)

**

HAM RADIO BUSINESS: AMATEUR RADIO TRADER CEASES PUBLICATION

Ham radio Internet auction sites may be responsible for a twice a month ham radio equipment sales magazine going away. This, after Amateur Radio Trader magazine announces that it has ceased publication.

According to Editor Barbara Patterson, KF4MMV, the Amateur Radio Trader was no longer a viable product. She says that the firm will be redirecting its resources into other areas.

Meantime, the company has also pulled its amateuradiotrader.com website off line. But unlike other publications which have gone under, in this case subscribers are being reimbursed for any outstanding issues. In addition to handling buy and sell ads, Amateur Radio Trader also donated page space to advertising the annual Newsline Young Ham of the Year award. (ARNewsline™)

**

HAM RADIO HERITAGE: MAKING WCC A PART OF THE FUTURE

A ham is campaigning to preserve part of radios past and have it become a part of the future. This as Lewis Masson, K1LJ-S, says that the town of Chatham Massachusetts should convert the site of radio station WCC into an Amateur Radio station along with a training curriculum to teach the kids in the area about communications technology.

WCC is one of the original Marconi Marine Radio Stations. Masson is an ex-marine telex operator at WCC. The site was recently turned over to the town of Chatham and Masson believes it is important to preserve the operations building as an operating amateur radio station and keep the hotel building as a museum to preserve and display memorabilia.

Masson says over the Internet that he has formed a committee to work on this project and that they are looking for nationwide support for this campaign. If preserving the past as an investment in the future is of interest to you, please contact K1LJS by e-mail to lemasson@juno.com. (Internet)

**

SPECIAL EVENTS: HAM RADIO UNIVERSITY 2002

A reminder the third annual Ham Radio University event takes place on January 20, 2002. Location is the Babylon Long Island New York Town Hall Annex with the doors opening at 9 a-m Eastern time.

Ham Radio University is a day of education about Amateur Radio. This there will be twenty, one-hour presentations with special forums geared to the non-ham as well as the experienced Amateur Radio operator. The focus will be "hands on" with many demonstrations. Besides the forums, there will be tables set up with information about the different groups, ham radio classes, exam session schedules, public service and other activities.

For more information about Ham Radio University, please contact its Chairman Phil Lewis N2MUN by e-mail to n2mun@optonline.net. You can also get in touch with ARRL New York and Long Island Section Manager, George Tranos N2GA by e-mail to n2ga@arrl.org. Also check the Ham Radio University website for a full list of forums, directions and talk-in information. Its in cyberspace at www.arrlhudson.org/nli/hru2002.htm (N2DO)

**

HAM RADIO RECORDS: BEST OF THE WEST AND VHF CONTEST HONOR ROLLS

Tim Marek, K7XC, says that he has updated W6 / W7 & "Best In The West" VHF Contest Honor Rolls. They are now available at the following web sites.

http://k7xc.tripod.com/VHF_Records/index.html s the stand alone records page. http://k7xc.tripod.com/K7XCweaksignal/ is where individual links can be found to each contest. (VHF Reflector)

**

HAM RADIO SCIENCE: NEW 6 METER PROPAGATION BEACON IN WASHINGTON STATE

Rich Ewing, KO7N reports over the VHF Reflector that Bruce Shurtz, W7BAS, has installed a propagation beacon in gridsquare CN87TG near Kennmore Washington. It operates on 50.069 MHz putting out 10 watts to a 5 element yagi pointing 90 degrees. The beacon is operational 24 hours a day, seven days a week. QSN reports go to W7BAS, at his callbook address. (VHF Reflector)

**

HAM RADIO IN SPACE: VERY FEW LAUNCHES

Peter Guezlow, DB2OS, reported that 2001 has turned out to be the slowest year for space launches in nearly 40 years. Ham radio or otherwise. According to DB2OS, only 58 flights reached orbit, and there was one complete failure.

Guezlow says that historians note that we must look back to 1963 to find a year that produced fewer launches. He says that in 2000 there were 82 launches to orbit plus three failures. By contrast the most productive year was 1984 when 129 launches delivered payloads into orbit.

But there is at least one bright note. Russia successfully placed five satellites into orbit recently after launching them aboard a Zenit rocket. The cargo rocket, carrying three Russian, one Moroccan and one Pakistani satellite, took off from the Baikonur space center in Kazakhstan. (AMSAT, ANS)

**

HAM RADIO IN SPACE: NEW INDIA WEBSITE

The AMSAT-India website has been officially launched recently by the government of India and the Department of Space. VU2POP says that you can check it out by taking your browser over to www.amsatindia.org. (ANS)

**

CONTESTS: HUNTING LIONS ON THE AIR

The 31st annual Hunting Lions in the Air contest will take place on the weekend January 12th to the 13th. The contest period will be 48 hours and will run from midnight UTC Friday night to midnight UTC Sunday night, and all hams are welcome to participate.

According to its sponsors, the objective of this operating event is to create and foster a spirit of international understanding and cooperation among radio amateurs and members of the Lions Clubs through the use of world-wide radio communication. The contest also commemorates the birthday of Melvin Jones, the founder of the Association of Lions Clubs who was born at Ft. Thomas, Arizona on January 13, 1879. (Q-News)

**

DX

In DX, word that the recently postponed Ducie Island Dxpedition is on again for March. Ducie Island became a DXCC entity last November and it immediately jumped to the top of the most wanted contact list. But rough seas scuttle the first attempt to put it on the air. (RSGB)

Meantime 6 meters continues to be the V-H-F D-X band of choice. On Monday December 31st, Kevin Bishop WB8XX, says that he started hearing O-H-1-X-T at 1300 U-T-C on a backscatter path. From then on until 1620 U-T-C he worked 8 new countries and over thirty new grids in Europe and Asia. (VHF Reflector)

**

STRANGE TECHNOLOGY: ARE CELLPHONES KILLING GHOSTS?

Now, from radio communications to the effect of radio communications on supernatural communications. This, as a British expert who has spent years researching the occult says that cellular and other mobile phones are killing off ghosts. Don Wilbanks KC5MFA has the details:

--

No, we are not kidding you. In fact, Tony Cornell, of the Society for Psychical Research, has told the London Sunday Express that reports of ghost

sightings started to decline when mobile phones were introduced 15 years ago.

According to Cornell, ghost sightings had remained consistent for centuries. In fact, until three years ago the society received one or two new ghost sighting reports every week. But with the introduction of mobile phones 15 years ago, ghost sightings began to decline to the point where they are not receiving any.

And why are there no longer any ghosts being observed? Apparently paranormal events, which many scientists attribute to unusual electrical activity, my be drowned out by the electronic noise produced by cellular telephones and text messaging pager transmitters. And according to the newspaper, the lack of ghost sightings could adversely impact on the nations economy. It says that haunted tourist attractions in Britain could be under threat if the number of cellphones continues to grow from the present figure of about 39 million now in use in the U-K.

Don Wilbanks, KC5MFA.

--

And all of this begs that one question be asked. If ghosts are the spirits of the dead, how can anything actually kill them? (Science Today)

**

NEWSCAST CLOSE

With thanks to Alan Labs, Amateur News Weekly, AMSAT, the ARRL, the CGC Communicator, CQ Magazine, the FCC, the Ohio Penn DX Bulletin, Radio Netherlands, Rain, the RSGB and Australia's Q-News, that's all from the Amateur Radio Newsline(tm). Our e-mail address is newsline @arnewsline.org. More information is available at Amateur Radio Newsline's(tm) only official website located at www.arnewsline.org. You can also write to us or support us at Amateur Radio Newsline(tm), P.O. Box 660937, Arcadia, California 91066.

For now, with Bill Pasternak, WA6ITF, at the editors desk, I’m Mert Garlick, N6AWE, saying welcome to the year 2002, 73 and we thank you for listening." Amateur Radio Newsline(tm) is Copyright 2002. All rights are reserved.

**

END NEWSCAST - RAIN PROMO

449. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 19:15:10 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C38A23E.B9027DFB@IEEE.org>
Source record: 151336

Mark Keith wrote:
> Thats not very long. I went 20 years without a direct strike, and then
> had two direct strikes to my mast in the past three years or so. We
> also have mucho lightning here. "Houston". I didn't have any damage as
> I was grounded out. MK

I'm just up I45 in Madisonville. What I have done is use banana plugs/
sockets at the plexiglas "firewall". I unplug the banana plugs and
tie the ladder-line to the hurricane fence when lightening threatens.
Even if I forget, wind almost always occurs before the lightening
and the ladder-line unplugs itself. I've been doing that for
14 years and suffered no ligntening damage.
--
cheers, CAM http://www.qsl.net/w5dxp

450. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 19:19:42 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C38A34E.20C80CBC@IEEE.org>
Source record: 151337

Crazy George wrote:
> One of the most readable and correct for its time discussion of the cellular
> system appeared in one of the early Cheek Scanner Modification Books, of all
> places.
>
> Now, Cecil, I want you to go back and look carefully at your question.

I've got a textbook on cellphones. It shows the radiation patterns to
be hexagons. How do they achieve those sharp corners?
--
cheers, CAM http://www.qsl.net/w5dxp

451. Entangled Photon Pairs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 19:26:47 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C38A4F7.DEA5A792@IEEE.org>
Source record: 151338

The Dec. 8 copy of "Science News" has an article titled "Gadgets from the Quantum Spookhouse". One thing it describes is "entangled photon pairs". I think we hams should get back to the leading edge of communications by putting up a satellite based on these entangled photon pairs. In geosynchronous orbit, we could beam one photon beam at the East Coast and the other at the West Coast and have instantaneous full-duplex communications between the coasts.
--
cheers, CAM http://www.qsl.net/w5dxp

452. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 19:49:45 UTC
From: Anthony Duffy <a.duffy@sympatico.ca>
Message-ID: <3C38AA59.4090601@sympatico.ca>
Source record: 151339

From what I understand of this "antenna coupler", is that it's a self adjusting network installed at the base of the antenna. It works with the elements connected to the terminals the same way adjusting a tuning network at the base of the antenna does. The handy thing is that it's automatic, actually tunes the elements to resonance instead of faking the radio into thinking it has a good SWR (ie; antenna tuner at the radio), and can be used on any radio with a minimum of a 3 watt output (for this model). It can also be used with allot of different styles of antenna including a multi or single turn loop.

It's going to be my next acquisition too.

As for the down side, any antenna that is reduced in size and compensated for using coils and caps will be less efficient (some more then others). But not as bad as using traps from what I've read (and the antenna is still quite large). Oh, and it does have minimum radiator lengths depending on what band your going to be using it on.

If you'd like a better idea on how it works go to SGC World. There is a link to their publications where they have downloadable manuals and also one on using their products with stealth antennas. It was an interesting read.

73, Tony
VA3ATD
London, Ontario.

Kodiak Bear wrote:

> I'm considering purchasing an SG-239 Smartuner and wondered if anyone has
> experince with this tuner good or bad. Does it work as advertised or is it
> oversold? What gotcha's are there with this piece of equip? Does it work
> with a Yaesu FT-847? Does it work with an ICOM-706MKIIG?
>
> Thank you,
>
> Don, KC8RDO
>
>
>

453. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 19:52:01 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <GQ1_7.145069$lV4.24987955@e420r-atl1.usenetserver.com>
Source record: 151340

Haha! :)
"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C38A34E.20C80CBC@IEEE.org...
> Crazy George wrote:
> > One of the most readable and correct for its time discussion of the
cellular
> > system appeared in one of the early Cheek Scanner Modification Books, of
all
> > places.
> >
> > Now, Cecil, I want you to go back and look carefully at your question.
>
> I've got a textbook on cellphones. It shows the radiation patterns to
> be hexagons. How do they achieve those sharp corners?
> --
> cheers, CAM http://www.qsl.net/w5dxp

454. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 20:01:19 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201061201.21999a66@posting.google.com>
Source record: 151341

"AB7RS" <ab7rs@arrl.net> wrote in message news:<u3f2f5sn9flcd8@corp.supernews.com>...
> I have not use any so-called protection for the last 6 years nor do I
> unplug anything and I don't ground my station equipment either.Seems to work
> well.I do have home owners insurance but have not used it for damaged radio
> equipment.TG

I wouldn't let the premiums lapse. Not unplugging the antennas and grounding outside will get you one day. You never want to invite that stuff in the house with you. If the coax is the "best" return to ground for the strike, from the lack of a good ground at the mast, it could burn your house down. Not to mention fry everything in the shack. I'm talking dime sized holes blasted though cases, welded together , etc, etc. May take 20 years to happen, but it will sooner or later. Having a ground wire to the rig means nothing as far as lightning protection. In some cases, it can eat your lunch. I've seen it happen more than once. The "ground" needs to be outside at the antenna/mast. The least resistance to ground at that point, the less problems you will have. I've taken two direct hits on my mast in the past 3 years, but I didn't have any damage at all. Why? All my antennas were grounded out outside and my mast is well grounded and directs the strike to ground fairly efficiently. All grounds are tied together also. I also unplug the phone line and any uneeded gear from the 117v lines. But it's probably not really needed, as I haven't had any damage to any plugged in electrical gear and the breaker box and lead-in is 5 ft from the mast that takes the strike. I would be more likely to get that type of damage from a power line strike than a hit on my mast. I was sitting at this computer when one of the strikes hit, and the computer which is plugged in, didn't flinch at all. Not even a blip. BTW, good lightning protection doesn't have to cost 1000's. 500$ probably would cover it. Probably less if you are handy. It's well worth it if you don't want to unplug before every storm. Also, you might forget someday. It could happen to me. Sometimes storms will roll in so fast I barely have time to unhook. There has been more than one time when I was pulling cables while lightning was striking in the area. Scary ass @#$% let me tell you. A strike while I'm holding those cables , and I'll be dead before I hit the floor most likely. At the least, I'll wake up a good while later with problems that will last years or maybe the rest of my life. Most that get struck regret it. Only certain type forest rangers like the one struck 8 or 9 times seem to get a kick out of it. And I bet if you asked him, he'd say he could have done without them. :(MK

455. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 20:13:18 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C38AFC8.ABB46F08@icok.net>
Source record: 151343

Ron,
Your mobile antenna will need something to 'work' against,
so yes, you will need a 'ground' or counterpoise.
'Doc

456. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 20:14:15 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <re2_7.15982$Sf2.144542@rwcrnsc52>
Source record: 151342

Pen and ruler or, more likely these days, CAD.
--
CW
KC7NOD

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C38A34E.20C80CBC@IEEE.org...
> I've got a textbook on cellphones. It shows the radiation patterns to
> be hexagons. How do they achieve those sharp corners?
> --
> cheers, CAM http://www.qsl.net/w5dxp

457. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 20:14:27 UTC
From: richardharrison@webtv.net
Message-ID: <14975-3C38B023-45@storefull-111.iap.bryant.webtv.net>
Source record: 151349

Roy Lewallen wrote:
"You`re confusing mutual inductance with coupled inductance----."

Mutual inductance couples individual circuits which may have no physical connection. This occurrence is called inductive coupling and the circuits are said to be inductively coupled. Transformers exploit mutual inductance to transfer energy from one circuit to another without requiring direct conductance between the circuits. This is called transformer action, that is, current in one circuit results from voltage applied to another through the magnetic flux linking the circuits. Transformers can couple reactance and resistance. Readers of this thread probably know how this works.

Parallel wires behave as transformers. They just have less self inductance and less mutual inductance.

In the analysis of transformer action, the secondary impedance may be transferred to the primary. The total primary impedance is the sum of the actual primary impedance (Zp) and (omega M) squared / Zs. The term "(omega M) squared / Zs" is called the coupled impedance. This can be in part or in total a coupled inductance, if that is what is loading a secondary.

Best regards, Richard Harrison, KB5WZI

458. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 20:16:24 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C38B079.73A8CE7E@icok.net>
Source record: 151344

Cecil,
Are you sure that's really what you meant to say??

CAM wrote:

> Running a ground wire won't work very well because it becomes part of your
> radiating antenna system. What you need is a 1/4WL counterpoise for each band.
> --
> cheers, CAM http://www.qsl.net/w5dxp

I agree, a counterpoise for each band is a good idea, but
~they~ also
becomes a part of a radiating antenna system...
'Doc

459. Re: FYI: Fluid Motion Antenna - Remotely Tuned Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 20:21:39 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C38B1BD.4D72C81@icok.net>
Source record: 151345

ac6v wrote:
>
> No pecuniary interest here but FYI and interesting
> http://www.fluidmotion.ws/index.htm
>
> --
> 73 From AC6V, Rod In Oceanside, CA
> I doubt, therefore I might be!
> http://ac6v.com

Sort of like having two 'screwdriver' antennas mounted b-2-b,
huh?
'Doc

460. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 20:21:46 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C38B1DA.14884AB7@IEEE.org>
Source record: 151346

'Doc wrote:
> Cecil, Are you sure that's really what you meant to say??

I'm a man of few words.

> CAM wrote:
> > Running a ground wire won't work very well because it becomes part of your
> > radiating antenna system. What you need is a 1/4WL counterpoise for each band.
>
> I agree, a counterpoise for each band is a good idea, but
> ~they~ also becomes a part of a radiating antenna system...

Yep, but they are on purpose and don't screw up the feedpoint
impedance.
--
cheers, CAM http://www.qsl.net/w5dxp

461. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 20:32:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C38B455.D0F10151@eznec.com>
Source record: 151347

I give up. Information about mutual and coupled impedance is readily available to anyone who is willing to read it and learn from it.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "Please re-read your earlier posting with its logical reasoning as to
> why radials don`t couple."
>
> Wires have mutual inductance. Close-spaced, parallel wires have a lot of
> mutual inductance. Radials are wires so they have mutual inductance.
> What does mutual inductance do? It either adds to or subtracts form a
> wire`s self-inductance. More inductance in a radial produces more
> impedance in a radial.
>
> Inductance doesn`t allow current to change instantly, so more inductance
> in a radial means slower wave propagation. More inductance in a radial
> makes the radial appear longer.
>
> Concerning symmetrical radial distributions, I said that voltages at the
> same point on adjacent radials are equal, thus no impetus should exist
> for current in the ground between radials.
>
> Mutual impedance between radials may affect propagation velocity in
> them. If the radials are symmetrically arrayed, the radials may appear
> longer (I am repeating).
>
> The more radials used, the closer they are together, and so the more
> coupling. Counter emf is of the same polarity as that imposed on an
> inductance so that current into the inductance is minimized. In a
> radial, self inductance and mutual inductance are additive and wave
> progress in the radials is retarded by mutual inductance (I am repeating
> again).
>
> Mutual inductance between the radials in a ground system is small in its
> effect. Richard Clark opined that tighter coupling equalized behavior
> among radials.
>
> The function of a set of buried radials is to produce a low impedance
> earth connection. Reactance in the earth connection can be tuned out as
> we tune the antenna system. What we want is low ground system loss.
>
> There is an ARRL book, "Low-Band DXing" by ON4UN which includes much of

> what you might want to know about radials. Table 9-2 in that book gives
> the equivalent resistance of radials buried in good soil. Values range
> from 28.6-ohms for two radials of 0.15-wavelength to 0.1-ohm for 120
> radials of 0.4-wavelength.
>
> Best regards, Richard Harrison, KB5WZI

462. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 20:37:56 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c38b5cf$1@news.bnb-lp.com>
Source record: 151348

Hello Kodiak Bear,
Here is the URL for nearly 30 reviews of various SG tuners

http://www.eham.net/reviews/products/3

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

463. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 20:43:42 UTC
From: richardharrison@webtv.net
Message-ID: <14975-3C38B6FE-48@storefull-111.iap.bryant.webtv.net>
Source record: 151350

Roy Lewallen wrote:
"---a more abbreviated discussion (of mutual inductance and coupled inductance is found) in Chapter 8 of the ARRL Antenna Book."

For a good understanding through an easy read, try Chapter 50, Mutual Impedance, in "Radio-Electronic Transmission Fundamentals" by B. Whitfield Griffith, Jr. It is worth the effort in finding a copy.

Best regards, Richard Harrison, KB5WZI

464. Re: Antenna / SWR meters for 2m and higher

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 21:02:32 UTC
From: Robert Fulton <robfult@carolina.rr.com>
Message-ID: <IX2_7.58323$mp3.27036543@typhoon.southeast.rr.com>
Source record: 151351

Thanks to both responses -- your answers were great and helped me understand in more depth the reasoning. I was asking becuase I built a J-pole out of Copper tubing (a.k.a. copper cactus) and wanted to make "sure" it was right. Being from the CB world back as a child, I'm a afraid of causing damage to the transmitter due to mistake I made. Thanks again!

-Rob

465. Re: 6 meter mobiole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 21:52:41 UTC
From: garneval@aol.com
Message-ID: <20020106165241.26946.00000079@mb-mn.aol.com>
Source record: 151352

If you have a 5/8 wave 2 meter antenna it acts as a loaded 1/4 wave on 6 meters
swr is fine over the whole band>
>>I'm about to put a 6 meter rig in my full size Chevy van. I have ladder
>>racks on the roof, and wonder if the group has any ideas or suggestions.
>>
>>Thanks in advance.
>>

466. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 21:54:57 UTC
From: Krell <krell1215@yahoo.com>
Message-ID: <a1agvo0uhs@enews4.newsguy.com>
Source record: 151354
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Mark Walsh" <mark@km6xu.die.spam.die.com> wrote in message
news:a18v6vdtq1@bob.news.rcn.net...

> That's bull. I've been appending my crudely de-spammed
> e-mail address and call sign to my USENET posts for over
> ten years, and the little spam that I receive is the result of my
> having a domain name (the address is different). It's funny
> how anonymous cowards come up with all sorts of reasons
> to justify their childish behaviors. Sorry, it just won't wash.
>
> Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

20,000-plus newsgroups on usenet, some have flame wars and trolls that would make this newsgroup look like a Teletubby show. Yet, this is the only group in which a few people insist that you post a piece of information about yourself that can be searched to reveal your name, address, and, using that information, possibly credit card, Social Security, and telephone numbers. Can you say identity theft? I thought you could.

467. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 22:02:47 UTC
From: richardharrison@webtv.net
Message-ID: <10431-3C38C987-8@storefull-112.iap.bryant.webtv.net>
Source record: 151353

Peter Bertini wrote:
"Yeah, but you won`t know it is not working until you have a nearby hit."

Lightning protection works on radio installations that can`t be disconnected in stormy weather.

When is the cab dispatcher busyiest? During the sudden thunderstorm.

When do listeners pay attention to the radio? When they are hunting storm information.

How about TV and cell phones? Are they fair weather facilities?

Radio dispatched facilities of all sorts tend to be busyiest in stormy weather. The electric power company, the telecom company, police and fire, etc. These guys are busy in bad weather.

Most professionals don`t disconnect the radio and throw the coax out the window when a storm approaches. They can`t. Hams don`t need to disconnect everything either because adequate protection can be affordable. Most protection comes from cable routing and grounding.

I`ve worked with countless fixed radio installations and very few had lightning problems. Those that did were solved.

The guys who scare hell out of people to sell them expensive protection gadgets they don`t need should be ashamed of themselves, but they`re chuckling at how many chumps there are out there.

Best regards, Richard Harrison, KB5WZI

468. Re: FYI: Fluid Motion Antenna - Remotely Tuned Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 22:27:26 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020106172726.08090.00000075@mb-fi.aol.com>
Source record: 151355

Not really two screwdrivers. This thing is full size. You should get
monobander performance out of it.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free,
Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

469. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 22:29:36 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1aj4f$ol1$1@knossos.btinternet.com>
Source record: 151356

> How is the antenna analyzer connected to the bucket?
==========
Want to know a secret ? You'll never guess. Alligator clips.

I have on occasion measured the resistance between Europe and North America using a long test lead formed from coaxial cable, inner conductor a bundle of high-tensile steel wires with anti-torsional lays, clad longitudinally with an overlapping annealed copper tape, surrounded by an extrusion of purest polyethylene to a diameter of 0.99 inches at 20 degrees C. Outer conductor = six slowly spiralling pure aluminium tapes. Then a thick outer jacket of more plastic. A real precision engineering job which didn't let in water like RG-58 even at depths of 2 or 3 miles.

It always struck me when making such measurements how very incongruous it was to have to make connection to the extreme end of 2000 miles of such beautiful stuff using a few feet of 22-gauge insulated wire salvaged from the station junk bin, terminated with an alligator clip from Woolworths.

Aaaah, such sweet memories of the 1950's. And of days aboard oceanic cable laying ships with nothing to do but show the radio operator how to make a crystal set and connect it to the ship's antenna. Many years later I visited a ship-to-shore radio station to take my 12 wpm morse test. Lo and behold the morse testing officer was the very same fellow as had been aboard the cable layer. I passed first time.

****
Regards, Reg G4FGQ
Radio Modelling Programs.
Have a free lunch.
Http://www.g4fgq.com
****

470. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 22:58:22 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201061458.7eda0eb8@posting.google.com>
Source record: 151358

"Peter J. Bertini" <commquart@home.com> wrote in message
news:<3SPZ7.106599$Y6.10421987@news1.rdc1.ct.home.com>...
> Yeah, but you won't know if it is working well until you have a nearby
> lightning hit..
>
> I'd rather spend the few hundred bucks and a few weekends and at least make
> an
> effort to minimize my potential for damage.
>
> Pete

I'd at least spend 20-30 bucks for a lightning arrestor of some type
if I didn't unhook during storms. Even a cheapy model. And hook it to
a good ground rod. Won't really protect the radio much, but it should
keep from burning the house down. This is per code. Applies to TV's
also. All tv and radio instruction manuals recommend a lightning
arrester for outside antennas. MK

471. Re: 6 meter mobiole antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 23:10:24 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna3hmb1.g8r.QSB@animas.frontier.net>
Source record: 151359

[Jeopardy posting corrected. Long lines and punctuation not...]

On 06 Jan 2002 21:52:41 GMT, Garneval scribbled:
>>>I'm about to put a 6 meter rig in my full size Chevy van. I have ladder
>>>racks on the roof, and wonder if the group has any ideas or suggestions.

> If you have a 5/8 wave 2 meter antenna it acts as a loaded 1/4 wave on 6 meters
> swr is fine over the whole band>

Not all 2M 5/8W whips will work on 6M. Some use series coil matching
on 2M, and those will load up nicely on 6M. You might want to add
a 1" or 2" extension with a piece of copper wire at the tip to get
the swr down.

I have an old Antenna Specialists model that I use this-a-way.

Then there is the series capacitor-tapped-to-a-coil style of
2M 5/8W whips. These will *not* work worth a hoot on 6M.

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

472. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 23:16:10 UTC
From: w_tom <w_tom1@usa.net>
Message-ID: <3C38DAB9.ACCE3A52@usa.net>
Source record: 151360

This example of household damage is not necessarily the energy of lightning. Lightning can strike the 13 Kv line, create a plasma short through a transformer, then leave with little damage. But the plasma short remains, pumping 13Kv directly into a residence. That 13K is called follow through current. Lightning typically is not a high energy transient. The power utility can provide the destructive energy. It is why that ground wire to a utility pole transformer is so important to your surge protection system.

Stray cars have a habit of cutting that ground wire. Since many don't understand the importance of earthing, then that broken ground wire is too often ignored. After all, lights still work so that wire must not be important. As noted too often in this thread, earthing is the heart of effective surge protection. Surge damage is too often directly traceable to a human who did not understand that surge protection is only as effective as an earth ground system. Instead, others use the 'woe is me' defense and claim one cannot install effective lightning protection. It is simply a question of spending just a little to protect from 90% of the strikes, more to protect from 98% of the strikes, or big bucks to protect from 99.999%.

Your Friend Bill wrote:

> A buddy of mine took a nice surge (I won't say hit) that zapped stuff
> all over the house. That clock radio probably jumped off the table at
> the moment of the strike and that moment of bell-ringing from the phones
> was short-lived and they dripped from the wall afterwards.
> At the end of the day he wanted to blame it on ungrounded rotor cables.

473. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 23:19:27 UTC
From: w_tom <w_tom1@usa.net>
Message-ID: <3C38DB7E.C6790107@usa.net>
Source record: 151361

Lightning strikes typically occur about once every eight years (tends to vary according to geology and geography). Therefore six months is like saying I did not catch a cold in the past two hours, therefore I will never catch a cold.

AB7RS wrote:

> You could spend thousands of hours and dollars and not make a bit of
> difference.TG

474. WTB: M57726 RF Amp Module

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 23:51:40 UTC
From: Neil <DontDoIt@ImNotHere.com>
Message-ID: <4loh3ukfii022j6q22verpm028e589tlej@4ax.com>
Source record: 151362
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.swap

Hi all. I'm looking for a functional M57726 RF Amplifier module,
doesn't have to be new. Yes, I know I can get them for $60 plus
shipping from RF Parts, but I'd like to find one a lot less expensive.
(It doesn't make sense to put a $60 module in a radio only worth about
$90 on a good day.)

So, what have you? Maybe you've got a junker with a known good
module?

I look forward to your email or call; cosmetics DON'T matter to me on
this one.

Thanks;

Neil, K1VY
NeilR@innermedia.com
(603) 465-2788
(800) 962-2949

475. Re: Through The Glass - 2Meter & 440

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-06 23:57:29 UTC
From: Chip Griffin <n1mie@NOSPAM.snet.net>
Message-ID: <060120021857348382%n1mie@NOSPAM.snet.net>
Source record: 151363

In article <a18vj1$f35$1@bob.news.rcn.net>, Mark Walsh
<mark@km6xu.die.spam.die.com> wrote:

] Why the automakers don't want people
] don't want to see out of their cars is beyond me, but it appears
] to be the current gangmemberwannabe fad thing...

Actually there are good reasons for this. My van is tinted and I wanted it to be. First it cuts down on the heating in the summer sun. Two it cuts down on folks glaring into the car at the family while we are on the road (specifically in parking lots). Three it cuts down on folks looking in the window for what goodies might be found within the vehicle. The ONLY down side in my mind is that it puts policemen at ill-ease if they pull you over.

--
N1MIE - FN31xm

476. Re: Wind Load Calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 00:15:38 UTC
From: Robert Haviland <bobh@iag.net>
Message-ID: <KM5_7.8946$Vz3.1058545@newsread2.prod.itd.earthlink.net>
Source record: 151364

Most comprehensive is W6QHS book Physical Design of Yagi Antennas, available from ARRL. While oriented to yagi beams, the formulas and spreadsheet easily adapt to wires, towers, etc.
w4mb

477. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 00:39:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C38EE26.AD61BCF@eznec.com>
Source record: 151365

I'm duly impressed with your measurement of the resistance between our continents. And now, armed with the detailed information about your method of measuring the conductivity of your back yard soil, we can make our own measurements.

As soon as I read the connection method you use -- silly me for not having figured it out on my own -- I made some measurements using your method. I found that when I fill the metal bucket with dirt and attach the antenna analyzer to it with alligator clips as you suggest, I get the same reading no matter what I fill the bucket with. Using your method, all grounds have the same conductivity as a bucket of bullshit. Remarkable! As always, you've managed to make a complicated process very simple. Thanks!

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> > How is the antenna analyzer connected to the bucket?
> ==========
> Want to know a secret ? You'll never guess. Alligator clips.
>
> I have on occasion measured the resistance between Europe and North America
> using a long test lead formed from coaxial cable, inner conductor a bundle
> of high-tensile steel wires with anti-torsional lays, clad longitudinally
> with an overlapping annealed copper tape, surrounded by an extrusion of
> purest polyethylene to a diameter of 0.99 inches at 20 degrees C. Outer
> conductor = six slowly spiralling pure aluminium tapes. Then a thick outer
> jacket of more plastic. A real precision engineering job which didn't let in
> water like RG-58 even at depths of 2 or 3 miles.
>
> It always struck me when making such measurements how very incongruous it
> was to have to make connection to the extreme end of 2000 miles of such
> beautiful stuff using a few feet of 22-gauge insulated wire salvaged from
> the station junk bin, terminated with an alligator clip from Woolworths.
>
> Aaaah, such sweet memories of the 1950's. And of days aboard oceanic cable
> laying ships with nothing to do but show the radio operator how to make a
> crystal set and connect it to the ship's antenna. Many years later I
> visited a ship-to-shore radio station to take my 12 wpm morse test. Lo and
> behold the morse testing officer was the very same fellow as had been aboard
> the cable layer. I passed first time.
> ---
> **********
> Regards, Reg G4FGQ

> Radio Modelling Programs.
> Have a free lunch.
> Http://www.g4fgq.com
> **************************

478. Re: Antenna / SWR meters for 2m and higher

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 00:51:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C38F10A.77C5052B@eznec.com>
Source record: 151366

Nearly all modern commercial transmitters, especially ones designed for VHF/UHF operation, are able to operate without damage into nearly any sort of load. If the mismatch is too extreme, they'll reduce output power to protect themselves. HTs, in particular, are often used with very poorly matched antennas, and are seldom damaged because of it. If you want to get the best from your antenna, feed it with 50 ohm line. Put an SWR meter in line and adjust the match at the antenna (by adjusting the element lengths or stub length, and tap points) for a 1:1 SWR. The SWR meter can be either at the antenna or at the rig during this adjustment. Having a low SWR will assure the lowest possible line loss and the full power output from your transmitter. (Working to lower the SWR below the point at which the rig will deliver full output isn't worthwhile if the line loss is reasonably low.) The SWR will normally be lower at the rig end of the feedline due to feedline loss, but with a J pole or ground plane you can expect some variation in SWR (and pattern) with feedline length and orientation. This is because the feedline couples to the antenna and becomes part of the radiating system.

Roy Lewallen, W7EL

Robert Fulton wrote:
>
> Thanks to both responses -- your answers were great and helped me understand
> in more depth the reasoning. I was asking becuase I built a J-pole out of
> Copper tubing (a.k.a. copper cactus) and wanted to make "sure" it was right.
> Being from the CB world back as a child, I'm a afraid of causing damage to
> the transmitter due to mistake I made. Thanks again!
>
> -Rob

479. 70 cm yagi fs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 01:06:18 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3c38f493$0$37100$2c3e98f8@news.voyager.net>
Source record: 151367

cushcraft 719 430/440 mhz yagi for sale as new.purchased oct 2001 in air
for one month $100 shipped conus. will consider trade on like value
telegraph key as well. contact kce@freeway.net tks

480. Re: FYI: Fluid Motion Antenna - Remotely Tuned Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 01:32:08 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C38FA83.8FA47F54@icok.net>
Source record: 151368

Probably, but portable (as advertised)? Naw, I doubt it.
'Doc

481. Need antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 01:46:02 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u3hvf8hoqmnk42@corp.supernews.com>
Source record: 151269

I'm trying to listen to the K1MAN broadcasts on 3.890 MHz at night to increase my knowledge of ham radio and maybe contribute something back to the hobby.
But, the broadcast is garbled and hard to understand. Can anyone suggest an antenna that will clear up the sound?
Thanks!

482. Re: Entangled Photon Pairs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 02:19:06 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <3x7_7.706$B36.544724@news20.bellglobal.com>
Source record: 151270

"CAM" <Cecil.A.Moore@IEEE.org> wrote :
> ...geosynchronous orbit...
> ...instantaneous full-duplex...

Define "instantaneous" (as pertains to high orbit satellites).
:-)

483. Re: Need antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 02:26:46 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C39072B.B5D14938@tampabay.rr.com>
Source record: 151271

just to clear things up you are listening on LSB not USB right?
if the signal is garbled i would say your in the wrong mode rather than the antenna at fault

AstroMan wrote:

> I'm trying to listen to the K1MAN broadcasts on 3.890 MHz at night to
> increase my knowledge of ham radio and maybe contribute something back to
> the hobby.
> But, the broadcast is garbled and hard to understand. Can anyone suggest an
> antenna that will clear up the sound?
> Thanks!

484. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 02:53:06 UTC
From: Robert McConnell <rmcconne.NOSPAM@lightlink.com>
Message-ID: <703i3u4e82ikpmslj460got7plpq20r0o9@4ax.com>
Source record: 151272

On Sat, 5 Jan 2002 06:18:57 +0000 (UTC), Bill Nelson
<billn@spock.peak.org> wrote:

>Robert McConnell <rmcconne.NOSPAM@lightlink.com> wrote:
>
>> A number of years ago, I reviewed the preliminary survey of a direct
>> lightning hit on a 50KW tower near Portland, OR. The coax had three
>> inch holes in it at every point where it was adjacent to a cross beam.
>
>Coax? Don't you mean hard line?
>
>What did they do - isolate the transmission line from the tower?

Hardline is coax; it's just a little bigger and stiffer than what most
of us use.

If I remember correctly (it's been more than 30 years) only part of
the tower was actually driven. There was a grounded base, so the
hardline had to go part way up to the actual tie point.

Bob McConnell
N2SPP

485. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 03:02:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1b33t$pu4$1@helle.btinternet.com>
Source record: 151273

Roy Lewallen wrote
> I give up. Information about mutual and coupled impedance is readily
> available to anyone who is willing to read it and learn from it.
==========
Dear Roy,

How you love to unnecessarily complicate matters !

KIS. ;o)

Anyone wishing to get the feel of how shallow-buried radial systems behave quantitatively, versus number, length and frequency, can download programs RADIOETH, EARTHRES & ENDFEED. They've been available for several years, free to USA citizens plus a money-back guarantee.

I shall not divulge the source code because inevitably it would be subjected to very ill-informed criticism from people afflicted by delusions of accuracy and some of the mud-slinging would stick.

But, of current interest, I can confirm the source code in no way gets bogged-down with red herrings such as the mutual impedance between radial wires. That source of interference to an analysis can be removed by considering the radial system to be a continuous flat sheet with conductivity intermediate between copper and the soil. But it's just not worth all the trouble.

The only acceptable criticism should be based on measurements made on actual radial systems, qualified with realistic measurement uncertainties including the uncertainty of soil properties. So don't forget to measure them.

Roy, you will agree this approach to validation of mathematical modelling formulae conforms exactly with your own measurements philosophy.

The only claims I make are that accuracy is adequate for the intended purpose and results are available within seconds. A two-weeks training course on data entry is unnecessary.

I bet that's put the cat amongst the pidgeons! ;o)

****
Regards, Reg G4FGQ
Radio Modelling Programs.
Have a free lunch.
Http://www.g4fgq.com
****

486. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 03:13:42 UTC
From: Robert McConnell <rmcconne.NOSPAM@lightlink.com>
Message-ID: <hc3i3u4q1o3d3q5gsrj14ucvpqqrdqtg2h@4ax.com>
Source record: 151274

On Sat, 05 Jan 2002 02:50:35 GMT, "Dave VanHorn" <dvanhorn@cedar.net>
wrote:

>> If you want some directional capabilities, end fed rhombics are quite
>> useful. Ladder line to one point, and a 50 ohm load at the opposite
>> point. If I remember correctly from my days at Lualualei (NAVCOMSTA
>> Honolulu) they each covered about 60 degrees of arc. So we had six
>> sets circling each building. They were a couple hundred feet from feed
>> point to load, but only 15 - 20 feet off the ground, and could be
>> tuned across the full 2-30MHz short wave band.
>>
>> Of course we were using 10 and 40 KW transmitters, but we didn't
>> actually need full power most of the time.
>>
>> Bob McConnell
>> N2SPP
>
>I remember you guys!
>
>I put in a buried seismic alarm system just on the other side of the road
>from your western fenceline.
>Had a fun time filtering out your transmitter. :)
>
>I used to get interesting tone sequences, just at the edge of my hearing,
>over open inputs on my stereo too.
>I always figured they were coming from your rigs.
>
>Rumour had it the VLF output was 1MW.
>
>
>When were you there? I was there from 72 through 87.
>
>--

Hi Dave,

Which transmitter? We had about 60 HF transmitters there, almost 40
were 10KW and the rest were 40KW. The antenna farm was spread out over
three square miles. I remember one grass fire that spread through the
farm and over part of the ammo depot up the valley. It burned almost
2000 acres and never got close to the fences.

Let's see, The destroyer I was on was home ported in Pearl Harbor. I
was on it from August '70 till April '74. It got back from my second
visit to Vietnam in March '73, a few weeks after the cease fire. I was

transferred to Lualualei in April '74, worked there 22 months, and then moved to the TTY repair shop at Pearl Harbor. I was there until my discharge in April '77. We left Hawaii in February '78.

I think the VLF output was classified back then, but yes, it was 1MW somewhere between 15 and 20KHz. It put out an FSK signal at 50 bits per second.

Bob McConnell
ex-RM2 USN (NFIT, NLM)
N2SPP

487. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 03:26:19 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <e75i3uodt3ualhbvaposp34sjj7g2f1l2g@4ax.com>
Source record: 151275

CAM <Cecil.A.Moore@IEEE.org>
shared these priceless pearls of wisdom:

If you are worried about lightening damage, just don't drill so many holes in the metal of the antennas.

If you are worried about LIGHTNING damage, on the other hand, that's a whole different problem.

Jim
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

488. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 03:29:13 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <8b5i3u09c7s3p8qcgieqgbgakts4cmchb3@4ax.com>
Source record: 151276

Lightening refers to drilling out unnecessary parts of the antenna.

Lightning refers to the meteorological phenomena of static discharge between the ionosphere and the earth.

Which one do you need information on?

Jim

Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

489. Re: Tri-Ex 58' Sky Needle Tower - SoCal Area

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 03:34:26 UTC
From: Paul Lonnquist <paul@dock.net>
Message-ID: <6H8_7.91$bd.53622@monger.newsread.com>
Source record: 151277
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.marketplace,rec.radio.swap

Thanks for questioning Jerry, last communications I had with whomever it was that took over Tri-Ex, it was specifically stated that it was no problem getting the rebar cage, but that they recommended just getting it locally as you'd save the freight costs as the cage weights quite a bit. As for the gears required, information is in the provided packet and you can get those from any gear speciality shop as they aren't anything special. But at least everyone knows what to expect now.

It does not need anything specific to the to tower, just a generic rebar cage made to print (which I have) and a pair of gears for the rotor cage (as well as the thrust bearing for the mast). Hardly a difficult project to any ham who's been around the hobby for a couple of years.

de Paul NS6V

i
"JerryL" <jlockett@bak.rr.com> wrote in message
news:VRHZ7.498$O54.703932@typhoon.socal.rr.com...
> Thats interesting, prey tell me, where is 'tri-ex' these days? Last time
I
> checked they are totally gone in the wind! (and don't tell me about
> WillBurt towers, their designs are 'not' the same as the original tri-ex
> stuff!) So that being said, how/where would one get 'anything' that would
> fit that tower?
> de jerry..
> n6jp@arrl.net
>
> "Paul Lonnquist" <paul@dock.net> wrote in message
> news:c%FZ7.106$Dz3.56937@monger.newsread.com...
> > For sale...
> >
> > Tri-Ex TM-358 Sky Needle tower. Includes 58' three section tubular
tower,
> > newly recabled with SS cable, 10' thickwall mast, complete motor
assembly
> > for controlled extension and retraction (120VAC), CDR sized rotator cage
> > assembly,
> > new hinged base, instruction manuals, a 1997 UBC stress analysis,
> > blueprints, and even the side mounted ladder!!!...the whole enchilada
> ready
> > to
> > grace your property.
> >
> > Tower is down and next to my home. It is HEAVY (on the order of 1500#),

> so
> > it will take a wrecker or 15 very strong men to lift it out of the yard
> and
> > onto your car trailer. I will foot the bill to get the wrecker out to
> lift
> > it onto your trailer if that works better for you.
> > To install you will need to manufacture or purchase the re-bar assembly
> that
> > goes into
> > the hole (I have the specs and plans), gather up the gears and thrust
> > bearings for the rotator assembly (available through Tri-Ex),
> > and lots of labor!! This is not one of those lightweight and flimsy
> tubular
> > towers!
> >
> > This is the cadillac of tubular towers. Very strong and rated at 12.4
> > square feet at 60mph, 7.2
> > square feet at 78mph, and 3.6 square feet at 95mph while fully
extended!!
> > Dead weight capability is 400# including rotor and rotor cage.
> >
> > Start your new year with a REAL tower that can actually handle realistic
> > antenna loads
> > yet still be asthetically pleasing to your neighbors.
> >
> > Pictures available upon request. Email your questions or interest to
> > paul@dock.net
> >
> > $2495.00 cash, cashiers check, postal money orders all OK.
> >
> > Located in Thousand Oaks, CA (45 miles NW of LAX).
> >
> >
> >
>
>

490. Re: radials and vertical antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 03:50:37 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1b5uclh1@helle.btinternet.com>
Source record: 151278

Roy, call in a local CB-er and ask him to show you where you went wrong. But first check the batteries in the 259B

==========

Roy Lewallen <w7el@eznec.com> wrote in message news:3C38EE26.AD61BCF@eznec.com...
> I'm duly impressed with your measurement of the resistance between our
> continents. And now, armed with the detailed information about your
> method of measuring the conductivity of your back yard soil, we can make
> our own measurements.
>
> As soon as I read the connection method you use -- silly me for not
> having figured it out on my own -- I made some measurements using your
> method. I found that when I fill the metal bucket with dirt and attach
> the antenna analyzer to it with alligator clips as you suggest, I get
> the same reading no matter what I fill the bucket with. Using your
> method, all grounds have the same conductivity as a bucket of bullshit.
> Remarkable! As always, you've managed to make a complicated process very
> simple. Thanks!
>
> Roy Lewallen, W7EL
>
> Reg Edwards wrote:
> >
> > > How is the antenna analyzer connected to the bucket?
> > ==========
> > Want to know a secret ? You'll never guess. Alligator clips.
> >
> > I have on occasion measured the resistance between Europe and North America
> > using a long test lead formed from coaxial cable, inner conductor a bundle
> > of high-tensile steel wires with anti-torsional lays, clad longitudinally
> > with an overlapping annealed copper tape, surrounded by an extrusion of
> > purest polyethylene to a diameter of 0.99 inches at 20 degrees C. Outer
> > conductor = six slowly spiralling pure aluminium tapes. Then a thick outer
> > jacket of more plastic. A real precision engineering job which didn't let in
> > water like RG-58 even at depths of 2 or 3 miles.
> >
> > It always struck me when making such measurements how very incongruous it

> > was to have to make connection to the extreme end of 2000 miles of such
> > beautiful stuff using a few feet of 22-gauge insulated wire salvaged
from
> > the station junk bin, terminated with an alligator clip from Woolworths.
> >
> > Aaaah, such sweet memories of the 1950's. And of days aboard oceanic
cable
> > laying ships with nothing to do but show the radio operator how to make
a
> > crystal set and connect it to the ship's antenna. Many years later I
> > visited a ship-to-shore radio station to take my 12 wpm morse test. Lo
and
> > behold the morse testing officer was the very same fellow as had been
aboard
> > the cable layer. I passed first time.
> > ---
> > **********
> > Regards, Reg G4FGQ
> > Radio Modelling Programs.
> > Have a free lunch.
> > Http://www.g4fgq.com
> > **********

491. Impressions of Outbacker Stealth Plus?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 03:53:18 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <RW8_7.798$B36.613727@news20.bellglobal.com>
Source record: 151279

I'd like to hear from anyone currently using the Outbacker Stealth Plus antenna mobile. Just undecided whether to go with the Yaesu ATAS-100 or the Stealth Plus. They are both about the same price up here in Canada. I like the in-car tuneability of the Yaesu, but like the compactness of the Stealth. I've read the reviews on eham.net and looking for a little more info from guys using them. If you are using the ATAS-100 I'd also like to hear from you.

If you aren't using either antenna, please don't waste your time replying. I am not into mounting a 7 or 8 foot tall screwdriver on my car.

Thanks to those who do reply,

ve3tmt@rac.ca - please respond direct, tnx

492. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 03:54:01 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C391BC4.DDA3BB96@icok.net>
Source record: 151280

> > CAM wrote:
> > > Running a ground wire won't work very well because it becomes part of your
> > > radiating antenna system. What you need is a 1/4WL counterpoise for each band.
> >
> > I agree, a counterpoise for each band is a good idea, but
> > ~they~ also becomes a part of a radiating antenna system...
>
> Yep, but they are on purpose and don't screw up the feedpoint
> impedance.
> --
> cheers, CAM http://www.qsl.net/w5dxp

Odd. I have never had a ground wire 'screw up' the feed point
impedance before. I feel deprived...
'Doc

493. Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 04:31:31 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1b8n4$pk23b$1@ID-124126.news.dfncis.de>
Source record: 151281

It is popularly understood that an increase in soil resistivity always results in increased losses in the ground such as the ground in the vicinity of a vertical antenna.

But this cannot be true because when soil resistivity increases to the point when it can be considered to be an insulator the ground loss becomes very small again. Soil permittivity causes radiation to be reflected or refracted with little loss back towards to the sky.

So there must be some value of soil resistivity at which ground loss is at its maximum. What is it ? Is that the value in YOUR back yard? Should you consider moving house?

Reg

494. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 04:55:08 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C392A2C.4D0CA8E5@IEEE.org>
Source record: 151282

'Doc wrote:
> I have never had a ground wire 'screw up' the feed point
> impedance before. I feel deprived...

You never grounded the end of a 1/4WL radial? Consider what the
transformed impedance would be.
--
cheers, CAM http://www.qsl.net/w5dxp

495. Re: Entangled Photon Pairs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 05:00:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C392B79.12D6780@IEEE.org>
Source record: 151283

"J. Harvey" wrote:
>
> "CAM" <Cecil.A.Moore@IEEE.org> wrote :
> > ...geosynchronous orbit...
> > ...instantaneous full-duplex...
>
> Define "instantaneous" (as pertains to high orbit satellites).
> :-)

That's the beauty of entangled photon pairs. Once they leave the transmitter,
the quantum communication between the two particles is actually
instantaneous, i.e. there is no delay between the changes (modulation)
in the two particles, i.e. faster than light communications is possible.
If I twist a photon in Los Angeles, the twin entangled photon in New York
undergoes an opposite twist. The satellite delay is irrelevant. In fact,
there is no up link at all - just a transmitter.
--
cheers, CAM http://www.qsl.net/w5dxp

496. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 05:03:05 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C392C09.EB560319@IEEE.org>
Source record: 151284

Reg Edwards wrote:
>
> It is popularly understood that an increase in soil resistivity always
> results in increased losses in the ground such as the ground in the vicinity
> of a vertical antenna.
>
> But this cannot be true because when soil resistivity increases to the point
> when it can be considered to be an insulator the ground loss becomes very
> small again. Soil permittivity causes radiation to be reflected or refracted
> with little loss back towards to the sky.
>
> So there must be some value of soil resistivity at which ground loss is at
> its maximum. What is it ?

Half way between zero and infinity.
--
cheers, CAM http://www.qsl.net/w5dxp

497. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 05:07:13 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C392D01.E2DA3C4D@IEEE.org>
Source record: 151285

Jim Weir wrote:
>
> CAM <Cecil.A.Moore@IEEE.org>
> shared these priceless pearls of wisdom:
>
> If you are worried about lightening damage, just don't drill so many holes in
> the metal of the antennas.
>
> If you are worried about LIGHTNING damage, on the other hand, that's a whole
> different problem.

I thought we were talking about the subject of this thread. :-)

Aha, I see what the problem is. Lightning and lightening are both valid words
so the spellchecker doesn't catch the error.
--
cheers, CAM http://www.qsl.net/w5dxp

498. Need swivel antenna with male F connector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 05:21:09 UTC
From: phil@cgallery.com
Message-ID: <2c6a63a7.0201062121.47e26605@posting.google.com>
Source record: 151286

I'd like an antenna (either fixed or telescoping) with a swivel at the base (so as to make it possible for me to adjust it to a right angle) and terminating in a male F connector. This is to be used on an Onkyo home receiver for FM reception. Is this possible? Anyone make such an animal? Even if you think it may not work well, I'd be interested in trying one to see what kind of results I can get.

Thanks,
Phil

499. Pryme RD-98: heavy or light?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 05:30:12 UTC
From: senecal@mapson.cs.ucdavis.edu
Message-ID: <senecal-0601022130120001@d71-096.solano1.ucdavis.edu>
Source record: 151287

Hi all,

I'm considering a Pryme RD-98 for my VX-5R. Can anyone tell my how heavy (or light) the antenna is? I've installed a Yaesu SMA-BNC converter, and I'm worried about the antenna making the radio top heavy and stressing the connector.

Thanks!

-Josh Senecal

--
senecal@mapson.cs.ucdavis.edu (remove the obvious bit from the address)

"Your most valuable asset is rampant ignorance."
-Dogbert

500. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 06:15:43 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C393CFA.430211AE@icok.net>
Source record: 151288

Cecil,
Is that on a linear or logarhythmic scale?
'Doc

PS - Spelling doesn't count.

501. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 06:18:13 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C393D90.C6F00B3@icok.net>
Source record: 151289

Cecil,
What does that have to do with the original post? I
doubt if he was going to ground the antenna, but run a
ground wire from the mount to ground. You know, connected
to the shield on the coax.
'Doc

502. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 06:58:26 UTC
From: n7ws@yahoo.com
Message-ID: <3c3946b5.180643206@news.triconet.org>
Source record: 151290

On Sun, 06 Jan 2002 23:03:05 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

|Reg Edwards wrote:
|>
|> It is popularly understood that an increase in soil resistivity always
|> results in increased losses in the ground such as the ground in the vicinity
|> of a vertical antenna.
|>
|> But this cannot be true because when soil resistivity increases to the point
|> when it can be considered to be an insulator the ground loss becomes very
|> small again. Soil permittivity causes radiation to be reflected or refracted
|> with little loss back towards to the sky.
|>
|> So there must be some value of soil resistivity at which ground loss is at
|> its maximum. What is it ?
|
|Half way between zero and infinity.

Exactly. Or is it precisely? I forget.

Wes N7WS

503. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 09:28:23 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a1bpnm$3c2$16@quark.scn.rain.com>
Source record: 151291

CAM <Cecil.A.Moore@ieee.org> wrote:

> I've got a textbook on cellphones. It shows the radiation patterns to
> be hexagons. How do they achieve those sharp corners?

Heh, heh! With corner reflectors, of course.

--
Bill Nelson (billn@peak.org)

504. Re: Through The Glass - 2Meter & 440

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 09:38:47 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a1bqb6$3c2$17@quark.scn.rain.com>
Source record: 151292

Mark Walsh <mark@km6xu.die.spam.die.com> wrote:

>> Or, it could be that it helps keep the car cooler in the summer,
>> and is easier on the eyes.
>> Could be.

> Perhaps where you live; here it is a iwannalookkewl thing.
> Huge effect on safe driving on the freeway at night.

So how does a tinted rear window make nighttime freeway driving more
hazardous?

--
Bill Nelson (billn@peak.org)

505. Re: Pryme RD-98: heavy or light?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 12:10:38 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <3ag_7.147193$lV4.25275364@e420r-atl1.usenetserver.com>
Source record: 151293

No way, It's really light. It's basically thick piano wire. I'm pleased
with it. Very flexible. No real strain on the connector. The only real
annoyance is how it flops around a bit (but that's good).
Drink, WP3JQ
"Joshua Senecal" <senecal@mapson.cs.ucdavis.edu> wrote in message
news:senecal-0601022130120001@d71-096.solano1.ucdavis.edu...
> Hi all,
>
> I'm considering a Pryme RD-98 for my VX-5R. Can anyone tell my how heavy
> (or light) the antenna is? I've installed a Yaesu SMA-BNC converter, and
> I'm worried about the antenna making the radio top heavy and stressing the
> connector.
>
> Thanks!
>
> -Josh Senecal
>
> --
> senecal@mapson.cs.ucdavis.edu (remove the obvious bit from the address)
>
> "Your most valuable asset is rampant ignorance."
> -Dogbert

506. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 12:24:29 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C399330.AB8F81DA@bellatlantic.net>
Source record: 151294

During Field Day 1970, I found my crappy 14AVQ vertical actually started to work (marginally) once I dumped 10 pounds of road salt and a few hundred gallons of water around the ground spike. Early the next morning, I swear I could see steam rising.

'73 KI4Z

Reg Edwards wrote:

> It is popularly understood that an increase in soil resistivity always
> results in increased losses in the ground such as the ground in the vicinity
> of a vertical antenna.
>
> But this cannot be true because when soil resistivity increases to the point
> when it can be considered to be an insulator the ground loss becomes very
> small again. Soil permittivity causes radiation to be reflected or refracted
> with little loss back towards to the sky.
>
> So there must be some value of soil resistivity at which ground loss is at
> its maximum. What is it ? Is that the value in YOUR back yard? Should you
> consider moving house?
> ---
> Reg

507. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 12:46:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1c5aglul1@paris.btinternet.com>
Source record: 151295

'Doc wrote
> Cecil,
> Is that on a linear or logarhythmic scale?
> 'Doc

==========
Now we're getting somewhere - keep going!

508. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 12:54:20 UTC
From: KC8JBO <kc8jbo@alt.net>
Message-ID: <a1cetlfuu5@pita.alt.net>
Source record: 151309
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"Krell" <krell1215@yahoo.com> wrote in message
news:a1agvo0uhs@enews4.newsguy.com...
>
> "Mark Walsh" <mark@km6xu.die.spam.die.com> wrote in message
> news:a18v6vdtq1@bob.news.rcn.net...
>
> > That's bull. I've been appending my crudely de-spammed
> > e-mail address and call sign to my USENET posts for over
> > ten years, and the little spam that I receive is the result of my
> > having a domain name (the address is different). It's funny
> > how anonymous cowards come up with all sorts of reasons
> > to justify their childish behaviors. Sorry, it just won't wash.
> >
> > Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com
>
> 20,000-plus newsgroups on usenet, some have flame wars and trolls that
would
> make this newsgroup look like a Teletubby show. Yet, this is the only
group
> in which a few people insist that you post a piece of information about
> yourself that can be searched to reveal your name, address, and, using
that
> information, possibly credit card, Social Security, and telephone numbers.
> Can you say identity theft? I thought you could.

Paranoid much?

Anonymous coward and all-around fuckwit
"Stagger Milhaus Romain Fentworth Lee" <SLee@houston-hunks.com>
revealed what a hypocrite he is in message
news:3C36FDCC.76EC185D@houston-hunks.com :

"Therefore, I find your story difficult to believe. Your own anonymous
status makes the story even less credible."

509. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 13:31:06 UTC
From: N4ZN <nevermind@all.com>
Message-ID: <2m7j3uc51uuu12vl7317d85lp8k3qk83qp@4ax.com>
Source record: 151296

On Sat, 05 Jan 2002 10:12:39 GMT, Adrian Brentnall
<amb_quality@dial.pipex.com> wrote:

>HI Frank
>
>Thanks for the response.
>I was hoping to make an untuned loop (because I will want to use it from 160 -
>10) - so I was planning on feeding it with ladder line rather than coax so
>that I can tune it from the shack.
>
>What's the effect of making the loop 'off square' (as in rectangular)?
>
>It'll be simplest to feed it from the corner - does this have an effect ?
>
>Regards
>Adrian
>Suffolk UK

If you can cut a magnetic loop (fed continuous loop) to be resonant
on a ham band, it will be resonant at higher odd multiples of that
frequency. With this in mind, coax will not be a problem. The nice
thing about using coax is you don't have to worry about proximity to
surrounding objects. You can make an adapter to use at the shack end
that shorts center to shield to feed it on frequencies lower than the
design freq , and feed it against ground (if you have a very good
station ground, and a respectable vertical run of coax of respectable
hight out side) as a capacitive top loaded vertical.
If you're encountering high SWR at certain places due to not being
able to cut it to full size, naturally ladder line will be to your
advantage.
It doesnt matter where you feed the loop, but most folks feed it at a
corner for obvious reasons.
The shape of the loop doesn't matter, but it performs best when the
loop encompasses the MAXIMUM area inside the loop (perfect circle).
Remember, more wire means more danger from lightning or other simple
causes of static. Dust, precipitation, wind, all of these can cause
extremely high amounts of static electricity to build up on a wire, so
it's best to have the whole thing shorted to ground when not in use...
preferably pulling the feedline outside of the shack to do so.

Good luck, cu on the bands.
Mike/N4ZN

510. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 14:13:27 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1cae7smu1@paris.btinternet.com>
Source record: 151297

CAM wrote
> Reg Edwards wrote:
> >
> > So there must be some value of soil resistivity at which ground loss is
at
> > its maximum. What is it ?
==========
> Half way between zero and infinity.
> --
> cheers, CAM
==========

Cecil, an excellent first step. Thanks for putting us on the right track.
Did BL&E have anything to say about this non-trivial matter ?

Consider the CFA above deep, perfectly dry Sahara sand. Conductivity
measured in micro-siemens. Would a horizontal 1/2-wave dipole laid on the
sand surface perform better? It would certainly be less expensive! Who's
for a shoot-out expedition to Timbuctu ?

Reg.

511. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 14:17:15 UTC
From: rons533@dejazzd.com
Message-ID: <3C39AD85.E7A@dejazzd.com>
Source record: 151299

'Doc wrote:
>
> Cecil,
> What does that have to do with the original post? I
> doubt if he was going to ground the antenna, but run a
> ground wire from the mount to ground. You know, connected
> to the shield on the coax.
> 'Doc

Yes, that is what I was questioning. Should I earth ground the mount.
Then from what I am getting I need to run a counterpoise connected to
the mount for each band I want to operate.
Ron

512. FS: 22GHz Andrew antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 14:18:55 UTC
From: rskup@my-deja.com
Message-ID: <683249b1.0201070618.bd0bf59@posting.google.com>
Source record: 151298

This antenna, brand new, never used, is posted on Ebay:

Item #: 1318657947

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?MfcISAPICommand=ViewItem&item=1318657947

513. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 14:35:03 UTC
From: N4ZN <nevermind@all.com>
Message-ID: <s7cj3uol5e696g2eheh9v1ojdgbh86a4k4@4ax.com>
Source record: 151300

Why is it that people seem to discount wire antennas right off the bat? For $5 you can put up an effective, even if not efficient, multiband antenna that is extremely stealthy.

On Sun, 06 Jan 2002 13:52:20 GMT, rons533@dejazzd.com wrote:

>Hello
>
>I live in a home that is very restricted (no room) as to what HF antenna
>I can install. I was offered a Hustler mobile antenna with the RM 10-15-
>and 75 meter resinators to put up as my antenna. I plan to chimney mount
>it. Will I be wasting my time by using this and if not do I have to run
>a ground from the mount to an earth ground? I have read other posts here
>about atic, rain spout, and other hidden antennas but I have ruled them
>out.
>Thanks

514. Re: How come American Hams can't use HF freqs that Canadians can?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 14:37:42 UTC
From: Val <val_a20@hotmail.com>
Message-ID: <3C39B2B6.842E2207@hotmail.com>
Source record: 151301

Well...
To perform a 2xSSB QSO legally VE-G on 7 MHz, without split (wich
is NOT favorable at low signal strengths and hi QRM: How is
that possible if the VE ham can not work SSB 7040-7100 (G SSB band)?

The 7 MHz band is a special case. In Europe the band is ONLY
7000-7100, cw 7000-7040... Wait until we get a global band, then
we can discuss.

V.

Max wrote:
>
> "Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
> news:3C3653F9.AB685C52@tampabay.rr.com...
> > the ARRL got into enough BS when they helped reduce the code speed down
> > to 5WPM the old timers like there CW parts of the band and dont want any
> > one running voice there
>
> Speaking as one Canadian ham, I understand perfectly your point. The daily
> Trans-Provincial net on 7.055 is one example. But quite a few US hams check
> in on CW. I myself don't check into nets or use voice in any portion of an
> HF CW segment, but the Canadian hams aren't the ones to be pissed off at, it
> is the Canadian Ministry of Transportation and Communications. Yes we have
> more voice priveledges than many other ham nations, but it isn't the doing
> of the hams themselves.
>
> 73,
>
> Max ve3tmt@rac.ca

515. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 14:38:49 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39B2F9.E2A17F8F@IEEE.org>
Source record: 151302

'Doc wrote:
>
> Cecil,
> What does that have to do with the original post? I
> doubt if he was going to ground the antenna, but run a
> ground wire from the mount to ground. You know, connected
> to the shield on the coax.

If the ground wire from the mount to ground is 1/4WL, it
will adversely affect the feedpoint impedance. It's like
connecting one of your 1/4WL radials to your transceiver
chassis. I got literally burned by such a configuration
about 50 years ago.
--
cheers, CAM http://www.qsl.net/w5dxp

516. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 14:47:03 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39B4E7.9F211F93@IEEE.org>
Source record: 151303

rons533@dejazzd.com wrote:
>
> 'Doc wrote:
> >
> > Cecil,
> > What does that have to do with the original post? I
> > doubt if he was going to ground the antenna, but run a
> > ground wire from the mount to ground. You know, connected
> > to the shield on the coax.
> > 'Doc
>
> Yes, that is what I was questioning. Should I earth ground the mount.
> Then from what I am getting I need to run a counterpoise connected to
> the mount for each band I want to operate.

It is virtually impossible to get a solid ground 30 ft up in the air.
The "ground" wire can carry standing waves, can adversely affect the
feedpoint impedance, and can result in lots of RF-in-the-shack. IMO,
go with the counterpoise for each band and wrap a few turns of coax
to achieve some choking action. BTW, you will be running QRP on 80m.
--
cheers, CAM http://www.qsl.net/w5dxp

517. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 14:49:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39B585.6B2509CA@IEEE.org>
Source record: 151304

'Doc wrote:
>
> Cecil, Is that on a linear or logarhythmic scale?

Isn't 1/2 infinity equal to 1/2 log (infinity)?
If so, the scale doesn't matter. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

518. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 14:51:08 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39B5DC.498224C3@IEEE.org>
Source record: 151305

```
Reg Edwards wrote:
>
> 'Doc wrote
> > Cecil,
> > Is that on a linear or logarhythmic scale?
> > 'Doc
>
> ====================
> Now we're getting somewhere - keep going!

Well 1/2 infinity is Aleph(null). Would 1/2 log(infinity)
also be Aleph(null)?
--
cheers, CAM http://www.qsl.net/w5dxp
```

519. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 14:54:45 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39B6B5.EC817A9F@IEEE.org>
Source record: 151306

Reg Edwards wrote:
> Consider the CFA above deep, perfectly dry Sahara sand. Conductivity
> measured in micro-siemens. Would a horizontal 1/2-wave dipole laid on the
> sand surface perform better? It would certainly be less expensive! Who's
> for a shoot-out expedition to Timbuctu ?

It seems to me that ground reflections would be pretty poor using
deep, perfectly dry Sahara sand. I don't think dry sand can compete
with salt water. Speaking of which, do any hams live on the shores
of the Great Salt Lake in Utah?
--
cheers, CAM http://www.qsl.net/w5dxp

520. Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 15:09:20 UTC
From: Andy Markham <andrew.markham@virgin.net>
Message-ID: <bSi_7.9625$qL3.1492042@news6-win.server.ntlworld.com>
Source record: 151307

Hi All

The ideal length of coax (according to the manufacture) for my antenna is...
86' of RG8x which has a VF of 78.

I have some RG58 which is a VF of 66.

Question :- How long do I make the RG58 so the length is the ideal ?. What
is the formula ?.

Andy

521. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 15:20:52 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39BCD4.89837D75@IEEE.org>
Source record: 151308

Andy Markham wrote:
>
> Hi All
>
> The ideal length of coax (according to the manufacture) for my antenna is...
> 86' of RG8x which has a VF of 78.
>
> I have some RG58 which is a VF of 66.
>
> Question :- How long do I make the RG58 so the length is the ideal ?. What
> is the formula ?.

.66(RG8x length)/.78 = .66(86)/.78 = 73 ft
--
cheers, CAM http://www.qsl.net/w5dxp

522. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 16:26:28 UTC
From: rons533@dejazzd.com
Message-ID: <3C39CBC4.744E@dejazzd.com>
Source record: 151310

CAM wrote:
>
> rons533@dejazzd.com wrote:
> >
> > 'Doc wrote:
> > >
> > > Cecil,
> > > What does that have to do with the original post? I
> > > doubt if he was going to ground the antenna, but run a
> > > ground wire from the mount to ground. You know, connected
> > > to the shield on the coax.
> > > 'Doc
> >
> > Yes, that is what I was questioning. Should I earth ground the mount.
> > Then from what I am getting I need to run a counterpoise connected to
> > the mount for each band I want to operate.
>
> It is virtually impossible to get a solid ground 30 ft up in the air.
> The "ground" wire can carry standing waves, can adversely affect the
> feedpoint impedance, and can result in lots of RF-in-the-shack. IMO,
> go with the counterpoise for each band and wrap a few turns of coax
> to achieve some choking action. BTW, you will be running QRP on 80m.
> --
> cheers, CAM http://www.qsl.net/w5dxp

Ok so this is what I am going to do---
My roof is 20' high asphalt shingle almost flat. I am going to mount the antenna on the roof without using an earth ground attached to the mounting bracket. However attached to the mounting plate I will attach a 1/4WL counterpoise for each band I will be using (I have a triple resonator mount). I will lay the counterpoises horizontally on the roof extending out from the mounting bracket. I will make a choke at the the base of the antenna to help keep RF out of the shack. Sounds like a plan. By the way I considered a wire antenna but believe it or not I don't have the room except for maybe a 10M dipole. Also considered a verticle but don't want to mount a 20' verticle on the roof of my home. Live in a duplex and the neighbor won't go for it. Can't ground mount it "cause there is no room on the ground for radials.
Thanks for all the suggestions. I will keep watching posts.
Ron

523. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 16:28:46 UTC
From: Adrian Brentnall <amb_quality@dial.pipex.com>
Message-ID: <VA.00003a34.03da5e56@dial.pipex.com>
Source record: 151312

HI Mike

Thanks for the comments....

> If you can cut a magnetic loop (fed continuous loop) to be resonant
> on a ham band, it will be resonant at higher odd multiples of that
> frequency. With this in mind, coax will not be a problem. The nice
> thing about using coax is you don't have to worry about proximity to
> surrounding objects.

It looks as if the first attempt will be something like 100m total -
just due to the way the land is arranged - and where suitable supports can be
placed. The feeder will have to stretch out at maybe 30 degrees from horizontal -
the field where the loop will be is up the slope from the bungalow / shack.

> You can make an adapter to use at the shack end
> that shorts center to shield to feed it on frequencies lower than the
> design freq , and feed it against ground (if you have a very good
> station ground, and a respectable vertical run of coax of respectable
> hight out side) as a capacitive top loaded vertical.

See above - also not sure how good a ground we'll be able to achieve - natural
'soil' round here is very sandy - and drains water away very quickly....
I may be able to locate the rainwater 'soakaway' - so 'planting' and earth rod
'under' that might be a good start..

> If you're encountering high SWR at certain places due to not being
> able to cut it to full size, naturally ladder line will be to your
> advantage.

Understood

> It doesnt matter where you feed the loop, but most folks feed it at a
> corner for obvious reasons.
> The shape of the loop doesn't matter, but it performs best when the
> loop encompasses the MAXIMUM area inside the loop (perfect circle).
> Remember, more wire means more danger from lightning or other simple
> causes of static. Dust, precipitation, wind, all of these can cause
> extremely high amounts of static electricity to build up on a wire, so
> it's best to have the whole thing shorted to ground when not in use...
> preferably pulling the feedline outside of the shack to do so.

Yes - that's a good plan. Might even be able to arrange some sort of 'remote
relay' shorting arrangement up where the loop is - keep some of the HV away from
the shack.....

Hopefully it'll be a good location for HF & VHF - we're at 15m ASL - but more or less at the top of a hill (we don't get very big hills round here <g>). The North Sea is about a mile away .... and I've got a generally good take-off in all directions.....

>
> Good luck, cu on the bands.

Thanks - look forward to it

Adrian
Suffolk UK

524. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 16:36:05 UTC
From: Stahr <w6nyc@earthlink.net>
Message-ID: <V7k_7.10999$zw3.1216253@newsread1.prod.itd.earthlink.net>
Source record: 151311

On Larry King Live last night, Ted Olson, husband of Barbara Olson the
author, again confirmed that Barbara did call on her personal cel phone from
flight 77 before it hit the Pentagon.

Dennis - W6NYC

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
news:u3a98pkgcs7q49@corp.supernews.com...
> Did not!
>
>
> "Stahr" <w6nyc(remove this to email)@earthlink.net> wrote in message
> news:3L8Z7.1798$zw3.322338@newsread1.prod.itd.earthlink.net...
> >
> > Yes they did use their personal cel phones, and you are an idiot!
> >
> > Dennis
> >
> >
> > "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
> > news:u3990s96ulmt40@corp.supernews.com...
> > > They didn't use cell phones. They used the in-flight phones mounted
in
> > the
> > > seat backs. These are wired into the aircraft and to an antenna on
the
> > > outside of the fuselage.
> > >
> > > They couldn't have used a cell phone due to the interference it would
> have
> > > caused being in range of so many towers. The cell phones wouldn't
have
> > > worked.
> > >
> > > Man - the level of ignorance on Usenet astounds me sometimes!
> > >
> > >
> > > --
> > > Nick: Hey in there! Don't you want your doorknocker?
> > > Catherwood: I already have a doorknocker.
> > > Nick: But this is yours!
> > > Catherwood: See, I told you!
> > >
> > > "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> > > news:3C349622.4281A893@blackhole.net...

> > > >
> > > > When the planes were hijacked on Sept. 11, according to reports
many
> > > > people on the plane used cell phones. How do these phones work
through
> > > > the aluminum skin of the aircraft, which seems to surround them
> > > > completely? I apologize for the ignorance that this question
reveals,
> > > > but I don't have a cell phone and I haven't flow for about ten
years.
> > > >
> > > > --
> > > > john
> > >
> > >
> > >
> >
> >
>
>
>

525. Re: Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 16:50:29 UTC
From: Kent K9EZ <kwinrich@wi.rr.com>
Message-ID: <plk_7.193287$8w3.41011174@typhoon.kc.rr.com>
Source record: 151313

Any idea where those recordings are?

Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net> wrote
in message news:3C34963C.3DC7B351@coqui.net...
> CAM wrote:
> >
> > N2EY wrote:
> > > The "balloons tied to a lawn chair" part is not an urban legend. A guy
actually
> > > did it, years ago. Lived to tell the tale, too.
> >
> > Wasn't that in the Los Angeles area?
>
> Yeah. They actually had recordings of the guy's desperate
> communications on the show. The guy was somewhat sensible and
> sober...the little stunt simply got out of hand.
>

526. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 16:52:16 UTC
From: richardharrison@webtv.net
Message-ID: <2249-3C39D240-55@storefull-115.iap.bryant.webtv.net>
Source record: 151315

Cecil, W5DXP wrote:
"It seems to me that ground reflections would be pretty poor using deep, perfectly dry Sahara sand."

Terman assumes 3.5 degrees to be the minimum practical angle above the horizon for rays departing a shortwave antenna. That makes maximum skip distance roughly 1000 miles to 2000 miles depending on the sky reflecting layer and its height. To reach farther requires more hops.

To use 3.5 degrees means you may need an earth reflection point about 2000 feet from your antenna in the 160-meter band. How good is the soil at your reflection point? How smooth is the earth surface there? Surface irregularities can be worse for a reflection than high soil impedance.

Best regards, Richard Harrison, KB5WZI

527. Re: Lawn Chair Squalo-QST

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 17:01:55 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C39D483.ECA6CBB0@coqui.net>
Source record: 151314

Kent K9EZ wrote:
>
> Any idea where those recordings are?

They are on the Art Bell website (http://www.artbell.com) but that has been turned into a pay-site for accessing the audio. It was an older program but was replayed during the late summer of '01 as one of the 'classics' while Bell was on vacation or sick...along with ones like the guy who was arrested for stealing power company transformers for the construction of his Time Machine. :-)

Since they went 'pay' with the site I understand that the old show archives are pretty extensive but for that same reason I haven't been back.

-Bill WX4A

528. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 17:17:23 UTC
From: paul harris <paul@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC80BEFC890@www.premiersi.com>
Source record: 151172

Send an email to k1man's aol account and see what happens. You wind up on his unmonitored mailing list that then starts spewing his crap back at you. If you ask to be removed, then THAT message gets you on the list another time, and so on, and so on.

THAT is why my email address never shows up in newsgroups - some people figure they have the liberty to do whatever they please with no regard to the other person's wishes. Same thing as with my phone number, it's up to me to decide who can have it.

And, yes, AOL has been notified and requested to take "appropriate action" to the k1man account.

"Mad Max" <SayWhat@DummyGlenn.com> wrote in message
news:a18jto$39t$0@pita.alt.net...
>
> "Richard McCollum" <rmccollOMA@worldnet.att.net> wrote in message
> news:5CPZ7.330050$W8.12613098@bgtnsc04-news.ops.worldnet.att.net...
> >
> > "Mad Max" <SayWhat@DummyGlenn.com> wrote in message
> > news:a18f15$n5g$0@pita.alt.net...
> > >
> > > Glenn Baxter, K1MAN, is sending this notification. I don't know what
he
> > is
> > > trying to prove save for wasting his breath. I mean, who cares??
> > >
> > >
> >
> > Who cares indeed. So why are you spreading joy and happiness across a
> > half dozen groups?
> >
> > Neither the topic nor the writer deserve this much, particularly a bozo
> > who doesn't know his own name.
> >
> > Dick N&#65533;BK
> >
> Ah...the old refrain "you are posting anonymously, you coward." Is that
not
> what you imply, Dick?
> Maybe you like spam. It may be the only email you get. As for me? I prefer
> to keep my real name and email address anonymous due to the lack of
quality
> that some of these posters have and all of them are Hams.

> So there you have it, Big Dick. How I operate is my option, not yours.
> 73
>

529. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 17:17:37 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C39D82F.4B616413@icok.net>
Source record: 151316

I got 72.7 feet. Close enough...
'Doc

530. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 17:22:53 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C39D96B.C02E8296@icok.net>
Source record: 151317

As a matter of fact, no. There are no hams living on the
shores of the Great Salt Lake.
'Doc

531. Re: Need antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 17:26:18 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C39DA37.74A2D59F@icok.net>
Source record: 151318

AstroMan wrote:
>
> I'm trying to listen to the K1MAN broadcasts on 3.890 MHz at night to
> increase my knowledge of ham radio and maybe contribute something back to
> the hobby.
> But, the broadcast is garbled and hard to understand. Can anyone suggest an
> antenna that will clear up the sound?
> Thanks!

Astro',
Theres absolutely nothing you can do to clear up the
'garble',
it's built in to all K1MAN's broadcasts. If you want to increase
your knowledge of ham radio, and contribute something to the
hobby,
the best thing you can do is not listen to K1MAN.
'Doc

532. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 17:41:17 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C39DDBA.68B73975@icok.net>
Source record: 151169

Cecil,
I have no idea of how the guy's home is constructed. But,
I'd be willing to bet that the length of the ground wire would
be less than a 1/4 wave on 80 meters (+/- 62 feet). For 10 and
15 meters, a 1/4 wave would be about 8 and 11 feet respectively.
I would also hazard a bet that a ground from the mount to earth
on these two bands would be even multiple of a 1/4 wave. Any of
which should work fine for the three bands. But (another one),
since he's already decided to use the counterpoise, this is all
beside the point...
'Doc

533. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 17:48:04 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C39DF50.50CE2FC@icok.net>
Source record: 151170

Adrian,
If it were my choice, I would enclose the largest area I possibly could. It wouldn't be resonant on any ham band, but it doesn't matter that much. The larger the better! Feed it where ever it's most convenient, corner, side, something between the two.
'Doc

534. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 17:54:16 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C39E0C5.80BB462A@icok.net>
Source record: 151171

Adrian,
I wouldn't be too concerned about the aspect ratio (l/w)
until it really got out of hand. A 3/1 aspect ratio, two
sides being 3 times as long as the other two sides will have
some affect on the radiation pattern, but not much. Same for
the input impedance (which you wouldn't care about anyway).
The idea is to get as much area inside the loop as possible.
'Doc

535. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 18:13:16 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <=uI5PHyjULE=4yFM7Nshew2zvJJX@4ax.com>
Source record: 151173

rons533@dejazzd.com wrote:

>CAM wrote:
>>
>> rons533@dejazzd.com wrote:
>> >
>> > 'Doc wrote:
>> > >
>> > > Cecil,
>> > > What does that have to do with the original post? I
>> > > doubt if he was going to ground the antenna, but run a
>> > > ground wire from the mount to ground. You know, connected
>> > > to the shield on the coax.
>> > > 'Doc
>> >
>> > Yes, that is what I was questioning. Should I earth ground the mount.
>> > Then from what I am getting I need to run a counterpoise connected to
>> > the mount for each band I want to operate.
>>
>> It is virtually impossible to get a solid ground 30 ft up in the air.
>> The "ground" wire can carry standing waves, can adversely affect the
>> feedpoint impedance, and can result in lots of RF-in-the-shack. IMO,
>> go with the counterpoise for each band and wrap a few turns of coax
>> to achieve some choking action. BTW, you will be running QRP on 80m.
>> --
>> cheers, CAM http://www.qsl.net/w5dxp
>
>Ok so this is what I am going to do---
>My roof is 20' high asphalt shingle almost flat. I am going to mount the
>antenna on the roof without using an earth ground attached to the
>mounting bracket. However attached to the mounting plate I will attach a
>1/4WL counterpoise for each band I will be using (I have a triple
>resonator mount).

I ran a similar antenna with counterpoise, and found the counterpoise had to be adjusted very precisely for each frequency, so plan on some finagelling of wire length. Also, the counterpoise will be hot with rf energy -- you may want to consider insulated wire to keep from heating the shingles. Otherwise, should work fine.

Bob
k5qwg

> I will lay the counterpoises horizontally on the roof
>extending out from the mounting bracket. I will make a choke at the the

>base of the antenna to help keep RF out of the shack. Sounds like a
>plan. By the way I considered a wire antenna but believe it or not I
>don't have the room except for maybe a 10M dipole. Also considered a
>verticle but don't want to mount a 20' verticle on the roof of my home.
>Live in a duplex and the neighbor won't go for it. Can't ground mount it
>"cause there is no room on the ground for radials.
>Thanks for all the suggestions. I will keep watching posts.
>Ron

536. Re: AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 18:26:23 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C39E84E.1519588@umich.edu>
Source record: 151174

> "Alex" <alex99@peoplepc.com> wrote:
>
> >Help! I work in an office building in the Detroit area and listen to an
> >am/fm extended range radio. I try to listen to various am stations but
> >either don't get them or they come in very poor with a lot of
> >hissing/crackling noise. If I bring the radio close to a window, reception
> >is perfect. Unfortunately I sit about 25 feet from a window and CAN'T bring
> >my radio any closer.
> >
> >Can anyone offer suggestions on how to improve my reception and get rid of
> >some of the hissing/crackling????

I used to add an external antenna to my Sears Silvertone transistor radio back in the early 60's by coupling an external coil to the internal loopstick antenna. It used to pull in some pretty distant stations.

Here's what I did. First, figure out where the loopstick antenna is. If it's internal, you will probably need to open the case to find it. The loopstick will be a grey bar a few inches long, with fine wire coiled around it. Using #24 magnet wire, wind a few dozen turns around the exposed end of the loop-stick, bringing the wires out through the case. Alternatively, you may be able to just wind a coil in free air and tape it to the outside of the case, just off the end of the loopstick (with your windings on a plane parallel to those built onto the loopstick). I seem to recall doing it both ways.

Now connect a long wire to one of the coil leads (the longer the better) and a ground to the other coil lead. The ground can be a connection to the central screw on a power outlet (caution! Electrical system MUST be grounded properly!), or a copper water pipe, or just another long wire run along the floorboards. Try your reception now.

Another approach I have read about (but not tried) is the "magic wall", where you wind a large (6' diam) coil with the ends connected into a closed loop, and affix it on or in a nearby wall. Any radio brought into its field gets better reception, supposedly. I've seen this written up in Popular Electronics of decades past. No clue if it really works.

Bob, KI8AB

537. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 18:49:03 UTC
From: richardharrison@webtv.net
Message-ID: <27475-3C39ED9F-73@storefull-114.iap.bryant.webtv.net>
Source record: 151177

Andy Markham wrote:
How long do I make the RG 58 so the length is ideal?"

Using your numbers, the velocity is less in the cable you propose to substitute, so less length is required for the ideal phase shift.

Multiply 86 ft. times the ratio of the velocities which is 66/78. The length Andy needs of RG-58 is 72.77 ft.

Best regards, Richard Harrison, KB5WZI

538. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 18:59:34 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39F016.FE8C843F@IEEE.org>
Source record: 151175

rons533@dejazzd.com wrote:
> I will lay the counterpoises horizontally on the roof
> extending out from the mounting bracket.

And since you are going to all that trouble, I would also
suggest TWO 1/4WL counterpoises per band, laid out 180 degrees
apart. That will *tend* to keep the counterpoises from radiating
and tend to turn the counterpoises into ground planes.

And if that doesn't work, add 118 more radials. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

539. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 19:05:58 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39F196.F7AE2EDA@IEEE.org>
Source record: 151176

'Doc wrote:
>
> Cecil,
> I have no idea of how the guy's home is constructed. But,
> I'd be willing to bet that the length of the ground wire would
> be less than a 1/4 wave on 80 meters (+/- 62 feet). For 10 and
> 15 meters, a 1/4 wave would be about 8 and 11 feet respectively.
> I would also hazard a bet that a ground from the mount to earth
> on these two bands would be even multiple of a 1/4 wave.

Out of infinite possibilities, you think the ground wire would
accidentally be an even multiple of 1/4WL on two bands? "Hope
springs eternal from the human breast." :-)
--
cheers, CAM http://www.qsl.net/w5dxp

540. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 19:14:26 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39F392.1FA586C7@IEEE.org>
Source record: 151178

Richard Harrison wrote:
> How good is the soil
> at your reflection point? How smooth is the earth surface there? Surface
> irregularities can be worse for a reflection than high soil impedance.

The typical conductivity around here in East Texas is supposed to be
4 mS/m. Where I was in Arizona is supposed to be 8 mS/m. I don't know
much about this subject. Which is lossier? Salt water is about 5000 mS/m
and free space is zero mS/m. Salt water is lossier than free space but
we know salt water is closer to ideal for HF than is free space.
--
cheers, CAM http://www.qsl.net/w5dxp

541. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 19:15:57 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39F3ED.1BA19614@IEEE.org>
Source record: 151179

'Doc wrote:
> As a matter of fact, no. There are no hams living on the
> shores of the Great Salt Lake.

Because?
--
cheers, CAM http://www.qsl.net/w5dxp

542. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 19:17:39 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39F453.9BC35A30@IEEE.org>
Source record: 151180

'Doc wrote:
>
> I got 72.7 feet. Close enough...

I'll bet the VF varies enough that 0.3 ft doesn't matter. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

543. Good antenna for VX5R?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 19:20:15 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020107142015.23998.00000232@mb-cn.aol.com>
Source record: 151181

I am considering buying a VX5R triband handheld and was wondering what people could recommend for an antenna. I'd like something that has good gain on all three bands and from what I've read, the included antenna isn't very good on 6 meters. Any ideas would be appretiated. Thanks!
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

544. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 19:34:54 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C39F85E.4DE77ED5@IEEE.org>
Source record: 151182

Richard Harrison wrote:
>
> Andy Markham wrote:
> How long do I make the RG 58 so the length is ideal?"
>
> Using your numbers, the velocity is less in the cable you propose to
> substitute, so less length is required for the ideal phase shift.
>
> Multiply 86 ft. times the ratio of the velocities which is 66/78. The
> length Andy needs of RG-58 is 72.77 ft.

What would you guess the tolerances on those VF's are? 20%?
--
cheers, CAM http://www.qsl.net/w5dxp

545. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 20:18:47 UTC
From: richardharrison@webtv.net
Message-ID: <12050-3C3A02A7-89@storefull-117.iap.bryant.webtv.net>
Source record: 151184

Cecil, W5DXP wrote:
"What would you guess the tolerances on the VF are? 20%?"

20% sounds close to me. The two decimal places was just a boast that I own a Chinese Calculator. With a slide rule I never could read that close. I wasn`t trying to outdo anybody. Who knew anybody else would answer the question? No answers had yet appeared when I sent my answer.

Best regards, Richard Harrison, KB5WZI

546. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 20:31:45 UTC
From: Andy M <andrew.markham@virgin.net>
Message-ID: <bBn_7.7513$6q2.1899116@news2-win.server.ntlworld.com>
Source record: 151183

Hi All

Just a quick word of thanks to all that have replied to my question.

I'll let you know how it works, once I get up up !.

Andy

"Andy Markham" <andrew.markham@virgin.net> wrote in message
news:bSi_7.9625$qL3.1492042@news6-win.server.ntlworld.com...
> Hi All
>
> The ideal length of coax (according to the manufacture) for my antenna
is...
> 86' of RG8x which has a VF of 78.
>
> I have some RG58 which is a VF of 66.
>
> Question :- How long do I make the RG58 so the length is the ideal ?.
What
> is the formula ?.
>
> Andy
>
>
>

547. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 20:42:49 UTC
From: Adrian Brentnall <amb_quality@dial.pipex.com>
Message-ID: <VA.00003a39.04c30125@dial.pipex.com>
Source record: 151185

HI Doc

> Adrian,
> If it were my choice, I would enclose the largest area I
> possibly could. It wouldn't be resonant on any ham band, but
> it doesn't matter that much. The larger the better! Feed it
> where ever it's most convenient, corner, side, something
> between the two.

Thanks for this......

I'll just have to do some 'empirical performance testing' -
also known as 'suck it & see' <g>

Perhaps we'll start out square - maybe with a conventional long
wire for comparison - and see how they compare.....

Thanks again
Adrian
Suffolk UK

548. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 21:08:33 UTC
From: richardharrison@webtv.net
Message-ID: <10430-3C3A0E51-97@storefull-112.iap.bryant.webtv.net>
Source record: 151186

Cecil, W5DXP wrote:
"Which is lossier (4 mS/m or 8 mS/m)?"

Well, I think a mS/m is a millisiemens per meter. The millisiemens has the same conductance as 1000 ohms. The siemens is a new name for the mho which is the reciprocal of the ohm.

The FCC`s Ground Wave Propagation Curves show less r-f loss for more ground conductivity in all cases. So, 4 mS/m is lossier than 8 mS/m. The 4 mS/m earth is less conductive.

Salt water is lossier than free space because free space is closer to a perfect insulator than salt water is to a perfect conductor. Salt water is closer to ideal as a reflector for h-f than is free space which doesn`t reflect at all.

Best regards, Richard Harrison, KB5WZI

549. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 23:12:45 UTC
From: phil <phil@phil.com>
Message-ID: <u3kao55t65hoae@corp.supernews.com>
Source record: 151187
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

paranoid? i watched that movie with sandra bullock. it could happen. i'm not paranoid... AAAAAAAAHHHHHHHHH THEY'RE AFTER ME :P

550. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 23:17:46 UTC
From: la8ak.xnd@online.no
Message-ID: <3c3a2c48.363465764@news.online.no>
Source record: 151188

On Sun, 06 Jan 2002 08:31:36 -0600, CAM <Cecil.A.Moore@IEEE.org>
wrote:

>cheers, CAM http://www.qsl.net/w5dxp:
The No-Tuner, All-HF-Band, Horizontal, Center-Fed Antenna is our old
friend, the 80 meter halfwave dipole dressed up a bit. By varying the
length of the 450 ohm ladder-line feeding the antenna, we can achieve
an SWR of less than 2:1 on all frequencies on all HF bands with the
exception of the lowest part of 80m

well, I would still use my tuner although I must admit that a VSWR of
2:1 isn't that much

73
Jan-Martin
--
remove ,xnd to reply

551. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 23:25:07 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C3A2E53.DA6D8F18@IEEE.org>
Source record: 151189

Andy M wrote:
> Just a quick word of thanks to all that have replied to my question.
> I'll let you know how it works, once I get up up !.

As a matter of interest, exactly what is "it"?
--
cheers, CAM http://www.qsl.net/w5dxp

552. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-07 23:41:49 UTC
From: Andy M <andrew.markham@virgin.net>
Message-ID: <3c3a3249_1@news.greennet.net>
Source record: 151190

> As a matter of interest, exactly what is "it"?

Ah, so curiosity got to you eh !.

It's actually a Carolina Windom 80 Beam.

Andy

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C3A2E53.DA6D8F18@IEEE.org...
> Andy M wrote:
> > Just a quick word of thanks to all that have replied to my question.
> > I'll let you know how it works, once I get up up !.
>
> As a matter of interest, exactly what is "it"?
> --
> cheers, CAM http://www.qsl.net/w5dxp

553. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 00:11:07 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c3a3cd2_3@news1.prserv.net>
Source record: 151191

I don't think there is any privately owned property along the shoreline.

--
Crazy George
Remove NO and SPAM from return address
CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C39F3ED.1BA19614@IEEE.org...
> 'Doc wrote:
> > As a matter of fact, no. There are no hams living on the
> > shores of the Great Salt Lake.
>
> Because?
> --
> cheers, CAM http://www.qsl.net/w5dxp

554. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 00:57:11 UTC
From: Mark Krubsack <mkrubsack@yahoo.com>
Message-ID: <mqbk3ugp6nabrdtbgk04hkdogo00d71l67@4ax.com>
Source record: 151192

I have a SGC-239 SmarTuner I will sell for the best offer over $200,
plus shipping. Used maybe 24 hours. Includes smartuner, manual,
original packing, and the case as described at
http://www.wireservices.com/n9zrt/SG-239/case.html.

It worked great, but I prefer my old manual Drake MN-2000.

Mark Krubsack,
ke6oi@arrl.net

555. Re: How come American Hams can't use HF freqs that Canadians can?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 01:40:09 UTC
From: Anthony Duffy <a.duffy@sympatico.ca>
Message-ID: <3C3A4DF9.3090300@sympatico.ca>
Source record: 151193

According to the RAC web site (our version of ARRL) the 40m band in
Canada is as follows: (from http://www.rac.ca/hfband.htm)

40 Meter Band - Maximum bandwidth 6 kHz
7.000 to 7.035 MHz - CW
7.035 to 7.050 MHz - Digital Modes
7.040 to 7.050 MHz - International packet
7.050 to 7.100 MHz - SSB
7.100 to 7.120 MHz - Packet within Region 2
7.120 to 7.150 MHz - CW
7.150 to 7.300 MHz - SSB and other wide band modes

We can work voice from 7.05 to 7.100 so we are able to QSO VE - G. I
looked on the ARRL web site for the US band plan but it didn't specify
any segments of 40m as CW or SSB. Only those that weren't.
(7.040 RTTY DX, 7.080-7.100 RTTY, 7.171 SSTV, 7.290 AM calling frequency)

Guess we'll have to just do it the gentlemanly way for now until both
the ARRL and RAC get it synchronized. Is there a problem with the use of
the band or just the way it's explained by the ARRL?

Just my 2 cents

73, Tony
VA3-ATD
London, Ontario.

Val wrote:

> Well...
> To perform a 2xSSB QSO legally VE-G on 7 MHz, without split (wich
> is NOT favorable at low signal strengths and hi QRM: How is
> that possible if the VE ham can not work SSB 7040-7100 (G SSB band)?
>
> The 7 MHz band is a special case. In Europe the band is ONLY
> 7000-7100, cw 7000-7040... Wait until we get a global band, then
> we can discuss.
>
> V.
>
> Max wrote:
>
>>"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
>>news:3C3653F9.AB685C52@tampabay.rr.com...
>>
>>>the ARRL got into enough BS when they helped reduce the code speed down

>>>to 5WPM the old timers like there CW parts of the band and dont want any
>>>one running voice there
>>>
>>Speaking as one Canadian ham, I understand perfectly your point. The daily
>>Trans-Provincial net on 7.055 is one example. But quite a few US hams check
>>in on CW. I myself don't check into nets or use voice in any portion of an
>>HF CW segment, but the Canadian hams aren't the ones to be pissed off at, it
>>is the Canadian Ministry of Transportation and Communications. Yes we have
>>more voice priveledges than many other ham nations, but it isn't the doing
>>of the hams themselves.
>>
>>73,
>>
>>Max ve3tmt@rac.ca
>>

556. Re: Protecting Antennas against Lightening!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 02:05:28 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <vqs_7.148008$IV4.25530809@e420r-atl1.usenetserver.com>
Source record: 151194

I've bin laughing for a couple of daze now. Haha! Kind of like the
emperors knew close:)
Drink
P.S. "Off coarse ewe kin spill will." But, the checker won't catch it. ;)

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C392D01.E2DA3C4D@IEEE.org...
> Jim Weir wrote:
> >
> > CAM <Cecil.A.Moore@IEEE.org>
> > shared these priceless pearls of wisdom:
> >
> > If you are worried about lightening damage, just don't drill so many
holes in
> > the metal of the antennas.
> >
> > If you are worried about LIGHTNING damage, on the other hand, that's a
whole
> > different problem.
>
> I thought we were talking about the subject of this thread. :-)
>
> Aha, I see what the problem is. Lightning and lightening are both valid
words
> so the spellchecker doesn't catch the error.
> --
> cheers, CAM http://www.qsl.net/w5dxp

557. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 02:32:59 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C3A5A57.8F9246BF@att.net>
Source record: 151195

And the feedline length is *that* critical?

Just out of curiosity, how does that thing work? And why is the line length
so critical?

Not yanking your chain - I just don't know and would like some information.

72/73, George W5YR - the Yellow Rose of Texas QRP-L 1373 NETXQRP 6
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe SOC 262 COG 8
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All incoming and outgoing email virus-checked by Norton Anti-Virus 2002

Andy M wrote:
>
> > As a matter of interest, exactly what is "it"?
>
> Ah, so curiosity got to you eh !.
>
> It's actually a Carolina Windom 80 Beam.
>
> Andy

558. Re: Entangled Photon Pairs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 02:38:35 UTC
From: alevand@yahoo.com
Message-ID: <e52e470e.0201071838.3497bca1@posting.google.com>
Source record: 151196

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C392B79.12D6780@IEEE.org>...
> "J. Harvey" wrote:
> >
> > "CAM" <Cecil.A.Moore@IEEE.org> wrote :
> > > ...geosynchronous orbit...
> > > ...instantaneous full-duplex...
> >
> > Define "instantaneous" (as pertains to high orbit satellites).
> > :-)
>
> That's the beauty of entangled photon pairs. Once they leave the transmitter,
> the quantum communication between the two particles is actually
> instantaneous, i.e. there is no delay between the changes (modulation)
> in the two particles, i.e. faster than light communications is possible.
> If I twist a photon in Los Angeles, the twin entangled photon in New York
> undergoes an opposite twist. The satellite delay is irrelevant. In fact,
> there is no up link at all - just a transmitter.

One first has to create a radio frequency photon. A half wave sine
pulse of one electron charge will do in a pinch. Next we need an
infinitely high Q nonlinear downconverting antenna, identical at each
end. Super conducting rare earth metal q= 10^9. Well have to wait 40
years until we can get a room temperature superconducting carbon
nanotube nanotaylored antenna. Then we need a way to direct the photon
to each receiver, humm...

559. Re: Hustler for Apt. antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 02:38:37 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C3A5BA8.91A07C40@icok.net>
Source record: 151197

CAM wrote:

>
> Out of infinite possibilities, you think the ground wire would
> accidentally be an even multiple of 1/4WL on two bands? "Hope
> springs eternal from the human breast." :-)
> --
> cheers, CAM http://www.qsl.net/w5dxp

Infinite possibilities... hope? Not really. Just some
common sense, a little experience, and some knowledge of how
people behave. Think about it...
'Doc

560. Re: Good antenna for VX5R?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 02:38:37 UTC
From: senecal@mapson.cs.ucdavis.edu
Message-ID: <senecal-0701021838370001@d71-096.solano1.ucdavis.edu>
Source record: 151198

First of all, let me say that I have a VX-5R, and I think it's a great radio. If you get one I think you'll be pleased with it, but take my opinion for what it's worth! :) The rubber duck that comes with the radio isn't bad, but like all stock ducks it isn't the best, either. I'm also in the process of looking for a new antenna (I posted about it recently). I wanted one that would give me all three bands too, but there aren't that many. Most antennas are for 2m/70cm.

Things to might want to consider: are you going to install an SMA-BNC adapter on your radio (A BNC connector is a lot less of a hassle than SMA)? If you get an SMA-BNC connector you might want to look into a non-Yaesu connector. I have the Yaesu one, and I think they could have done better. Make sure that the antanna you purchase will not make the radio top heavy. This can stress (and break) your connector.

As far as antennas I'm probably going to get a Pryme RD-98 dual-bander. The only antennas that I've seen that offer 6m/2m/70cm are the Maldol AH510R and the Diamond SRH999. The Maldol comes SMA or BNC, but the Diamond is only SMA. I have never used either of these antennas, so I can't offer any opinions on them, although if the Maldol is light enough I'll probably get it instead of the RD-98, since I really want the 6m capability.

Good luck!

-Josh Senecal, KG6IBF

> I am considering buying a VX5R triband handheld and was wondering what people
> could recommend for an antenna. I'd like something that has good gain on all
> three bands and from what I've read, the included antenna isn't very good on 6
> meters.

--
senecal@mapson.cs.ucdavis.edu (remove the obvious bit from the address)

"Your most valuable asset is rampant ignorance."
-Dogbert

561. Re: Good antenna for VX5R?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 03:32:13 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020107223213.09387.00000179@mb-cd.aol.com>
Source record: 151199

>As far as antennas I'm probably going to get a Pryme RD-98 dual-bander.
>The only antennas that I've seen that offer 6m/2m/70cm are the Maldol
>AH510R and the Diamond SRH999

Actually, I just checked AES and I found both of the antennas you mention, as well as the Maldol MH510 and the MFJ-1720S, both SMA antennas. The MFJ was the only one I could find specs on ($30!). As far as the radio, I've done a bit of research and found that this is the radio to get... it's as cheap as a dualbander ($255 from AES or HRO), but you get 6m as well!
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

562. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 03:53:35 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c3a70f2_1@news1.prserv.net>
Source record: 151200

The last time this word appeared, I looked it up in the Webster's unabridged.
They give the first definition as something like (I ain't gonna look it up again): The feeling when the fetus drops from the womb into the birth canal in position to be born. Unquote. I just hate what has happened to the American educational system. Apparently neither grammar, spelling, nor sentence construction is taught any longer.

--
Crazy George
Remove NO and SPAM from return address
Jim Weir <jim@rst-engr.com> wrote in message news:8b5i3u09c7s3p8qcgieqgbgakts4cmchb3@4ax.com...
>
> Lightening refers to drilling out unnecessary parts of the antenna.
>
> Lightning refers to the meteorological phenomena of static discharge between the
> ionosphere and the earth.
>
> Which one do you need information on?
>
> Jim
>
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

563. Re: Pryme RD-98: heavy or light?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 04:51:59 UTC
From: k6lcs@clintbradford.com
Message-ID: <fc08b778.0201072051.222ed04b@posting.google.com>
Source record: 151201

senecal@mapson.cs.ucdavis.edu (Joshua Senecal) wrote in message
news:<senecal-0601022130120001@d71-096.solano1.ucdavis.edu>...
> I'm worried about the antenna making the radio top heavy and stressing the
> connector.

You might be mistaking the RD-98 (which IS available in SMA for you!)
with the Pryme AL-800 metal telescoping unit.

The RD98SMA or RD98BNC is very light - and not anywhere near the
"mass" of the AL-800 or other solid antennas. It is an excellent
performer for your HT!

Clint Bradford, K6LCS / KAF3359

564. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 04:56:15 UTC
From: Ed Cregger <nm2k@arrl.net>
Message-ID: <u3kuo111joad24@corp.supernews.com>
Source record: 151202

I guess the powers that be figure that if the population
can't read, they won't realize the rights they are losing on
an almost daily basis. After all, one must be able to READ
the constitution and the Bill of Rights in order to
understand it.

Ed Cregger
nm2k@adoublerl.net

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in
message news:3c3a70f2_1@news1.prserv.net...
> The last time this word appeared, I looked it up in the
Webster's
> unabridged.
> They give the first definition as something like (I ain't
gonna look it up
> again): The feeling when the fetus drops from the womb
into the birth canal
> in position to be born. Unquote. I just hate what has
happened to the
> American educational system. Apparently neither grammar,
spelling, nor
> sentence construction is taught any longer.
>
> --
> Crazy George
> Remove NO and SPAM from return address
> Jim Weir <jim@rst-engr.com> wrote in message
> news:8b5i3u09c7s3p8qcgieqgbgakts4cmchb3@4ax.com...
> >
> > Lightening refers to drilling out unnecessary parts of
the antenna.
> >
> > Lightning refers to the meteorological phenomena of
static discharge
> between the
> > ionosphere and the earth.
> >
> > Which one do you need information on?
> >
> > Jim
> >
> > Jim Weir, VP Eng. RST Eng. WX6RST
> > A&P, CFI, and other good alphabet soup
>

>
>
>

565. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 05:03:05 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201072103.7e5be770@posting.google.com>
Source record: 151203

'Doc <w5lz@icok.net> wrote in message news:<3C39D96B.C02E8296@icok.net>...
> As a matter of fact, no. There are no hams living on the
> shores of the Great Salt Lake.
> 'Doc

There was for one night. Except I wasn't really on the shores of the lake. I was pretty close though. Just a bit west. Best place for looking at stars I've ever seen so far, except for maybe being out on the ocean. Horizon to horizon, except for the random car headlights. I slept outside in a sleeping bag and woke up half buried in sand. Kind of like being on the moon with wind...:/ MK

566. Re: Pryme RD-98: heavy or light?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 05:12:12 UTC
From: senecal@mapson.cs.ucdavis.edu
Message-ID: <senecal-0701022112120001@d71-096.solano1.ucdavis.edu>
Source record: 151204

> You might be mistaking the RD-98 (which IS available in SMA for you!)
> with the Pryme AL-800 metal telescoping unit.

I'll probably go BNC simply because it's easier when changing antennas.

-Josh Senecal

--
senecal@mapson.cs.ucdavis.edu (remove the obvious bit from the address)

"Your most valuable asset is rampant ignorance."
-Dogbert

567. Re: AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 05:17:03 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201072117.4a34982c@posting.google.com>
Source record: 151205

"Alex" <alex99@peoplepc.com> wrote in message
news:<a14u8c$q665@eccws12.dearborn.ford.com>...
> Help! I work in an office building in the Detroit area and listen to an
> am/fm extended range radio. I try to listen to various am stations but
> either don't get them or they come in very poor with a lot of
> hissing/crackling noise. If I bring the radio close to a window, reception
> is perfect. Unfortunately I sit about 25 feet from a window and CAN'T bring
> my radio any closer.
>
> Can anyone offer suggestions on how to improve my reception and get rid of
> some of the hissing/crackling????

Something you could try that costs nothing is to place the radio very
close to something that is run off the 117v line. Such as a lamp, etc.
Many times the power lines are fairly hot with local RF and you might
be able to get a decent signal near your desk. Walk around the room
and place the radio close to anything plugged in and find a good spot.
I'm sure you will see an increase of some type near power lines. This
could work for FM or AM. Never know until you try it. MK

568. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 08:00:56 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a1e8vo$9e4$2@quark.scn.rain.com>
Source record: 151206

Crazy George <munschNO@attglobal.net.spam> wrote:
> The last time this word appeared, I looked it up in the Webster's
> unabridged.
> They give the first definition as something like (I ain't gonna look it up
> again): The feeling when the fetus drops from the womb into the birth canal
> in position to be born. Unquote. I just hate what has happened to the
> American educational system. Apparently neither grammar, spelling, nor
> sentence construction is taught any longer.

"Unquote." is improper here - as did not quote.

If you remove cargo from a ship, you are lightening the ship.

The first definition has to do with removing a weight or burden.

--
Bill Nelson (billn@peak.org)

569. 21~50 MHz Quad EZNEC Model

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 10:20:20 UTC
From: post_to_usenet@hotmail.com
Message-ID: <b6b4e772.0201080220.37ab31a@posting.google.com>
Source record: 151207

Hi,

Playing with EZNEC I have got to a Quad design that should not be possible: good gain, good bandwidth, low SWR, many bands. I know this is considered not possible, so it probably has some failure that I cannot see (I have no formal studies on antennas nor much experience with modeling them). I have seen that when used with too long segments, EZNEC tends to be over optimistic on antenna gain. Maybe the catch is this, that with the proper number of segments gain would be much lower (and/or SWR higher).

This antenna would work all ham bands from 50MHz down to 21MHz. SWR < 1.7 for 50 MHz, < 1.8 for full 21 MHz band and < 1:5 on all frequencies between 23.5 and 34 MHz. Feed would be by 300 ohms parallel line. Catch: It requires 120 mm (~ 4in.) cable diameter, so some kind of wire cage is imperative.

Please comment if this design could possibly work, and what is wrong if not.

Thanks for answers.

Toni

I do not know if the .EZ file will get posted; if not copy and paste the following wire definition to a text file and import it in EZNEC. In addition, wires 2, 3, 4 and 5 have a 33pF capacitor (no coil) at 50% position. Source is at 50% on wire 1. Alt Z is 300ohm.

```
----8<----8<---- cut here ----8<----8<----
; Units:

m mm

; Wires:

0 -0.2 10 0 0.2 10 120 1
0 -3.5 8.5 0 -0.2 10 120 4
0 3.5 8.5 0 0.2 10 120 4
0 -3.5 8.5 0 0 7 120 5
0 3.5 8.5 0 0 7 120 5
```

570. Re: Coax Velocity Factor !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 10:31:12 UTC
From: Andy M <andrew.markham@virgin.net>
Message-ID: <qTz_7.14441$qL3.2343292@news6-win.server.ntlworld.com>
Source record: 151208

> And the feedline length is *that* critical?

I know what you mean. The aerial is, like I say a Carolina Windom 80 Beam.
It works on all bands and must have a ATU (Transmatch).

The manufacture states that the optimum length of feed line is 86'. I think
this will give a internal ATU of a rig the best chance of coping with the
SWR, otherwise you have to use a external ATU as well.

Must be that the feed line is part of a wavelength or something ?. As my
feed run was already close to 86' I just thought I would give it a try.

Andy

"Andy Markham" <andrew.markham@virgin.net> wrote in message
news:bSi_7.9625$qL3.1492042@news6-win.server.ntlworld.com...
> Hi All
>
> The ideal length of coax (according to the manufacture) for my antenna
is...
> 86' of RG8x which has a VF of 78.
>
> I have some RG58 which is a VF of 66.
>
> Question :- How long do I make the RG58 so the length is the ideal ?.
What
> is the formula ?.
>
> Andy
>
>
>

571. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 11:54:52 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C3ADDC0.C68C9A32@bellatlantic.net>
Source record: 151209

Not to a party pooper, but can anyone tell me ANY worthwhile attribute of a ground counterpoised vertical for HF? Only reason to install a vertical I can think of is for collecting worms out of the ground for fishing.

'73 KI4Z

Reg Edwards wrote:

> It is popularly understood that an increase in soil resistivity always
> results in increased losses in the ground such as the ground in the vicinity
> of a vertical antenna.
>
> But this cannot be true because when soil resistivity increases to the point
> when it can be considered to be an insulator the ground loss becomes very
> small again. Soil permittivity causes radiation to be reflected or refracted
> with little loss back towards to the sky.
>
> So there must be some value of soil resistivity at which ground loss is at
> its maximum. What is it ? Is that the value in YOUR back yard? Should you
> consider moving house?
> ---
> Reg

572. Re: FYI: Fluid Motion Antenna - Remotely Tuned Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 12:02:44 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C3ADF98.3A206B@bellatlantic.net>
Source record: 151210

Interesting.. anyone ever adapt those auto electrically retractable antennas for this? Probably work just fine if you decouple the motor wiring from the elements. 30" of varable length on each element end of that 80 meter 3 element yagi would do wonders.

'73 KI4Z

ac6v wrote:

> No pecuniary interest here but FYI and interesting
> http://www.fluidmotion.ws/index.htm
>
> --
> 73 From AC6V, Rod In Oceanside, CA
> I doubt, therefore I might be!
> http://ac6v.com

573. Re: Wind Load Calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 12:21:46 UTC
From: Joe O <jenjoeo@zianet.com>
Message-ID: <3c3ae6a1.0@oracle.zianet.com>
Source record: 151216

I would be prepared to explain that the mast is being installed in accordance with manufacturer's recommendations. Example : I have four Radio Shack 35 ft push-up masts set in concrete and guyed with 3 guys at two levels and one at the top level. These masts support a 480 ft horizontal loop. The wind loading in your case is very small compared to the basic structural integrety of the mast and guys. I used augur type ground anchors (swing set variety) in a 12 inch deep hole filled with concrete.

If you are a member of the ARRL they may be able to help with a source for wind loading information. I considered the info in an old publication when I put up my tower and beams. Simple wire antennas have a negilible wind load.

Joe O, KI5FJ

Drink <REMOVE_THISdrink@coqui.net> wrote in message news:fy%Z7.144929$lV4.24934532@e420r-atl1.usenetserver.com...
> I'm going to put up a simple doublet and want to have my technical facts
> prepared for when/if my local housing authority disapproves. I'm interested
> in calculating the wind load and other factors of an antenna. This could be
> a major factor in the event of a moderate hurricane.
> Antenna is as follows:
> 30ft x 1 1/4" steel mast mounted vertically
> 450 Ohm (poly) ladder line feeder
> 14 ga. copper wire, mounted as an inverted V
> Inv. V Apex at 30ft
> Inv. V Ends at 10ft
>
> I'm asking for you to *teach me how* to do it or direct me to a source
> vice fish for me. I may be as simple as a data table that accounts for
> diameter & length or as complicated as a basic formula. I appreciate any
> help I can get as well as additional info since this is a learning
> opportunity. TIA.
> 73's
> Drink, WP3JQ
>
>
>

574. Which Came First?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 13:49:34 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <3C3AF8ED.38B8578E@agilent.com>
Source record: 151244
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I'm just curious: is it correct to assume that the current AM broadcast band is really the best choice of frequency for the desired characteristics for that service? In other words, was 540-1600 kHz (before expansion to 'AM wide' a few years ago) chosen first, and then the stations placed there? Or did the stations begin operation in that frequency band and just happened to choose a good ground wave frequency band for local broadcasting?

I've been reading some of the history of KDKA, which of course was the first commercial broadcast station in Pittsburgh in 1920 (on 360 meters, according to the original FCC license), and it seems that the Westinghouse engineers knew that starting around 1500 kHz ground losses increased, making those frequencies less useful for local reception. (They apparently didn't know about sky wave propagation). But aside from that, is there anything magical about the current broadcast band that makes it the best choice?

Thanks,

Al W6LX

575. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 14:17:33 UTC
From: richardharrison@webtv.net
Message-ID: <14975-3C3AFF7D-207@storefull-111.iap.bryant.webtv.net>
Source record: 151212

Mark Hall wrote:
"---ANY worthwhile attribute of a ground counterpoised vertical for HF?"

Medium wave broadcasters early in the development of their business found greater efficiency in the vertical radiator, combined with a good ground system, than other antenna systems gave.

If you want to launch waves parallel with the surface of the earth, the vertical is for you. If you want to launch waves at only small angles with the surface of the earth, say 5 degrees or 10 degrees, as may be useful for long distance sky wave propagation, the vertical may be for you. Good earth conductivity and an efficient ground connection are needed with a 1/4-wave vertical.

A horizontal antenna over sea water at heights under 1/2-wavelength does poorly.

Two figures in the 19th edition of the ARRL Antenna Book compare horizontal and vertical 1/2-wave antennas better than words can. See Fig 4A and 4B on page 3-5.

Best regards, Richard Harrison, KB5WZI

576. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 14:22:49 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C3B00B9.D480CB5A@IEEE.org>
Source record: 151211

Mark Hall wrote:
> Not to a party pooper, but can anyone tell me ANY worthwhile attribute of a
> ground counterpoised vertical for HF?

Mobile operation. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

577. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 14:43:54 UTC
From: richardharrison@webtv.net
Message-ID: <14977-3C3B05AA-36@storefull-111.iap.bryant.webtv.net>
Source record: 151214

Bill Nelson wrote:
"If you remove cargo from a ship you are lightening the ship."

Doesn`t an electrical discharge between sky and earth "remove the charge" of these areas in space?

It`s not nice to contest spelling on the internet.

Best regards, Richard Harrison, KB5WZI

578. Re: www.sauderelectronics.com now online!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 15:15:30 UTC
From: Delayed Thinking <delay@delaythinking.com>
Message-ID: <m2E_7.6058$DG5.68545@rwcrnsc53.ops.asp.att.net>
Source record: 151213
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

why do you put a link at the top of your homepage that links to your homepage?

also why is it broken.
Doesn't anyone check this stuff

"Ben Silverman" <ben@everyoneflydotcom> wrote in message news:Xns918DB7330711Ebeneveryoneflycom@209.249.90.101...
> Hello all,
>
> Just wanted to let everyone know that Sauder Electronics is now online with
> a secure catalog. This is the same Sauder Electronics you see at Hamfests
> and at the Dayton shows. Many of you have spoken with Kathy Sauder about
> getting a website together and she has finally delivered.
>
> Happy browsing, ordering, etc.
>
> http://www.sauderelectronics.com
>
> -Ben

579. Re: AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 15:19:00 UTC
From: richardharrison@webtv.net
Message-ID: <86-3C3B0DE4-281@storefull-113.iap.bryant.webtv.net>
Source record: 151215

Mark Keith says: Experiment!
Reg Edwards says: Alligator clips!
They have something!

About 40 years ago Japan was exporting crystal sets called rocket radios because they were made to look like toy rockets. They were permeability tuned. The knob was the rocket`s satellite payload. They had a high-impedance crystal earphone that pluged into the ear and an alligator clip lead or leads for making aerial or earth connections. The whole thing was smaller than most cigars and worked very well.

To me, the surprising thing was where a usable signal could be found with those alligator clips. Experimentation may yield similar surprises within the questioner`s building.

Best regards, Richard Harrison, KB5WZI

580. Re: AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 16:24:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1f85d$qdnnk$1@ID-124126.news.dfncis.de>
Source record: 151218

Richard Harrison wrote
> Mark Keith says: Experiment!
> Reg Edwards says: Alligator clips!
> They have something!
>
==========
Indeed they do. I've been using them for 60 years or more. They were invented before sliced bread.

On this side of the pond we refer to them as 'crocodile' clips.

Crocodiles inhabit the Nile. I understand alligators inhabit the swamps of Florida.

I have noticed when clipping on the turns of PA tank coils, in a strong RF magnetic field, it ie easy to get thumb and forefinger burnt if the clip's base material is steel. So if there's a choice prefer the brass variety because they run cooler in that application.

You won't find THAT advice in ARRL books, Always glad to be of practical help.

Reg, G4FGQ

581. google java gis open source

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 16:29:13 UTC
From: Greg Blair <gblair@sympatico.ca>
Message-ID: <3C3B1E59.D7FAF8E6@sympatico.ca>
Source record: 151217

Hello Philip,

I just did a google search on "java gis open source" and it found many pages of hits.

I noticed OpenMap on the first page of hits.

I think the JCS contract should use something like OpenMap as its UI. We would have to add the readers and writers specified in the contract to OpenMap. The alternative is to spend time building a custom UI that only supports the mapping functions required to satisfy the JCS contract. If we don't graft JCS/JTS onto an existing GIS UI, we would still have to build something that would handle map display, zooming, and editing.

OpenMap has a rich set of reading, querying, display, and map saving functions. It would be a good start. Some of the other open source packages may be a better start.

Cheers, Greg

582. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 16:39:30 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1f85f$qdnnk$2@ID-124126.news.dfncis.de>
Source record: 151219

MF broadcasters use vertical antennas for two reasons only - they radiate most strongly along the horizontal, ie., a strong groundwave, and they are omnidirectional.

This was known long before BL&E.

It so happens only one mast is needed and it is sound economics to use the mast as the radiator instead of using it just to hold up the wire.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Richard Harrison <richardharrison@webtv.net> wrote in message
news:14975-3C3AFF7D-207@storefull-111.iap.bryant.webtv.net...
> Mark Hall wrote:
> "---ANY worthwhile attribute of a ground counterpoised vertical for HF?"
>
> Medium wave broadcasters early in the development of their business
> found greater efficiency in the vertical radiator, combined with a good
> ground system, than other antenna systems gave.
>
> If you want to launch waves parallel with the surface of the earth, the
> vertical is for you. If you want to launch waves at only small angles
> with the surface of the earth, say 5 degrees or 10 degrees, as may be
> useful for long distance sky wave propagation, the vertical may be for
> you. Good earth conductivity and an efficient ground connection are
> needed with a 1/4-wave vertical.
>
> A horizontal antenna over sea water at heights under 1/2-wavelength does
> poorly.
>
> Two figures in the 19th edition of the ARRL Antenna Book compare
> horizontal and vertical 1/2-wave antennas better than words can. See Fig
> 4A and 4B on page 3-5.
>
> Best regards, Richard Harrison, KB5WZI
>

583. Re: AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 18:19:40 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C3B383C.DA144C01@IEEE.org>
Source record: 151220

Reg Edwards wrote:
> Crocodiles inhabit the Nile. I understand alligators inhabit the swamps of
> Florida.

Actually, Florida also has crocodiles. It's the only natural place in
the world where an alligator can meet a crocodile in person, as it were.
I wonder if they know they are genetic cousins?
--
cheers, CAM http://www.qsl.net/w5dxp

584. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 18:23:58 UTC
From: Alan White <alannc44@ix.netcom.com>
Message-ID: <2PG_7.31277$Cd6.6485349@typhoon1.southeast.rr.com>
Source record: 151130

The shoreline changes too much with evaporation and rain. Hundreds of yards
in some cases.

Alan WN4HOG
--
Windsurfing Club: http://www.ibscc.org
Homepage: http://pw1.netcom.com/~alannc44/qsl.htm

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:3c3a3cd2_3@news1.prserv.net...
> I don't think there is any privately owned property along the shoreline.
>
> --
> Crazy George
> Remove NO and SPAM from return address
> CAM <Cecil.A.Moore@IEEE.org> wrote in message
> news:3C39F3ED.1BA19614@IEEE.org...
> > 'Doc wrote:
> > > As a matter of fact, no. There are no hams living on the
> > > shores of the Great Salt Lake.
> >
> > Because?
> > --
> > cheers, CAM http://www.qsl.net/w5dxp
>
>

585. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 18:29:22 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <6jem3ucp4v85c1to9pcjo2cq690d10e701@4ax.com>
Source record: 151221

On Tue, 8 Jan 2002 16:39:30 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>This was known long before BL&E.
>

Poor Punchinello,

Living in the shadow of BL&E.

If you would only pull those recipes out from under your apron....

73's
Richard Clark, KB7QHC

586. Re: AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 18:33:21 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <vnem3ukj6knae4t1kskdfpul03djkq1p48@4ax.com>
Source record: 151222

On Tue, 8 Jan 2002 09:19:00 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Mark Keith says: Experiment!
>Reg Edwards says: Alligator clips!
>They have something!
>
>About 40 years ago Japan was exporting crystal sets called rocket radios
>because they were made to look like toy rockets. They were permeability
>tuned. The knob was the rocket`s satellite payload. They had a
>high-impedance crystal earphone that pluged into the ear and an
>alligator clip lead or leads for making aerial or earth connections. The
>whole thing was smaller than most cigars and worked very well.
>
>To me, the surprising thing was where a usable signal could be found
>with those alligator clips. Experimentation may yield similar surprises
>within the questioner`s building.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

You speak of a toy I got for christmas back then.

Living in Pacific Manor, south of Frisco, I recall hearing the Coast
Guard on my rocket.

73's
Richard Clark, KB7QHC

587. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 19:17:59 UTC
From: richardharrison@webtv.net
Message-ID: <27475-3C3B45E7-100@storefull-114.iap.bryant.webtv.net>
Source record: 151223

Reg wrote:
"MF broadcasters use vertical antennas for two reasons only - they radiate most strongly along the horizontal,ie., a strong groundwave, and they are omnidirectional.

This was known long before BL&E."

True. Early broadcasters often used a T antenna. The horizontal section was a capacitive load ffor the vertical wire. As Reg noted, only one tower was used to replace two needed to suspend the T antenna, when the switch to the base insulated radiator was made.

BL&E answered the question as to how best make the earth connection for the vertical antenna.

Best regards, Richard Harrison, KB5WZI

588. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 20:30:55 UTC
From: KC8JBO <kc8jbo@alt.net>
Message-ID: <a1fpqc$7fr$4@dosa.alt.net>
Source record: 151227
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"phil" <phil@phil.com> wrote in message
news:u3kao55t65hoae@corp.supernews.com...
> paranoid? i watched that movie with sandra bullock. it could happen. i'm
not
> paranoid... AAAAAAAAHHHHHHHHH THEY'RE AFTER ME :P

LOL!!!!

589. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 20:57:44 UTC
From: n7ws@yahoo.com
Message-ID: <3c3b4d90.18635946@news.triconet.org>
Source record: 151224

On Tue, 8 Jan 2002 08:43:54 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

|
|It`s not nice to contest spelling on the internet.

Deer Richard,

I mussed ask, "Wye knot?"

Eye dew it awl the tyme. Aye think it madders when people due knot no how too right wright because it makes it two hard to reed. Won miner misteak mite bee aloud two stand awn occasion butt know more.

Sew now may bee ewe sea what I mien.

Buy, by

Wes

590. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 21:35:47 UTC
From: mike coslo <mjc5@psu.edu>
Message-ID: <3C3B6633.60EF9B5A@psu.edu>
Source record: 151225
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

I'd like to watch a movie with Sandra bullock too. I wonder if she's
free tonight?

- mike -

phil wrote:
>
> paranoid? i watched that movie with sandra bullock. it could happen. i'm not
> paranoid... AAAAAAAAHHHHHHHHH THEY'RE AFTER ME :P

591. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 21:41:43 UTC
From: aa1ll@email.com
Message-ID: <e85be400.0201081341.5812bdf0@posting.google.com>
Source record: 151226

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<a1b8n4$pk23b$1@ID-124126.news.dfncis.de>...
> It is popularly understood that an increase in soil resistivity always
> results in increased losses in the ground such as the ground in the vicinity
> of a vertical antenna.
>
> But this cannot be true because when soil resistivity increases to the point
> when it can be considered to be an insulator the ground loss becomes very
> small again. Soil permittivity causes radiation to be reflected or refracted
> with little loss back towards to the sky.
>
> So there must be some value of soil resistivity at which ground loss is at
> its maximum. What is it ? Is that the value in YOUR back yard? Should you
> consider moving house?
> ---
> Reg

The problem is not completely defined. You have to know what the
grounded side of the unbalanced antenna feedline connects to. If it
goes to a stake driven into the soil, then low resistivity (high
conductivity) is good; if it goes to a ground "plane" made of highly
conductive radials, then the popular understanding that "an increase
in soil resistivity always results in increased losses" is incorrect.
The problem also ignores the dielectric constant of the soil which, if
very large, negates losses associated with soil resistivity.
With the introduction of parameters for these other variables, a peak
(or valley) in a plot of efficiency vs. ground conductivity could
probably be found for a given antenna and grounding (plane or stake)
geometry, but you'd probably miss several payments on your mortgage
trying to figure it out and have to move anyway.

73, Paul, AA1LL
Mason, NH
http://www.qsl.net/aa1ll

592. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 21:55:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1fq4s$qfef9$1@ID-124126.news.dfncis.de>
Source record: 151228

For a given antenna, there is always a soil conductivity/resistivity at
whixh ground losses are at a maximum.

Just as there is always a load resistance in which maximum power is
generated when connected to a given generator.

Reg, G4FGQ

593. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 22:02:33 UTC
From: KC8JBO <kc8jbo@alt.net>
Message-ID: <a1fut9kpq0@dosa.alt.net>
Source record: 151232
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"mike coslo" <mjc5@psu.edu> wrote in message
news:3C3B6633.60EF9B5A@psu.edu...
> I'd like to watch a movie with Sandra bullock too. I wonder if she's
> free tonight?
>
> - mike -

LOL!!!!! I'd like to watch one with Penelope Ann Miller or Carmen Electkra.

> phil wrote:
> >
> > paranoid? i watched that movie with sandra bullock. it could happen. i'm
not
> > paranoid... AAAAAAAAHHHHHHHHH THEY'RE AFTER ME :P

594. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 22:03:19 UTC
From: phil <phil@phil.com>
Message-ID: <u3mr1v69tide91@corp.supernews.com>
Source record: 151229
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

> I'd like to watch a movie with Sandra bullock too. I wonder if she's
> free tonight?

maybe tomorrow... she's driving a bus tonight. hey sandra, this is a
residential area... why are you going 55?

phil :p

595. Re: Lots of land and lots of wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 22:20:28 UTC
From: lbrty4us@aol.com
Message-ID: <205ef942.0201081420.16d53c84@posting.google.com>
Source record: 151230

k4ia@aol.comnojunk (K4IA) wrote in message
news:<20020105222732.05624.00004841@mb-fo.aol.com>...
> Before you go all loopy, why don't you check out the guru of antennas and see
> the real loop poop. What he has to tell will convince you to go inverted L.
> www.cebik.com

Might his page have changed? I found no such conclusion nor
comparison thereon, but rather a good comparison with centerfed dipole
performance. Likewise, his captioned article covering the inverted L
did not mention the large loop, and basically concluded that the L is
a good alternative for limited space. Kindly clarify "convince."

596. New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 22:35:55 UTC
From: dothetime@hotmail.com
Message-ID: <141e2b2a.0201081435.3773f8f2@posting.google.com>
Source record: 151231

I have a NEW never installed Hy-Gain 18 HTB 10-80 Meter Hy-Tower that has the Manual, original box (slightly tattered), all parts and a Stainless Steel Hardware kit in addition to the original hardware. The tower sections are still banded together. Base insulators are there too, it's complete! The only catch is I don't want to ship it, so please don't ask, it's a pickup only. I am 30 miles north of NYC, Pomona, NY. I may deliver it for expenses locally (30 miles) if you can't pick it up. It will go on a roof rack or in a van or pickup.
Hy-Gain is selling them now for $739.00
$400.00 gets it.
Dave K2DHK dothetime@hotmail.com

597. For Sale Heathkit SB-220 2kw hf $450

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 23:28:08 UTC
From: Porkfatsoup@hotmail.com
Message-ID: <4c37bccf.0201081528.634e0886@posting.google.com>
Source record: 151233

I have a Heathkit SB-220 amp for sale. Has just been professionally checked out and is in great shape. Has several of the mods and comes with
a spare 3-500z tube. Asking $450 location is in Chesapeake,Virginia willing to ship anywhere in usa.If your looking for a great amplifier that will give you years of service this is the one that will work for you.

598. New links !

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 23:34:01 UTC
From: Bernard Violi <f5lcy@libertysurf.fr>
Message-ID: <a1fvrg$2d2d$2@news5.isdnet.net>
Source record: 151234

```
New links added today at site :
http://f6keh.free.fr/index_r
```

599. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 23:37:06 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <xpL_7.436750$er5.16784798@e3500-atl2.usenetserver.com>
Source record: 151235

I would have to disagree with the concept of any so-called "tuner" or coupler actually tuning
the radiating elements to resonance. The only way to do that, unless I am just dead wrong, is
to physically lengthen or shorten the whip, dipole, or long wire to do that. While I don't mean
to put down tuner/couplers, nothing beats a resonant antenna. I still believe the various HI Q
HF antennas such as Bugcatchers and screwdrivers will stomp a coupler. Again, they do work
by reducing SWR, but they still exhibit losses, and you STILL have a non-resonant radiating
element out there

73

Jerry
K4KWH

Anthony Duffy <a.duffy@sympatico.ca> wrote in message
news:3C38AA59.4090601@sympatico.ca...
> From what I understand of this "antenna coupler", is that it's a self
> adjusting network installed at the base of the antenna. It works with
> the elements connected to the terminals the same way adjusting a tuning
> network at the base of the antenna does. The handy thing is that it's
> automatic, actually tunes the elements to resonance instead of faking
> the radio into thinking it has a good SWR (ie; antenna tuner at the
> radio), and can be used on any radio with a minimum of a 3 watt output
> (for this model). It can also be used with allot of different styles of
> antenna including a multi or single turn loop.
>
> It's going to be my next acquisition too.
>
> As for the down side, any antenna that is reduced in size and
> compensated for using coils and caps will be less efficient (some more
> then others). But not as bad as using traps from what I've read (and the
> antenna is still quite large). Oh, and it does have minimum radiator
> lengths depending on what band your going to be using it on.
>
> If you'd like a better idea on how it works go to SGC World. There is a
> link to their publications where they have downloadable manuals and also
> one on using their products with stealth antennas. It was an
> interesting read.
>
> 73, Tony

> VA3ATD
> London, Ontario.
>
> Kodiak Bear wrote:
>
> > I'm considering purchasing an SG-239 Smartuner and wondered if anyone
has
> > experince with this tuner good or bad. Does it work as advertised or is
it
> > oversold? What gotcha's are there with this piece of equip? Does it
work
> > with a Yaesu FT-847? Does it work with an ICOM-706MKIIG?
> >
> > Thank you,
> >
> > Don, KC8RDO
> >
> >
> >
>

600. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-08 23:52:56 UTC
From: Anthony Duffy <a.duffy@sympatico.ca>
Message-ID: <3C3B8658.5030302@sympatico.ca>
Source record: 151236

I have to agree with there on having a resonant antenna is best, but in limited space etc they can help out the same as inserting an L-Network at the base of some antenna designs does. Even the screwdriver antenna uses a very large coil to tune an 8' whip antenna that would resonate on 10m down to 80m. These outfits just happen to switch coils and caps in and out to do the same thing. And as a bonus that are automatic to boot :-) !

73, Tony
VA3ATD
London, Ontario

"Necessity is the mother of all invention" and HAM Radio too!

Jerry Oxendine wrote:

> I would have to disagree with the concept of any so-called "tuner" or
> coupler actually tuning
> the radiating elements to resonance. The only way to do that, unless I am
> just dead wrong, is
> to physically lengthen or shorten the whip, dipole, or long wire to do that.
> While I don't mean
> to put down tuner/couplers, nothing beats a resonant antenna. I still
> believe the various HI Q
> HF antennas such as Bugcatchers and screwdrivers will stomp a coupler.
> Again, they do work
> by reducing SWR, but they still exhibit losses, and you STILL have a
> non-resonant radiating
> element out there
>
> 73
>
> Jerry
> K4KWH
>
>
> Anthony Duffy <a.duffy@sympatico.ca> wrote in message
> news:3C38AA59.4090601@sympatico.ca...
>
>>From what I understand of this "antenna coupler", is that it's a self
>>adjusting network installed at the base of the antenna. It works with
>>the elements connected to the terminals the same way adjusting a tuning
>>network at the base of the antenna does. The handy thing is that it's
>>automatic, actually tunes the elements to resonance instead of faking
>>the radio into thinking it has a good SWR (ie; antenna tuner at the

>>radio), and can be used on any radio with a minimum of a 3 watt output
>>(for this model). It can also be used with allot of different styles of
>>antenna including a multi or single turn loop.
>>
>>It's going to be my next acquisition too.
>>
>>As for the down side, any antenna that is reduced in size and
>>compensated for using coils and caps will be less efficient (some more
>>then others). But not as bad as using traps from what I've read (and the
>>antenna is still quite large). Oh, and it does have minimum radiator
>>lengths depending on what band your going to be using it on.
>>
>>If you'd like a better idea on how it works go to SGC World. There is a
>>link to their publications where they have downloadable manuals and also
>> one on using their products with stealth antennas. It was an
>>interesting read.
>>
>>73, Tony
>>VA3ATD
>>London, Ontario.
>>
>>Kodiak Bear wrote:
>>
>>
>>>I'm considering purchasing an SG-239 Smartuner and wondered if anyone
>>>
> has
>
>>>experince with this tuner good or bad. Does it work as advertised or is
>>>
> it
>
>>>oversold? What gotcha's are there with this piece of equip? Does it
>>>
> work
>
>>>with a Yaesu FT-847? Does it work with an ICOM-706MKIIG?
>>>
>>>Thank you,
>>>
>>>Don, KC8RDO
>>>
>>>
>>>
>>>
>
>
>

601. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 00:02:59 UTC
From: Krell <krell1215@yahoo.com>
Message-ID: <a1g19s030k3@enews2.newsguy.com>
Source record: 151237
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

She's never free. In fact, she's very expensive.

"mike coslo" <mjc5@psu.edu> wrote in message
news:3C3B6633.60EF9B5A@psu.edu...
> I'd like to watch a movie with Sandra bullock too. I wonder if she's
> free tonight?
>
> - mike -
>
> phil wrote:
> >
> > paranoid? i watched that movie with sandra bullock. it could happen. i'm
not
> > paranoid... AAAAAAAAHHHHHHHHH THEY'RE AFTER ME :P

602. FM stereo antenna.....horiz. or vert. ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 00:51:44 UTC
From: carkenord@juno.com
Message-ID: <4346b55e.0201081651.4f804ec4@posting.google.com>
Source record: 151238

I am going to make a folded dipole to help in the reception of a
fringe-area FM broadcast station.

Should this folded dipole be erected vertically, or horizontally?

Thank you........ KA0FPJ

603. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 00:52:24 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C3B9448.2C19471C@IEEE.org>
Source record: 151239

Jerry Oxendine wrote:
> While I don't mean to put down tuner/couplers, nothing beats a resonant antenna.

Jerry, a non-resonant antenna will radiate just as well as a resonant one.
A non resonant 102 ft dipole fed with ladder-line on 40m is essentially
just as efficient a radiator as a resonant 40m dipole fed with coax.

K7JEB runs a Texas Bugcatcher mobile with an SGC-230 tuner used for
broadbanding. The difference between the performance at resonance
and the performance off resonance is measurable but essentially
negligible.
--
cheers, CAM http://www.qsl.net/w5dxp

604. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 00:58:16 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C3B95A8.463796E5@IEEE.org>
Source record: 151240

Anthony Duffy wrote:
>
> I have to agree with there on having a resonant antenna is best, but in
> limited space etc they can help out the same as inserting an L-Network
> at the base of some antenna designs does. Even the screwdriver antenna
> uses a very large coil to tune an 8' whip antenna that would resonate on
> 10m down to 80m. These outfits just happen to switch coils and caps in
> and out to do the same thing. And as a bonus that are automatic to boot
> :-) !

One advantage that the very large screwdriver coil has is that it radiates.
The iron core toroidal coils in the SGC don't radiate much. Another factor
is that a screwdriver antenna is center-loaded while an SGC driven antenna
is base loaded. I measured an SGC driven whip in a 75m mobile shootout.
It was 14 dB down from a Bugcatcher plus top hat. Virtually all of the
RF power was soaked up by the SGC.
--
cheers, CAM http://www.qsl.net/w5dxp

605. MFJ-259B Servicing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 01:01:37 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C3B9669.1741FBF5@shaw.ca>
Source record: 151241

Has anyone any information on the MFJ-259B SWR Analyzer that
would be of value
in servicing/maintaining the unit?

Any assistance would be greatly appreciated. Thanks in
advance...
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

606. Re: FM stereo antenna.....horiz. or vert. ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 01:05:48 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a1g4slgvc1@bob.news.rcn.net>
Source record: 151242

"Lee Carkenord" <carkenord@juno.com> wrote:

> I am going to make a folded dipole to help in the reception of a
> fringe-area FM broadcast station.

You would be better off buying a cheap yagi...

> Should this folded dipole be erected vertically, or horizontally?

It should match the polarization of the transmitting antenna.
The http://www.fcc.gov database lists the polization for all
of the licensed stations in the USA, so check there. Most
of them use circular polarlization, so trial and error is your
best bet there. Most pirates use verticals. Check out
alt.radio.pirate for more details.

Mark Walsh ***** mark@km6xu.com ***** http://www.km6xu.com

607. Re: MFJ-259B Servicing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 01:30:34 UTC
From: dinoal7lz@aol.com
Message-ID: <20020108203034.05388.00000770@mb-mq.aol.com>
Source record: 151243

Irv---did you get copy of the article regarding servicing the 259 (freq and SWR calibration) I sent you a week or so ago in response to your first request? Friend of mine and I co-authored it; applies to the early model boxes.

Dino KLï¿½S/4

608. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 02:07:23 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a1g8krmrh6@quark.scn.rain.com>
Source record: 151245

Richard Harrison <richardharrison@webtv.net> wrote:
> Bill Nelson wrote:
> "If you remove cargo from a ship you are lightening the ship."

> Doesn`t an electrical discharge between sky and earth "remove the
> charge" of these areas in space?

It certainly lightens the sky.

> It`s not nice to contest spelling on the internet.

Did I contest spelling anywhere in the above?

--
Bill Nelson (billn@peak.org)

609. Re: Which Came First?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 02:11:43 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3BA6DF.D5FC0C1D@coqui.net>
Source record: 151246
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Al Lorona wrote:
>
> I'm just curious: is it correct to assume that the current AM broadcast
> band is really the best choice of frequency for the desired
> characteristics for that service? In other words, was 540-1600 kHz
> (before expansion to 'AM wide' a few years ago) chosen first, and then
> the stations placed there? Or did the stations begin operation in that
> frequency band and just happened to choose a good ground wave frequency
> band for local broadcasting?

I think the latter is closer to the explanation. Actually in the
earliest days it wasn't a 'band' in that context. 360 meters was the
norm for nearly ALL broadcast stations in June 1922 for instance. By
the following year they began spreading out but even still only a scant
few dared go above 1300 kc.

All the while in the early 20s there was an ongoing battle between
amateurs (many of which evolved into broadcasters) and commercial
stations. Hamming for ham-sake scuttled off above 200 meters as their
operating became a pest for broadcast listeners.
Here is an excellent page from an excellent site detailing the creation
of the broadcast band.
http://www.ipass.net/~whitetho/buildbcb.htm
Here's another good page
http://members.aol.com/jeff560/jeff.html

Happy reading,
-Bill

610. Re: FM stereo antenna.....horiz. or vert. ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 02:13:25 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3BA745.EA5DAA5B@coqui.net>
Source record: 151247

Lee Carkenord wrote:
>
> I am going to make a folded dipole to help in the reception of a
> fringe-area FM broadcast station.
>
> Should this folded dipole be erected vertically, or horizontally?
>
> Thank you........ KA0FPJ

Generally horizontally.
-Bill

611. Re: FM stereo antenna.....horiz. or vert. ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 02:30:45 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Yag7PAm5K0waK7canoJFNADpOD1k@4ax.com>
Source record: 151248

carkenord@juno.com (Lee Carkenord) wrote:

>I am going to make a folded dipole to help in the reception of a
>fringe-area FM broadcast station.
>
>Should this folded dipole be erected vertically, or horizontally?
>
>Thank you........ KA0FPJ

I'd just get the Radio Shack 6-element FM beam, #15-2163, for all of $19.99. Lay it down in the attic, pointed at the transmitting site; feed with cheapo 300-ohm line...

Bob
k5qwg

612. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 02:54:57 UTC
From: Anthony Duffy <a.duffy@sympatico.ca>
Message-ID: <3C3BB101.9030106@sympatico.ca>
Source record: 151249

That's interesting... I thought the screwdriver antenna was base loaded,
or at least it looks like it. The SG coupler suggests using the whip
antenna on 40m and up and 23' of wire for 80m and up as a minimum. The
manual for the LDG version mentions that it was designed to be used to
take an antenna and resonate it 1 band above and below it's design, i.e.
a 40m antenna for use on 80m & 20m. For Wire antennas and ladder line
fed antennas there is a 4:1 balun available.

73, Tony

CAM wrote:

> Anthony Duffy wrote:
>
>>I have to agree with there on having a resonant antenna is best, but in
>>limited space etc they can help out the same as inserting an L-Network
>>at the base of some antenna designs does. Even the screwdriver antenna
>>uses a very large coil to tune an 8' whip antenna that would resonate on
>>10m down to 80m. These outfits just happen to switch coils and caps in
>>and out to do the same thing. And as a bonus that are automatic to boot
>>:-) !
>>
>
> One advantage that the very large screwdriver coil has is that it radiates.
> The iron core toroidal coils in the SGC don't radiate much. Another factor
> is that a screwdriver antenna is center-loaded while an SGC driven antenna
> is base loaded. I measured an SGC driven whip in a 75m mobile shootout.
> It was 14 dB down from a Bugcatcher plus top hat. Virtually all of the
> RF power was soaked up by the SGC.
>

613. Re: Quad vs. Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 03:40:43 UTC
From: me@here.com
Message-ID: <3c3bb95e.109012528@news.mindspring.com>
Source record: 151250

Hello Bill,
Happy 4 el Quad owner here. I've had a stack of a 105ba and 115ba at 70 feet. I then replaced them with a 4 element Cubex. One obvious advantage that comes to mind (me personally) I needed to lower the overall windloading. So, 3 bands with monoband performance on one boom was a winner. My antenna was up for 4 years and I lost 2 wire elements predictably because they were alluminum wire. Now at a new Qth and a new installation with coperweld 14 awg wire, I'm convinced it will stay up for quite a while. Durring hurricane Opal, I got some cool photos of the yagis' elements culing back like blown grass. The quad I have witnessed barely moved durring some of the fiercest March thunderstorms to rip through Georgia. There is a slight difference in recieve noice to sig. However, this is the most powerful antenna I have never had to enhance with the use of an amplifier... nuf said. Try finding someone who has one and put your ears to it. I'd be happy to let you try mine :)
cheers,
de Mike
KR4TG

On 14 Dec 2001 12:55:11 -0800, bill@hovac.com (Bill -N4DXR-) wrote:

>Hi to the group,
>
>I presently have a 4 element (trapped) 10-15-20 tribander. I am
>considering a 5 band 2 element quad (10-12-15-17-20).
>
>I have read that the quad performs better at lower heights than a yagi
>and doesnt' receive as much "noise" as the yagi. My antenna is at 43
>feet.
>
>The gain on both antennas is very close.
>
>The only negative I can see of the quad is it doesn't handle bad
>weather as well as the yagi. However, I was monitoring a QSO in which
>one of the hams was from Alaska. He was using a quad and said it held
>up to the wind and ice just fine.
>
>I would like to hear from the group's experience and knowledge of the
>pros and cons of these two antennas in comparison to each other.
>
>Thanks and Happy Holdiays!
>Bill

614. Re: MFJ-259B Servicing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 04:03:07 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C3BC0F4.B0BA6FA8@shaw.ca>
Source record: 151251

Dino AL7LZ wrote:

> Irv---did you get copy of the article regarding servicing the 259 (freq and SWR
> calibration) I sent you a week or so ago in response to your first request?
> Friend of mine and I co-authored it; applies to the early model boxes.
>
> Dino KLï¿½S/4

Yes Dino, thanks. The 259B board is very different and bears little relationship to the 259. Darn it! I thought your article would take care of it all, but no such

luck. I've hung on to your article though -- I spend a lot of time servicing stuff for
the local ham community and I've learned to hang on to good information just in case!
Thanks again.

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

615. Re: Looking for SG-239 Smartuner feedback, pros and cons

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 04:31:04 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C3BC788.C93DDA4F@IEEE.org>
Source record: 151252

Anthony Duffy wrote:
>
> That's interesting... I thought the screwdriver antenna was base loaded,
> or at least it looks like it.

I use a three ft optional extension on the bottom of mine. Thus, the
center loading. In any case, the sleeve that covers the coil is part
of the bottom radiating section below the coil.

> The SG coupler suggests using the whip
> antenna on 40m and up and 23' of wire for 80m and up as a minimum.

Seems if it is 23' minimum on 80m, it would be 11.5' minimum on 40m.
An SGC-230 plus a 11.5' whip would be a little over one S-unit down
from a screwdriver on 40m.
--
cheers, CAM http://www.qsl.net/w5dxp

616. Re: MFJ-259B Servicing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 04:36:22 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C3BBC2F.D2CC579D@worldnet.att.net>
Source record: 151253

Dino AL7LZ wrote:

> Irv---did you get copy of the article regarding servicing the 259 (freq and SWR
> calibration) I sent you a week or so ago in response to your first request?
> Friend of mine and I co-authored it; applies to the early model boxes.

Hi dino, could I ask you to send me that information also? Tnx in advance.

73, Dick W0EX

617. Re: Which Came First?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 04:38:38 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a1ghbl$d2a$1@bob.news.rcn.net>
Source record: 151254
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Al Lorona" <al_lorona@agilent.com> wrote:

> I'm just curious: is it correct to assume that the current AM broadcast
> band is really the best choice of frequency for the desired
> characteristics for that service?

Oscillator technology was a limiting factor in the early 1920s.
There is a great book called, "200 Meters and Down"
(available from the ARRL and elsewhere) that is a good
read with lots of interesting history. Check it out!

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

618. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 05:18:32 UTC
From: richardharrison@webtv.net
Message-ID: <2249-3C3BD2A8-130@storefull-115.iap.bryant.webtv.net>
Source record: 151256

Reg wrote:
"For a given antenna, there is always a soil conductivity / resistivity at which ground losses are at a maximum.

Just as there is always a load resistance in which maximum power is generated when connected to a given generator."

That seems to be an affirmation of the maximum power transfer theorem.

The antenna is not the source to be matched by the ground system. A transmitter feeds a resistance which is the total of the radiation resistance and loss resistances. The antenna is 100% efficient if there is no loss. The antenna is 0% efficient if the radiation resistance is zero.

Say, we have an antenna with a radiation resistance of 28.6 ohms. Say, the antenna element and its matching network are lossless.

Our ground system won`t be lossless. Let`s use ON4UN`s Table 9-2 in "Low-Band DXing". For 2 radials of 0.15-wavelength, the equivalent resistance to ground is 28.6 ohms. For 120 radials of 0.4-wavelength, the equivalent resistance is equivalent to 0.1 ohm.

Say, the transmitter can deliver its maximum power of 100 watts into 50 ohms, and we have a tuner to make our antenna load appear as 50 ohms to the transmitter.

The tuner delivers 100 watts to a series combination of two resistors, the radiation resistance of 28.6 ohms and the radials` equivalent resistance, which depends on their number and length.

With ON4UN`s 120 radials of 0.4-wavelength, we only add 0.1 ohm to the 28.6 ohm radiation resistance of the antenna when we add the ground system to the total. When 100 watts feeds this system, less than 1/2 watt is lost in the ground system. Nearly all of the 100 watts is radiated.

With ON4UN`s 2 radials of 0.15-wavelength, we add 28.6 ohms to the 28.6 ohm radiation resistance of the antenna and 50%, 50 watts, is lost in the ground system. Of course, that`s only 3db or half an "S"-unit.

Best regards, Richard Harrison, KB5WZI

619. Re: Quad vs. Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 05:41:58 UTC
From: vswrref@hotmail.com
Message-ID: <3c3bd455.21220899@national-news.stargate.net>
Source record: 151255

Hi all.

I'd have to throw in my 2 cents, it's not about the performance between yagis and quads, it's about how amazed I am to see how many people fail to correctly point a yagi so that there is minimal windload. I know sometimes this may be hard to do, timewise, if a storm is fast approaching. When I can tell which direction the winds are coming, or storm is approaching, point the element ends into the the direction of the approaching winds. Windload on the boom is minimal compared to 3, or more elements, on it all facing the the wind. I had 4 storms blow through my location, in 23 years, with 80 to 85 MPH clocked at the local airport, about 3 miles away, and the antenna barely budged, lightly bouncing at the most. Quite obvious when you see an antenna's elements "culing back like blown grass" something is amiss.

I tried an experiment one time and I made a scale model of the yagi I have. I made a crude windtunnel from a 20 inch fan and kicked it up to high and placed the antenna on a post so it would swivel. Whenever the fan would be turned on, the antenna "rotated" and locked into what it saw as "least resistance" and stayed there like a compass finding North.

So a helpful hint. The next time there is a strong wind or storm, watch out for the lightning!, point your element ends into the wind and take a look. Wait for the nexxt storm, I wouldn't recommend rotating anything while a storm is in progress, then rotate the beam head on into the winds and see the difference.

Jeff Y.

On Wed, 09 Jan 2002 03:40:43 GMT, me@here.com (skyhi) wrote:

>
>Hello Bill,
>Happy 4 el Quad owner here. I've had a stack of a 105ba and 115ba at
>70 feet. I then replaced them with a 4 element Cubex. One obvious
>advantage that comes to mind (me personally) I needed to lower the
>overall windloading. So, 3 bands with monoband performance on one boom
>was a winner. My antenna was up for 4 years and I lost 2 wire elements
>predictably because they were alluminum wire. Now at a new Qth and a
>new installation with coperweld 14 awg wire, I'm convinced it will
>stay up for quite a while. Durring hurricane Opal, I got some cool
>photos of the yagis' elements culing back like blown grass. The quad I
>have witnessed barely moved durring some of the fiercest March
>thunderstorms to rip through Georgia. There is a slight difference in

>recieve noice to sig. However, this is the most powerful antenna I
>have never had to enhance with the use of an amplifier... nuf said.
>Try finding someone who has one and put your ears to it. I'd be happy
>to let you try mine :)
>cheers,
>de Mike
>KR4TG
>
>
>On 14 Dec 2001 12:55:11 -0800, bill@hovac.com (Bill -N4DXR-) wrote:
>
>>Hi to the group,
>>
>>I presently have a 4 element (trapped) 10-15-20 tribander. I am
>>considering a 5 band 2 element quad (10-12-15-17-20).
>>
>>I have read that the quad performs better at lower heights than a yagi
>>and doesnt' receive as much "noise" as the yagi. My antenna is at 43
>>feet.
>>
>>The gain on both antennas is very close.
>>
>>The only negative I can see of the quad is it doesn't handle bad
>>weather as well as the yagi. However, I was monitoring a QSO in which
>>one of the hams was from Alaska. He was using a quad and said it held
>>up to the wind and ice just fine.
>>
>>I would like to hear from the group's experience and knowledge of the
>>pros and cons of these two antennas in comparison to each other.
>>
>>Thanks and Happy Holdiays!
>>Bill
>
>
>

620. Butternut HF5V-III wont tune on 20 Meters pse help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 06:16:08 UTC
From: Eric Bourlet <ebourlet@gte.net>
Message-ID: <IeR_7.482$gt2.156612@dfiatx1-snr1.gtei.net>
Source record: 151257

I have recently resurrected an old Butternut HF5v-III. My problem is that it will not work on 20 Meters. The manual says that it should have a low SWR on the entire 20 meter band and no tuning is required. I have the 1/4 wave 75 ohm section and measured the velocity factor so I know its the proper length. Do you have any Idea what other problems there may be ? I am feeding it with a 30' section of rag-58. Thanks for any ideas you can provide.
WB7OYL

621. Vertical tuned with AH-4 - Question on radials

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 06:37:41 UTC
From: jim@bay-tech.com
Message-ID: <3c3be369.272385499@news.uslink.net>
Source record: 151258

I'm planning a vertical tuned remotly with an ICOM AH-4 remote tuner.

This will be an element of about 24' so as to avoid 1/2 wavelengths on the frequencies to be used as suggested by Icom so the tuner will work properly.

While I understand the importance of radials, I'm at a loss in this case as to how long they should be.

The antenna will be used on 160 thru 10 and the AH-4 will tune the vertical element - but what about the radials? Should they be 1/4 wavelength for each of the bands to be worked or should they be 24' also like the vertical element?

Help!

Jim WA0AXB

622. ant tuner ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 06:49:44 UTC
From: Jim <kg4enu@carolina.rr.com>
Message-ID: <31qn3ug6geeff1jpcsl1nct4m9h9fvm06h@4ax.com>
Source record: 151261

does anybody know of a good/excellent 6M/HF antenna tuner (not MFJ)..that sells for under $250.00.???

Thanks

Jim-kg4enu

623. WTB:Mckay Dymek DA3, DA5, DA7, or DA9 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 06:49:49 UTC
From: Daniel Simpson <dzan@qwest.net>
Message-ID: <090120020049490471%dzan@qwest.net>
Source record: 151260

WTB:Mckay Dymek DA3, DA5, DA7, or DA9 antenna

please email me at

dzan@qwest.net

624. Single wire antenna on crappy radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 06:50:48 UTC
From: sander wissing <zsl103@icon.co.za>
Message-ID: <a1goujian1@ctb-nnrp1.saix.net>
Source record: 151259

Hi all,

Sorry for another stupid question, but here goes ...

I have a crappy radio that I use to listen to HF, with a single wire antenna. I want to put up an antenna for 20m, but don't know how to connect the incoming co-ax to the radio. Does the single wire represent the co-ax core? And if so what do I do with the other connection?

Thanks
Sander
ZSL103

625. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 08:32:44 UTC
From: ab528@FreeNet.Carleton.CA
Message-ID: <a1gv7c$7t9$1@freenet9.carleton.ca>
Source record: 151262

Wes Stewart (n7ws@yahoo.com) writes:
> Deer Richard,
> I mussed ask, "Wye knot?"
> Eye dew it awl the tyme. Aye think it madders when people due knot no how too
> right wright because it makes it two hard to reed. Won miner misteak mite bee
> aloud two stand awn occasion butt know more.
> Sew now may bee ewe sea what I mien.
> Buy, by
> Wes

Damn, that speech recognition software is wonderful. We'll forgive
the fact that it buggered up the spelling of 'Wes' though.

626. Re: 21~50 MHz Quad EZNEC Model

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 08:47:49 UTC
From: post_to_usenet@hotmail.com
Message-ID: <b6b4e772.0201090047.6aed54dd@posting.google.com>
Source record: 151263
Body handling: Inline uuencoded payload not displayed: quad.zip

This should contain the (zipped) EZNEC model file

If your newsreader does not show the attachment and you
can see the encoded file below, save the whole message as a
TEXT file with extension .UUE, the open with WinZip.

(I do not know if the etiquette in this group allows for
posting binaries, but since it is very small -230 bytes-
and completelly related to antennas, I hope it is OK)

Toni

[Inline uuencoded payload not displayed: quad.zip]

627. Re: Which Came First?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 09:09:21 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3C3C08C1.3090501@mwci.net>
Source record: 151264
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Al Lorona wrote:

> I'm just curious: is it correct to assume that the current AM broadcast
> band is really the best choice of frequency for the desired
> characteristics for that service? In other words, was 540-1600 kHz
> (before expansion to 'AM wide' a few years ago) chosen first, and then
> the stations placed there? Or did the stations begin operation in that
> frequency band and just happened to choose a good ground wave frequency
> band for local broadcasting?
>
> I've been reading some of the history of KDKA, which of course was the
> first commercial broadcast station in Pittsburgh in 1920 (on 360 meters,
> according to the original FCC license), and it seems that the
> Westinghouse engineers knew that starting around 1500 kHz ground losses
> increased, making those frequencies less useful for local reception.
> (They apparently didn't know about sky wave propagation). But aside from
> that, is there anything magical about the current broadcast band that
> makes it the best choice?
>
> Thanks,
>
> Al W6LX
>

1) The sizes (dimensions)of the transmit and
receive antennas were reasonable for the BC band,

2) In the early 1920s receiver and transmitter
design and available components were OK for the BC
band frequencies, but not OK at short wave
frequencies.

A good example is FM, which was moved from the 40
kHz region to the 100 MHz region after WWII.
Technology improvements made it possible

Bill W0IYH

628. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 10:27:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1h7ad$qecku$1@ID-124126.news.dfncis.de>
Source record: 151265

Hi Rich,
So you don't disagree wuth the maximum power theorem.

Reg

629. Re: any info about EH?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 10:59:26 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a1h7qe$885$1@serra.unipi.it>
Source record: 151266

First of all I whish to thank all people who answered.

'Doc <w5lz@icok.net> wrote:

> Francesco,
> I am afraid you will find no scientific tests of the 'EH'
> antenna
> that are not compromised in some way. All of the testing done to
> date
> have faults. It can be compared to the 'CFA' antenna in this
> regard.

A friend of mine, a physicist and amateur radio operator for long time,
constructed an EH antenna and this antenna seems not working at all
(signals are 20dB lower than those obtained with a full lenght dipole
installed low over the ground and somewhat folded for space reasons).
I was just curious to know if anyone else conducted similar test
knowing what he/she was doing (as my friend without no doubts did).

Thanks again and best regards.

Francesco IZ5DWF

630. Re: Which Came First?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 12:17:08 UTC
From: Jim <w2mmr@nc.rr.com>
Message-ID: <8xW_7.34381$Cd6.7436126@typhoon1.southeast.rr.com>
Source record: 151267
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"William E. Sabin" <sabinw@mwci.net> wrote in message
news:3C3C08C1.3090501@mwci.net...

[snip]

> A good example is FM, which was moved from the 40
> kHz region to the 100 MHz region after WWII.
> Technology improvements made it possible
>
> Bill W0IYH
>

Technology improvements AND General Sarnoff's all-consuming drive to screw
Edwin H. Armstrong through any means possible, including Sarnoff's contacts
in the government.

Jim - W2MMR

631. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 12:46:40 UTC
From: KC8JBO <kc8jbo@alt.net>
Message-ID: <a1hkl6$v8d$2@pita.alt.net>
Source record: 151123
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

```
"Krell" <krell1215@yahoo.com> wrote in message
news:a1g19s030k3@enews2.newsguy.com...
> She's never free. In fact, she's very expensive.

Get a lesser-known starlet, then. LOL!

> "mike coslo" <mjc5@psu.edu> wrote in message
> news:3C3B6633.60EF9B5A@psu.edu...
> > I'd like to watch a movie with Sandra bullock too. I wonder if she's
> > free tonight?
> >
> > - mike -
> >
> > phil wrote:
> > >
> > > paranoid? i watched that movie with sandra bullock. it could happen.
i'm
> not
> > > paranoid... AAAAAAAAHHHHHHHHH THEY'RE AFTER ME :P
>
>
```

632. Re: Which Came First?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 12:59:18 UTC
From: Gary Glaenzer <nobulltrans@irtc.net>
Message-ID: <F8X_7.124$qgt.11206798@news2.randori.com>
Source record: 151268
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

```
"Jim" <w2mmr@nc.rr.com> wrote in message
news:8xW_7.34381$Cd6.7436126@typhoon1.southeast.rr.com...
>
> "William E. Sabin" <sabinw@mwci.net> wrote in message
> news:3C3C08C1.3090501@mwci.net...
>
> [snip]
>
> > A good example is FM, which was moved from the 40
> > kHz region to the 100 MHz region after WWII.
> > Technology improvements made it possible
> >
> > Bill W0IYH
> >
>
> Technology improvements AND General Sarnoff's all-consuming drive to screw
> Edwin H. Armstrong through any means possible, including Sarnoff's
contacts
> in the government.
>
> Jim - W2MMR
>

Technology improvements AND General Sarnoff's all-consuming drive to screw
Edwin H. Armstrong through any means possible, including Sarnoff's contacts
in the government AND broadcasters' ever-present 'we need more spectrum'
wailing, moaning, and gnashing of teeth.
```

633. New book on Quad antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 13:33:57 UTC
From: Larry Gauthier <larryg5099@chartermi.net>
Message-ID: <u3ohm8nrqkcca2@corp.supernews.com>
Source record: 151119

I recall seeing something on this list back in November about a new book on quads.. but have lost reference to it. (I think Cecil wrote it...)

Where can I buy it? Any "book reviews" from someone who bought it?

-larry
K8UT

634. Re: Single wire antenna on crappy radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 13:53:33 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C3C4B5D.CA37E5CA@IEEE.org>
Source record: 151120

sander wissing wrote:
>
> Hi all,
>
> Sorry for another stupid question, but here goes ...
>
> I have a crappy radio that I use to listen to HF, with a single wire
> antenna. I want to put up an antenna for 20m, but don't know how to connect
> the incoming co-ax to the radio. Does the single wire represent the co-ax
> core? And if so what do I do with the other connection?

Connect the center conductor of the coax to the antenna connector.
Connect the braid of the coax to the chassis of the radio. That
might be one of the screws that holds the radio together.
--
cheers, CAM http://www.qsl.net/w5dxp

635. Re: Which Came First?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 14:03:50 UTC
From: richardharrison@webtv.net
Message-ID: <14630-3C3C4DC6-9@storefull-112.iap.bryant.webtv.net>
Source record: 151121

Bill, W0IYH wrote:
"A good example is FM which was moved from the 40 kHz region to the 100 MHz region after WWII."

I had a receiver which had an FM band tuning 40 MHz frequencies.

TV receivers used 20 MHz IF amplifiers then. TVI was awful. The solurtion was moving the TV IF to the 40 MHz region and FM to the 88 MHz to 108 MHz band.

Best regards, Richard Harrison, KB5WZI

636. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 14:22:10 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C3C5212.86071EC9@yahoo.com>
Source record: 151122

> please don't ask, it's a pickup only. I am 30 miles north of NYC,
> Dave K2DHK dothetime@hotmail.com

Just curious, if its pickup only, why post to a newsgroup thats world wide?

637. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 14:45:37 UTC
From: aidehua@aol.com
Message-ID: <20020109094537.17507.00000518@mb-fy.aol.com>
Source record: 151124

Because it's also State-wide and around...duh..

638. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 14:47:14 UTC
From: richardharrison@webtv.net
Message-ID: <3312-3C3C57F2-3@storefull-113.iap.bryant.webtv.net>
Source record: 151126

Reg wrote:
"So you don`t disagree with the maximum power theorem.."

It`s irrefutable. I wouldn`t want to recycle the 47KW CB and Conjugate Match threads. My argument in those threads was that some transmitters are not tuned and loaded for a conjugate match.
Perhaps more transmitters are matched to their loads than I realized, and perhaps it is their maximum power out which is adjusted in a way which limits them.

The old threads convinced me that the internal resistance of a Class C amplifier is set by the time it spends switched-off. It dissipates no power while switched-off. So, there`s your dissipationless resistance.

This is an abundance of sparks. Hope there is no combustible material around.

Best regards, Richard Harrison, KB5WZI

639. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 14:53:42 UTC
From: mike.luther@ziplog.com
Message-ID: <u3ombm5ohcmq64@corp.supernews.com>
Source record: 151125

In <a1gv7c$7t9$1@freenet9.carleton.ca>, ab528@FreeNet.Carleton.CA (Heinz W. Wiggeshoff) writes:

I can't resist the rerun!

>Wes Stewart (n7ws@yahoo.com) writes:

> Damn, that speech recognition software is wonderful. We'll forgive
> the fact that it buggered up the spelling of 'Wes' though.

When OS/2's VoiceType and run the Desktop by voice first came out I tried mightily to train it for my voice! It just wouldn't. Part of the reason is that after ten years of telemarketing trailer dealerships, I'd developed a pattern of auction jargon in my normal speech! In a fit of anger I chanted into it:

Mary had a little sheep
with which she always went to sleep
the sheep turned out to be a ram
now Mary has a little lamb

I honestly got back:

Maria handsome ladle cheap
and Pentacostal witch to seep
Le cheap burned out Toshiba ram
Maria handsome little lamb

In studying how this actually seems to come about, I learned that auction jargon patterns really confuse the speech engine troops, although they are completely understandble to people! It's easier to talk for hours this way and still go home with a voice! (Becomes homewidavoice!)

The speech habit pattern which gets the voice recognition engines, seems to be, as in the above, where if you listen closely I'll sound something like:

Mary-hadda-liddle-lamb

which is the alliterative form of speech like we hear in the Gilbert and Sullivan songs! If you examine the phonic pattern in the little snip above, and chant it out, you'll find that it really is easier and faster to say it that way, than to more properly and clearly pronounce it!

Talking like an auctioneer is really quite easy.

For example, say,

What will he bid for ..

Then say,

Whaddlehebidfor

There's the example of the up-down toungue roll that is involved!
Rapidly saying these two patterns alternatively will you show you
exactly the thing which really confuses these engines! As you learn
more and more to do this, your speech pattern shifts to an 'automatic'
inate recognition of the chance to save a little bit of effort! From
then on away it goes!

Of interest in the thread, specifically, IBM has just announced, per the
trade rags, that a much improved meaning-aware version of ViaVoice is to
be released this fall. The original voice recognition toolsets that IBM
derived and dropped into the public use from the main-frame listen to the
phone lines and tell where the threat came from research, were there even
for the original OS/2 introduction of the technology. However, the
claim is that by fall, a major improvement will be at hand. They'll be
doing far better look backward - look forward over many more that the
two or three words that were the level of this bound into original ViaVoice.

That's one place where we really might see improvement from multi-Ghz
CPU's and huge amounts of really fast memory!

I still, as per the original poster, though, wonder what's going to happen
when someone really wants to say "Witch Witch!" And we still get back
"Which witch?" After Mary, I'm not convinced yet that even a 3.5Ghz CPU
processor speed and 512MB of RAM will let us even yet unravel the real
cause of the confusion to the engines!

"No never?" "No never!" "No never?"
"Well, ... hardly ever! 'E's hardly ever sick at sea!"

--> Sleep well; OS/2's still awake! ;)

W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

640. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 15:18:42 UTC
From: richardharrison@webtv.net
Message-ID: <3310-3C3C5F52-29@storefull-113.iap.bryant.webtv.net>
Source record: 151129

Robert wrote:
"Does someone know an amplifier which can selectively amplify a weak frequency as shown on the following picture?"

The picture is not clear enough for me to read the frequency. So, I can`t give a good answer. There are kit makers to be found with websites showing preselector / preamplifiers. You may need to adjust coils for your specific frequency.
Search!

Best regards, Richard Harrison, KB5WZI

641. Re: Which Came First?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 15:19:32 UTC
From: Sparks W4EAS <sparksw4eas@mindspring.com>
Message-ID: <3C3C5F84.32D7@mindspring.com>
Source record: 151127
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

After WW-2 the FM band was moved from about (40 MHZ) not Khz to the current band. 73 Sparks W4EAS

642. Re: New book on Quad antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 15:34:18 UTC
From: ac6v <hamguide73@ix.netcom.com>
Message-ID: <3C3C62FA.17C74BF5@ix.netcom.com>
Source record: 151128

Larry see URL: http://www.cebik.com/bookant.html

Cubical Quad Notes: Volume 1 A Review of Existing Designs: This first volume reviews many
existing designs of both monoband and multi-band quad arrays to assess both the potentials and the
limitations of these antennas and their feed systems.

Cubical Quad Notes: Volume 2 Rethinking the Quad Beam: The second volume examines the
most fundamental properties that determine quad performance and develops computer design
programs for a number of monoband quad beam types, from 1 to 4 elements.

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!
http://ac6v.com
==========

Larry Gauthier wrote:

> I recall seeing something on this list back in November about a new book on
> quads.. but have lost reference to it. (I think Cecil wrote it...)
>
> Where can I buy it? Any "book reviews" from someone who bought it?
>
> -larry
> K8UT

643. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 16:00:53 UTC
From: richardharrison@webtv.net
Message-ID: <26964-3C3C6935-18@storefull-114.iap.bryant.webtv.net>
Source record: 151132

I wrote:
"The picture is not clear enough for me to read the frequency."

UKW is ultra short wave, or the FM band on my old German radios. So, I guess Robert wants to separate FM stations. In the U.S. these are no closer than 200 KHz. At a carrier frequency of about 100 MHz, that`s a separation of only 0.2 percent, or too close to separate with a single tuned circuit at the carrier frequency.

The superheterodyne has a lot going for it!

Best regards, Richard Harrison, KB5WZI

644. Info about multiband quads

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 16:08:40 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a1hpu8nvq1@serra.unipi.it>
Source record: 151131

Hi all,

I'm a quad antenna fan. I've built some arrays for the 6 meters band
with great satisfaction for me. Now I'd like to build a two element
quad multiband antenna for HF (let's say 20,17,15,12,10 meters for now)
and I'm looking for practical notes on contruction of such antennas.
In particular I'd like to learn what are common used ways to feed these
antennas (multiple coax, single coax with switches, single feed in
parallel to all radiators maybe...) and how to arrange element for
different bands (same spacing VS different spacing on each band...).
Any info about these antennas is welcome.
Thanks in advance and best regards.

Francesco IZ5DWF

645. Re: Which Came First?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 16:23:26 UTC
From: Bill Janssen <billj@ieee.org>
Message-ID: <3C3C6E7D.A3F38051@ieee.org>
Source record: 151133
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Al Lorona wrote:

> I'm just curious: is it correct to assume that the current AM broadcast
> band is really the best choice of frequency for the desired
> characteristics for that service? In other words, was 540-1600 kHz
> (before expansion to 'AM wide' a few years ago) chosen first, and then
> the stations placed there? Or did the stations begin operation in that
> frequency band and just happened to choose a good ground wave frequency
> band for local broadcasting?
>
> I've been reading some of the history of KDKA, which of course was the
> first commercial broadcast station in Pittsburgh in 1920 (on 360 meters,
> according to the original FCC license), and it seems that the
> Westinghouse engineers knew that starting around 1500 kHz ground losses
> increased, making those frequencies less useful for local reception.
> (They apparently didn't know about sky wave propagation). But aside from
> that, is there anything magical about the current broadcast band that
> makes it the best choice?

Long wave less than 500 KHz was deemed necessary for long haul
communications.
Short wave more than 1500 KHz was deemed to be useless for serious
communication
and was assigned to amateur use. Broadcast was slipped in to that plan at
the shortest
wave length that was still useable.

Bill K7NOM

646. Re: Info about multiband quads

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 16:55:16 UTC
From: ac6v <hamguide73@ix.netcom.com>
Message-ID: <3C3C75F4.4E37840B@ix.netcom.com>
Source record: 151134

Francesco several books available -- see URL:
http://www.cebik.com/bookant.html
Cubical Quad Notes: Volume 1 qand Cubical Quad Notes: Volume 2

Bill Orr has some very good books on quads also -- go to URL:
http://www.amazon.com/

Some other Quad Links at URL:
http://www.qsl.net/iz7ath/web/02_brew/01_quad/english/pag03_eng.htm

http://www.softcom.net/users/kd6dks/quad.html
--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!
http://ac6v.com
==========

Francesco Messineo wrote:

> Hi all,
>
> I'm a quad antenna fan. I've built some arrays for the 6 meters band
> with great satisfaction for me. Now I'd like to build a two element
> quad multiband antenna for HF (let's say 20,17,15,12,10 meters for now)
> and I'm looking for practical notes on contruction of such antennas.
> In particular I'd like to learn what are common used ways to feed these
> antennas (multiple coax, single coax with switches, single feed in
> parallel to all radiators maybe...) and how to arrange element for
> different bands (same spacing VS different spacing on each band...).
> Any info about these antennas is welcome.
> Thanks in advance and best regards.
>
> Francesco IZ5DWF

647. Re: Butternut HF5V-III wont tune on 20 Meters pse help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 17:10:11 UTC
From: G Blair <gblair@sympatico.ca>
Message-ID: <3C3C7973.47C1A310@sympatico.ca>
Source record: 151136

Contact Butternut technical support.

Eric Bourlet wrote:

> I have recently resurrected an old Butternut HF5v-III. My problem is that it
> will not work on 20 Meters. The manual says that it should have a low SWR on
> the entire 20 meter band and no tuning is required. I have the 1/4 wave 75
> ohm section and measured the velocity factor so I know its the proper
> length. Do you have any Idea what other problems there may be ? I am feeding
> it with a 30' section of rag-58. Thanks for any ideas you can provide.
> WB7OYL

648. polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 17:15:11 UTC
From: John O'Flaherty <wewelcomespam@blackhole.net>
Message-ID: <3C3C7A9F.B6AAB65A@blackhole.net>
Source record: 151135

Playing with an antenna modeling program, I found that having the last 6 feet of a 30 foot wing of a dipole angled downward from the antenna made the antenna have some circular, or at least mixed, polarization.

That got me to wondering what circular polarization means.

1. Does it mean that the angle of polarization of the em wave changes within each cycle as it passes the receiving antenna? That would seem to be what would happen as the wave from the dog-eared dipole passed the receiving antenna.

2. Is circular polarization a yes/no thing, or can it be partial? Is it really circular, or could it be, say, oval or triangular if you had a funny shaped antenna?

3. Might an antenna have different polarizations in different propagation directions?

4. In an ideal case, what would be the relative loss receiving a perfectly circularly polarized signal on a horizontally polarized antenna?

--
john

649. Re: A better-built screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 17:38:51 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <ug%_7.447198$er5.17391235@e3500-atl2.usenetserver.com>
Source record: 151137

For those who are interested in viewing these antennas, I now have a
website!
It is presently linked on two sites--

www.w2blc.com

www.txrad.net

All necessary info about the Carolina Cyclone and coil covers for your
existing is there. Now
all I neeed to do is occasionally post the links!

Thanks to all for your patience.

73

Jerry
K4KWH

Jerry Oxendine <joxendi@bellsouth.net> wrote in message
news:wypY7.128001$BX4.8158983@e3500-atl1.usenetserver.com...
> About once a month, I will put a blurb on here about my Carolina Cyclone
> series of screwdriver antennas. I hope I don't annoy anyone by doing so,
> it's just that I get quite good
> responses in this manner.
>
> One of the advantages of the Carolina Cyclone is that it is more cost
> effective while delivering
> performance equal to or beyond that of the more expensive ones. Thru
> careful research and.
> with the assistance of a professional plastics supplier, I have found a
> material that meets all the
> requirements of the more expensive competitors in toughness, UV
resistance,
> and power handling. This material is UNMW,or a kind of black Nylon
similar
> or the same as Nyloc used
> on locking bolts (the little black or white collar near the head). The
> material turns well for the
> machinist and further reduces the cost because it produces less waste.
> Delrin is very high cost,
> and actually costs FOUR times that of UNMW. Most machinists dread to turn
> Phenolic because it, too, produces a huge amount of waste, comes off the
> lathe in long strings of fabric,
> and causes a huge mess to be cleaned up when finished. It, too, costs
> almost 4 times that of

> the Nylon derivative. Back to Delrin. What the fellows that use this
> hugely expensive stuff don't tell you is that, while Delrin IS very tough,
> UV resistant, and makes great antenna coils,
> it is also brittle--meaning that if you prang your coil on a low garage
door
> header, it is more
> likely to break. We DO make mistakes sometimes. LOL! Now I do not mean
to
> degrade the
> rival materials because they are good antenna coil forms. But the point I
> AM making is that there is something out there that will do the very same
> thing at a more reasonable cost.
>
> And that is where the Carolina Cyclone I & II come in.
>
> Cyclone I is a FULL 2" dia
> Wire is #14 wound at 8 TPI
> Form is UNMW (black Nylon)
> Decoupling fingers are a full 1/4" wide for strength, longevity, and tight
> contact.
> Power handling is 800 watts (warranted)
> Hardware is aluminum, brass, and stainless steel to resist corrosion and
> rust.
> Coil cover is 1/8" wall LEXAN for a clear weather protection for many
years
> (Butyl will crack and discolor in a year or so)
> Price is just $240 shipped (less whip) to lower 48 States Includes all
> ferrules, collets, and parts necessary..
>
>
> Cyclone II is identical to the one above except it is a FULL 3" dia for
the
> absolutely "persnickety" and avid HF mobile DXer. This is for the fellow
> that wants Texas Bugcatcher
> performance and screwdriver convenience. The one who wants "Q" factors in
> the 400+ range.
> Construction is to the same commercial-grade standards and good looks as
the
> Cyclone I.
> For example, most "generic" screwdrivers use a wood insert screwed and
glued
> into the bottom
> of a PVC reducer. This has very little in the way of threads, will
> sometimes strip, or come out of the bottom of the coil altogether. Without
> revealing too much, I have incorporated a 1" long
> turnbuckle nut which has the corresponding length of internal threads. It
> is secured in such a
> way that it is almost impossible to, either pull this assembly out of the
> coil, or to strip the drive
> nut. I have repaired some screwdrivers that "mysteriously" stopped

> travelling, and the cause was that the brass wood insert pulled completely
> out because there is not enough material in the
> PVC bushing to keep it in there securely. Yet, if disassembly is ever
> needed, each subassembly can be taken apart, repaired with commonly
> available hardware, and put back together.
> Cyclone II handles a FULL 1500 watts SSB! And costs only $350 Shipped to
> lower 48 states. Compare those prices to some of the big name screwdriver
> makers! I guarantee performance that will both please and surprise you,
or
> your money back. For those of you who
> have never heard of me, I can say that I have shipped Carolina Cyclones
all
> over the US--many to readers of this newsgroup. In 6 years of building, I
> have had exactly ONE to return for a
> mechanical failure, and I swapped it out immediately. You will find no
> negative remarks on the
> internet about trading with me--I do what I say or I make it right. If I
> didn't, I would be out of
> business in short order. But I want to STAY in the antenna business
because
> this is one of the
> aspects of ham radio that I love working with.
>
> Earilier, I said that I have a goal. My production is small--anywhere
from
> 2-3 per month except during hamfest season. I don't try for huge numbers
> because I acquire the parts, I
> assemble, I test, and I ship! When you get an antenna from me, it is,
> indeed, from me! I have
> no employees. I work for myself. I need to make that goal of 3-4 antennas
> during January.
> If you are in the market for an HF mobile antenna, please help me make
that
> goal AND receive
> an excellent product in return!
>
> Thank you for reading, and thanks to all of you who have purchased the
> Carolina Cyclone
> in the past.
>
> Happy New Year, and the best of 73 to all,
>
> Jerry
> K4KWH
>
>
>

650. Re: polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 18:24:22 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <qV%_7.346847$W8.13000215@bgtnsc04-news.ops.worldnet.att.net>
Source record: 151138

"John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
news:3C3C7A9F.B6AAB65A@blackhole.net...
>
> Playing with an antenna modeling program, I found that having the last
> 6 feet of a 30 foot wing of a dipole angled downward from the antenna
> made the antenna have some circular, or at least mixed, polarization.
>
> That got me to wondering what circular polarization means.
>
> 1. Does it mean that the angle of polarization of the em wave changes
> within each cycle as it passes the receiving antenna? That would seem to
> be what would happen as the wave from the dog-eared dipole passed the
> receiving antenna.
>

Circular polarization means that at a fixed point in space, the total
electric field vector of the EM wave radiated by the antenna traces out a
circle as a function of time. See more details below.

> 2. Is circular polarization a yes/no thing, or can it be partial? Is it
> really circular, or could it be, say, oval or triangular if you had a
> funny shaped antenna?
>

In general, all antennas are elliptically polarized.

Consider the radiated EM wave at a fixed point in space away from the
antenna. The total electric field vector of the wave has an Ex component
and an Ey component. At this fixed point in space, the total electric field
vector would trace out an elliptical shape as a function of time.

Pure circular polarization is a special case of elliptical polarization
where the Ex and Ey components have equal amplitude and are 90 degrees out
of phase.

Pure linear polarization is a special case of elliptical polarization where
either Ex or Ey is 0. In this case, the total electric field vector traces
out a straight line as a function of time.

> 3. Might an antenna have different polarizations in different
> propagation directions?

Yes.

>
> 4. In an ideal case, what would be the relative loss receiving a
> perfectly circularly polarized signal on a horizontally polarized

> antenna?
>

In an ideal case, where the circularly polarized wave has 0 dB axial ratio and the antenna is purely linearly polarized, the relative loss (polarization mismatch loss) is 3 dB. The linearly polarized antenna "sees" only 1/2 of the energy in the circularly polarized wave.

In general, the mismatch loss is something other than 3 dB because it is unlikely that the "circularly polarized" wave has an axial ratio of 0 dB. The axial ratio is the relative field strength difference between the Ex and Ey field components expressed in dB. For example, if the circularly polarized wave has an axial ratio of 3 dB (quite common) then the polarization mismatch loss will vary between 1.77 dB and 4.77 dB depending on how the linearly polarized antenna is aligned wrt the circularly polarized wave (how it aligns with either Ex or Ey).

Steve VE9SRB

651. Re: 70 cm yagi fs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 18:37:42 UTC
From: "P. A. Higson" <pahigson@cableinet.co.uk>
Message-ID: <W50%7.7863$3A5.754760@news1.cableinet.net>
Source record: 151139

kenneth m cubilo <kce@freeway.net> wrote in message
news:3c38f493$0$37100$2c3e98f8@news.voyager.net...
> cushcraft 719 430/440 mhz yagi for sale as new.purchased oct 2001 in air
> for one month $100 shipped conus. will consider trade on like value
> telegraph key as well. contact kce@freeway.net tks

652. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 19:13:10 UTC
From: mike coslo <mjc5@psu.edu>
Message-ID: <3C3C9646.BF2692B4@psu.edu>
Source record: 151142
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

```
KC8JBO wrote:
>
> "mike coslo" <mjc5@psu.edu> wrote in message
> news:3C3B6633.60EF9B5A@psu.edu...
> > I'd like to watch a movie with Sandra bullock too. I wonder if she's
> > free tonight?
> >
> > - mike -
>
> LOL!!!!! I'd like to watch one with Penelope Ann Miller or Carmen Electkra.
^^

Was that an "or" or a "and"??? heh, heh. ;^)
```

653. Re: Vertical tuned with AH-4 - Question on radials

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 19:14:57 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C3C96A3.78B2B760@icok.net>
Source record: 151140

Jim,
There are two schools of thought about radials. One says
to use 1/4 wave radials on the lowest band you plan to use.
The other says to use radials the same length as the vertical,
but more of them. Take your pick. (The 'lot more of them' and
as long as the vertical is much easier to do for most people)
Your going to have fun on 160-40 meters. That 24 feet is
kinda short for those bands, especially 160 and 80 meters.
Good luck...
'Doc

654. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 19:16:44 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C3C970F.DFF79B6E@icok.net>
Source record: 151141

David,
No chance of shipping it??
'Doc

655. Wm Orr handbooks FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 19:40:18 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3C3C9CA2.144EB5E6@iquest.net>
Source record: 151143

We have a few of these excellent handbooks left from the holiday promo.
Its the latest 23rd edition, the hardbound bible of builders and superb
classic reference
for all areas of interest to hams.

Bill/W6SAI lives on via his many gifts of articles and books. His
writing methods allow all levels of technical backgrounds to understand
and learn from his expertise.

The Handbook normally sells for $52.95, plus shipping and tax in state.
We're selling them for $39.95 plus a flat $5 shipping within the US 48.
That's $44.95 total! You can order online or call,fax, email.
Follow this link for more information:

http://www.websitea.com/mai/Books/books.htm

656. Re: polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 19:45:39 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <JcrQ9VAj3JP8EwBk@pickmere.demon.co.uk>
Source record: 151146

>
>3. Might an antenna have different polarizations in different
>propagation directions?

Yes. It is often found that sideways on to a horizontal Yagi, best
reception is from a vertically polarized aerial.

Mike
--
M.J.Powell

657. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 20:05:15 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C3CA27B.EF36FD98@yahoo.com>
Source record: 151144

newyork.forsale would have covered that

DUH

Local Swap Shop on the repeater would have covered it

DUH

Local BBS would have covered it DUH

Local Club Newsletter would have covered it

DUH

But world wide IS NEEDED to get the word out to every last single ham in
the world for somthing they cant ship.

DUH

Ai de hua wrote:
>
> Because it's also State-wide and around...duh..

658. Re: www.sauderelectronics.com now online!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 20:43:52 UTC
From: old_radios@yahoo.com
Message-ID: <7579bf83.0201091243.40380635@posting.google.com>
Source record: 151145
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

It has a comma in the link, it is http://www.sauderelectronics.com,/

"Delayed Thinking" <delay@delaythinking.com> wrote in message
news:<m2E_7.6058$DG5.68545@rwcrnsc53.ops.asp.att.net>...
> why do you put a link at the top of your homepage that links to your
> homepage?
>
> also why is it broken.
> Doesn't anyone check this stuff
>
> "Ben Silverman" <ben@everyoneflydotcom> wrote in message
> news:Xns918DB7330711Ebeneveryoneflycom@209.249.90.101...
> > Hello all,
> >
> > Just wanted to let everyone know that Sauder Electronics is now online
> with
> > a secure catalog. This is the same Sauder Electronics you see at Hamfests
> > and at the Dayton shows. Many of you have spoken with Kathy Sauder about
> > getting a website together and she has finally delivered.
> >
> > Happy browsing, ordering, etc.
> >
> > http://www.sauderelectronics.com
> >
> > -Ben

659. Re: AM reception HELP !!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-09 22:27:01 UTC
From: richardharrison@webtv.net
Message-ID: <26965-3C3CC3B5-14@storefull-114.iap.bryant.webtv.net>
Source record: 151147

Alex wrote:
"If I bring the radio close to a window, reception is perfect."

Some old Zenith Transoceanics had "Wavemagnet" loop antennas with suction cups to attach them to outside windows. The Wavemagnet cable wasn`t 25 feet long. Never mind. Get yourself one of these old working models and make yourself a flat cable extension cord. Snake the extension cord under the carpet between the Transoceanic at your workstation and the window with the wavemagnet. This particular Transoceanic may not work with this configuration, but some variation of this will work. You need low-impedance loop output (a turn or two), and a low-impedance radio input (balanced could be less noisy). Cable between the loop and radio is low-impedance, parallel-conductor, twisted pair, coax (not balanced but could be quiet too), almost anything will do.

Best regards, Richard Harrison, KB5WZI

660. Re: A better-built screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 00:25:06 UTC
From: Doug <doug@ycsi.net>
Message-ID: <a1in12$g7h$0@63.90.193.134>
Source record: 151148

Also consider the Bandhopper, manufactured in Clancy, MT. Very heavy duty,
built for long haul trucks, have used one for years and works extremely well.

Try bandhopper.com

73

Doug, K7YD

Jerry Oxendine wrote:

> For those who are interested in viewing these antennas, I now have a
> website!
> It is presently linked on two sites--
>
> www.w2blc.com
>
> www.txrad.net
>
> All necessary info about the Carolina Cyclone and coil covers for your
> existing is there. Now
> all I neeed to do is occasionally post the links!
>
> Thanks to all for your patience.
>
> 73
>
> Jerry
> K4KWH
>
> Jerry Oxendine <joxendi@bellsouth.net> wrote in message
> news:wypY7.128001$BX4.8158983@e3500-atl1.usenetserver.com...
> > About once a month, I will put a blurb on here about my Carolina Cyclone
> > series of screwdriver antennas. I hope I don't annoy anyone by doing so,
> > it's just that I get quite good
> > responses in this manner.
> >
> > One of the advantages of the Carolina Cyclone is that it is more cost
> > effective while delivering
> > performance equal to or beyond that of the more expensive ones. Thru
> > careful research and.
> > with the assistance of a professional plastics supplier, I have found a
> > material that meets all the
> > requirements of the more expensive competitors in toughness, UV
> resistance,
> > and power handling. This material is UNMW,or a kind of black Nylon

> similar
> > or the same as Nyloc used
> > on locking bolts (the little black or white collar near the head). The
> > material turns well for the
> > machinist and further reduces the cost because it produces less waste.
> > Delrin is very high cost,
> > and actually costs FOUR times that of UNMW. Most machinists dread to turn
> > Phenolic because it, too, produces a huge amount of waste, comes off the
> > lathe in long strings of fabric,
> > and causes a huge mess to be cleaned up when finished. It, too, costs
> > almost 4 times that of
> > the Nylon derivative. Back to Delrin. What the fellows that use this
> > hugely expensive stuff don't tell you is that, while Delrin IS very tough,
> > UV resistant, and makes great antenna coils,
> > it is also brittle--meaning that if you prang your coil on a low garage
> door
> > header, it is more
> > likely to break. We DO make mistakes sometimes. LOL! Now I do not mean
> to
> > degrade the
> > rival materials because they are good antenna coil forms. But the point I
> > AM making is that there is something out there that will do the very same
> > thing at a more reasonable cost.
> >
> > And that is where the Carolina Cyclone I & II come in.
> >
> > Cyclone I is a FULL 2" dia
> > Wire is #14 wound at 8 TPI
> > Form is UNMW (black Nylon)
> > Decoupling fingers are a full 1/4" wide for strength, longevity, and tight
> > contact.
> > Power handling is 800 watts (warranted)
> > Hardware is aluminum, brass, and stainless steel to resist corrosion and
> > rust.
> > Coil cover is 1/8" wall LEXAN for a clear weather protection for many
> years
> > (Butyl will crack and discolor in a year or so)
> > Price is just $240 shipped (less whip) to lower 48 States Includes all
> > ferrules, collets, and parts necessary..
> >
> >
> > Cyclone II is identical to the one above except it is a FULL 3" dia for
> the
> > absolutely "persnickety" and avid HF mobile DXer. This is for the fellow
> > that wants Texas Bugcatcher
> > performance and screwdriver convenience. The one who wants "Q" factors in
> > the 400+ range.
> > Construction is to the same commercial-grade standards and good looks as
> the
> > Cyclone I.

> > For example, most "generic" screwdrivers use a wood insert screwed and
> glued
> > into the bottom
> > of a PVC reducer. This has very little in the way of threads, will
> > sometimes strip, or come out of the bottom of the coil altogether. Without
> > revealing too much, I have incorporated a 1" long
> > turnbuckle nut which has the corresponding length of internal threads. It
> > is secured in such a
> > way that it is almost impossible to, either pull this assembly out of the
> > coil, or to strip the drive
> > nut. I have repaired some screwdrivers that "mysteriously" stopped
> > travelling, and the cause was that the brass wood insert pulled completely
> > out because there is not enough material in the
> > PVC bushing to keep it in there securely. Yet, if disassembly is ever
> > needed, each subassembly can be taken apart, repaired with commonly
> > available hardware, and put back together.
> > Cyclone II handles a FULL 1500 watts SSB! And costs only $350 Shipped to
> > lower 48 states. Compare those prices to some of the big name screwdriver
> > makers! I guarantee performance that will both please and surprise you,
> or
> > your money back. For those of you who
> > have never heard of me, I can say that I have shipped Carolina Cyclones
> all
> > over the US--many to readers of this newsgroup. In 6 years of building, I
> > have had exactly ONE to return for a
> > mechanical failure, and I swapped it out immediately. You will find no
> > negative remarks on the
> > internet about trading with me--I do what I say or I make it right. If I
> > didn't, I would be out of
> > business in short order. But I want to STAY in the antenna business
> because
> > this is one of the
> > aspects of ham radio that I love working with.
> >
> > Earilier, I said that I have a goal. My production is small--anywhere
> from
> > 2-3 per month except during hamfest season. I don't try for huge numbers
> > because I acquire the parts, I
> > assemble, I test, and I ship! When you get an antenna from me, it is,
> > indeed, from me! I have
> > no employees. I work for myself. I need to make that goal of 3-4 antennas
> > during January.
> > If you are in the market for an HF mobile antenna, please help me make
> that
> > goal AND receive
> > an excellent product in return!
> >
> > Thank you for reading, and thanks to all of you who have purchased the
> > Carolina Cyclone
> > in the past.

> >
> > Happy New Year, and the best of 73 to all,
> >
> > Jerry
> > K4KWH
> >
> >
> >

661. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 01:18:22 UTC
From: KC8JBO <kc8jbo@alt.net>
Message-ID: <a1isdnqse2@pita.alt.net>
Source record: 151150
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

```
"mike coslo" <mjc5@psu.edu> wrote in message
news:3C3C9646.BF2692B4@psu.edu...
>
>
> KC8JBO wrote:
> >
> > "mike coslo" <mjc5@psu.edu> wrote in message
> > news:3C3B6633.60EF9B5A@psu.edu...
> > > I'd like to watch a movie with Sandra bullock too. I wonder if she's
> > > free tonight?
> > >
> > > - mike -
> >
> > LOL!!!!! I'd like to watch one with Penelope Ann Miller or Carmen
Electkra.
> ^^
>
> Was that an "or" or a "and"??? heh, heh. ;^)

Hehehe... maybe a both! Not much film would be seen though!
```

662. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 01:41:04 UTC
From: M Kolber <mkolber@bellatlanictNS.net>
Message-ID: <Qi6%7.22881$tz1.19080@nwrddc01.gnilink.net>
Source record: 151149

Reg Edwards wrote in message ...
+AD4-It is popularly understood that an increase in soil resistivity always
+AD4-results in increased losses in the ground such as the ground in the
vicinity
+AD4-of a vertical antenna.
+AD4-
+AD4-But this cannot be true because when soil resistivity increases to the
point
+AD4-when it can be considered to be an insulator the ground loss becomes very
+AD4-small again.

Yes, but then the wave would continue to propagate into the soil just as if it were in free space and for your purposes it would be all loss.

The greatest losses therefore are when the soil appears the same as free space, then all the wave is absorbed, none reflected.

Interesting question

Mark
WB2WHC

663. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 02:15:28 UTC
From: mcduffie@xactcom.net
Message-ID: <uutp3ucn0qu3r1d4ljl83caf2ein5g81at@4ax.com>
Source record: 151152

On Wed, 9 Jan 2002 20:05:15 GMT, "R. Scott" <kf7qz@yahoo.com> wrote:

> But world wide IS NEEDED to get the word out to every last single ham in
> the world for somthing they cant ship.

Give it a break. Every time I see someone bitching about something like this, I'm tempted to post this response. This time I am.

I, for one, would be happy to drive half way across the country (actually it is more than half way) if I was in the market and had the $$ to buy it. If I'm in the market and can't find something like it locally, it's worth the time off and travel to go pick it up anywhere in country. It's also worth it to me to be able to look at it before I hand over the check and be sure it's what it's supposed to be, and to handle it myself, instead of letting some Joe Schmuk trucking company do it.

I've sold things to people who drove several hundred miles to pick them up. I certainly have no problem being on the other end of the deal.

gm
--
There is no x in my ISPs domain name.

664. conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 02:27:03 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <XZ6%7.4574$B7.608063667@newssvr16.news.prodigy.com>
Source record: 151151

I have read parts of Walter Maxwell's book Reflections II. He mentions the conjugate matching theorum. I still don t really understand it. In simple terms can somebody describe it and how it affects transmission lines, matching, antennas, tuners and getting the antenna system to operate efficiently?

Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his book? (Why) or is it controversial?

665. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 02:51:24 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <5b0q3ug33tnrr9idg21dqs2m6arnvg0e73@4ax.com>
Source record: 151153

Rather than reading "parts" why not read it all?

This subject has be hashed and rehashed may times. Check Deja View.

Danny

On Thu, 10 Jan 2002 02:27:03 GMT, "Jerry" <jerryaa@prodigy.net> wrote:

>I have read parts of Walter Maxwell's book Reflections II. He mentions the
>conjugate matching theorum. I still don t really understand it. In simple
>terms can somebody describe it and how it affects transmission lines,
>matching, antennas, tuners and getting the antenna system to operate
>efficiently?
>
>Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his book?
>(Why) or is it controversial?
>

666. Re: Status of NFPA Lightning Protection Code?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 03:41:33 UTC
From: rhampton2 <rhampton2@carolina.rr.com>
Message-ID: <3C3D0D8C.5B09BBD6@carolina.rr.com>
Source record: 151154

According to NFPA, it's now know as, "NFPA 780, Standard for the Installation of Lightning Protection Systems, 2000 Edition." Price is about $30.00. Check it out at: http://www.nfpa.org/catalog/search.asp?action=search&query=lightning

Crazy George wrote:

> The ongoing questions about lightning protection prompt me to ask the
> following: NFPA used to issue a Lightning Protection Code, NFPA 78, but it
> has not appeared in their catalog for many years. The most recent version I
> have been able to turn up is dated in the early 90s, which is way out of
> date for an NFPA code. For a short time it was included in the Building
> Construction Codes, but then it also disappeared from there. I heard (urban
> legend?) that there had been a great deal of disagreement inside the
> committee which was to update it, and that some technical data has been
> developed which tends to refute some of the premises of the existing code,
> causing NFPA to let it expire and wait for some other agency to issue a new
> lightning protection code. Anyone have any factual information on this?
> Maybe it was reissued under a different number?
>
> --
> Crazy George
> Remove NO and SPAM from return address

--
Rickey L. Hampton, WD8KEL
3700 Armitage Dr
Charlotte, NC 28269-8312 USA

Coordinates: 35ï¿½ 18' 59" N, 80ï¿½ 48' 22" W
County: Mecklenburg County
Grid: EM95oh
Email: WD8KEL@ARRL.NET

667. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 04:04:55 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <Hp8%7.1327$lx2.265150579@newssvr17.news.prodigy.com>
Source record: 151155

Dan, you are a real case. It's your kind with your attitude that gives
amateur radio a bad name. An Elmer you are not
"Dan Richardson" <k6mhe@arrl.net> wrote in message
news:5b0q3ug33tnrr9idg21dqs2m6arnvg0e73@4ax.com...
> Rather than reading "parts" why not read it all?
>
> This subject has be hashed and rehashed may times. Check Deja View.
>
> Danny
>
>
> On Thu, 10 Jan 2002 02:27:03 GMT, "Jerry" <jerryaa@prodigy.net> wrote:
>
> >I have read parts of Walter Maxwell's book Reflections II. He mentions
the
> >conjugate matching theorum. I still don t really understand it. In
simple
> >terms can somebody describe it and how it affects transmission lines,
> >matching, antennas, tuners and getting the antenna system to operate
> >efficiently?
> >
> >Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his
book?
> >(Why) or is it controversial?
> >
>

668. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 04:09:25 UTC
From: Krell <krell1215@yahoo.com>
Message-ID: <a1j43u0ik1@enews4.newsguy.com>
Source record: 151160
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

"KC8JBO" <kc8jbo@alt.net> wrote in message news:a1hkl6$v8d$2@pita.alt.net...
>
> "Krell" <krell1215@yahoo.com> wrote in message
> news:a1g19s030k3@enews2.newsguy.com...
> > She's never free. In fact, she's very expensive.
>
> Get a lesser-known starlet, then. LOL!

Hmmm...there's Roxanna Zal.

669. Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 04:17:37 UTC
From: The Moskal's <larry@sgi.net>
Message-ID: <3C3D15E0.4912A916@sgi.net>
Source record: 151156

Does anyone know just how far the local zoning officer can go with dumb ordinances involving antenna heighth and proximity to property lines, ect? Our local ordinance says an antenna mounted on the ground can't be

above 15 feet high, but a roof mount can be up to 20 feet above the highest point of the roof. I have mine on a 30 foot tower anchored to the gable of the roof. I also have a ground plane on the other side of the house that's close to the FCC limit of 70 feet. Do these local ordinances overrule the FCC? Where can I get the definitive answers to the questions I need to ask? Any help you could provide would be greatly appreciated. I also should mention that he said I could have only one antenna. Has anyone ever heard of this? Is this enforcable? I might just give him what he wants and take the one down and change the

dual polarity to a five element flatsider right about the height of the telephone lines and tell him to go @#$% himself. Thanks for any help you can give me with this problem.

670. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 04:23:09 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C3D172D.D370D741@IEEE.org>
Source record: 151157

Jerry wrote:
>
> I have read parts of Walter Maxwell's book Reflections II. He mentions the
> conjugate matching theorum. I still don t really understand it.

It would be better if you first understood the DC maximum power transfer theorem. That theorem says that maximum power transfer occurs when the source resistance is equal to the load resistance. The Conjugate Matching theorem is the AC/reactance equivalent of the DC theorem.

At one time, the maximum power transfer theorem was used to "prove" that central power generation and distribution was but a pipe dream. Then they discovered efficiency.
--
cheers, CAM http://www.qsl.net/w5dxp

671. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 04:26:57 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <nn5q3u03lunevhl4nbm1vne2lfh7fsauvp@4ax.com>
Source record: 151158

Also, what are the odds of a ham, any ham looking in newyork.forsale
for ham radio equipment? Or even know it exists?

Dick Hughes

On Wed, 09 Jan 2002 19:15:28 -0700, mcduffie@xactcom.net wrote:

>On Wed, 9 Jan 2002 20:05:15 GMT, "R. Scott" <kf7qz@yahoo.com> wrote:
>
>> But world wide IS NEEDED to get the word out to every last single ham in
>> the world for somthing they cant ship.
>
>Give it a break. Every time I see someone bitching about something like
>this, I'm tempted to post this response. This time I am.
>
>I, for one, would be happy to drive half way across the country
>(actually it is more than half way) if I was in the market and had the
>$$ to buy it. If I'm in the market and can't find something like it
>locally, it's worth the time off and travel to go pick it up anywhere in
>country. It's also worth it to me to be able to look at it before I
>hand over the check and be sure it's what it's supposed to be, and to
>handle it myself, instead of letting some Joe Schmuk trucking company do
>it.
>
>I've sold things to people who drove several hundred miles to pick them
>up. I certainly have no problem being on the other end of the deal.
>
>gm

672. Re: Quad vs. Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 04:30:37 UTC
From: me@here.com
Message-ID: <3c3d166e.198385954@news.mindspring.com>
Source record: 151159

On Wed, 09 Jan 2002 05:41:58 GMT, vswrref@hotmail.com (Jeff Y.) wrote:

<snip> for content...

Point well take Jeff. I cannot disagree. However the point I was making was not to oppose the structure or operation of either antenna, but rather the differences I have encountered in the use of both. Turning the elements into the wind is helpful for preserving the Yagi type antennas, untill of course you have several stacked. The primary reason for my changing to a single boom type (reguardless of structural type) has more to do with the overall windloading I am presenting to the top of my Rohn Tower. The Quad simply exhibits a fraction of the side/side moment and less compression on the tower. Hurricaines are fairly easy to predict which way the wind is coming from, However, we tend to get some real ugly t-storms that vary greatly in wind intensity and direction. At that point, your'e guess is as good as mine.
cheers
de
Mike

673. Re: Quad vs. Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 05:17:55 UTC
From: vswrref@hotmail.com
Message-ID: <3c3d20e9.3019007@national-news.stargate.net>
Source record: 151161

Those swirls, downdrafts and crosswinds can really play haviic on them, not doubt, but it still better to get a good idea which way the winds are generally coming from and take the proper precautions.

I'm used to the fact that being from the snowbelt states that just about everyone I knew who had a quad lost one due to the ice and in some cases survived the ice but failed when a moderate wind, 20 to 25 MPH, came along and with the extra weight totaled them. I know it's not the same situation but I thought I'd point that out as well and where my view was coming from.

BTW, what size Tohn tower are you using? 25G, 45G?

Jeff

On Thu, 10 Jan 2002 04:30:37 GMT, me@here.com (skyhi) wrote:

>On Wed, 09 Jan 2002 05:41:58 GMT, vswrref@hotmail.com (Jeff Y.) wrote:
>
><snip> for content...
>
>Point well take Jeff. I cannot disagree. However the point I was
>making was not to oppose the structure or operation of either
>antenna, but rather the differences I have encountered in the
>use of both. Turning the elements into the wind is helpful for
>preserving the Yagi type antennas, untill of course you have
>several stacked. The primary reason for my changing to a single
>boom type (reguardless of structural type) has more to do with
>the overall windloading I am presenting to the top of my Rohn
>Tower. The Quad simply exhibits a fraction of the side/side
>moment and less compression on the tower. Hurricaines are
>fairly easy to predict which way the wind is coming from, However,
>we tend to get some real ugly t-storms that vary greatly in wind
>intensity and direction. At that point, your'e guess is as good as
>mine.
>cheers
>de
>Mike
>

674. Re: Lightening ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 07:16:39 UTC
From: ab528@FreeNet.Carleton.CA
Message-ID: <a1jf4n$27$1@freenet9.carleton.ca>
Source record: 151162

(mike.luther@ziplog.com) writes:
>
...
Never did install that 'do what I mean' software.

> --> Sleep well; OS/2's still awake! ;)

Unluckily for me, Warp 4 went to sleep when the mb and video card
changed.

675. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 07:52:36 UTC
From: Sideband <sideband@spam.me.not>
Message-ID: <3C3D4844.F996F7D8@spam.me.not>
Source record: 151163

Wow.. Can you smell the troll dung?

-SSB

Jerry wrote:
>
> Dan, you are a real case. It's your kind with your attitude that gives
> amateur radio a bad name. An Elmer you are not
> "Dan Richardson" <k6mhe@arrl.net> wrote in message
> news:5b0q3ug33tnrr9idg21dqs2m6arnvg0e73@4ax.com...
> > Rather than reading "parts" why not read it all?
> >
> > This subject has be hashed and rehashed may times. Check Deja View.
> >
> > Danny
> >
> >
> > On Thu, 10 Jan 2002 02:27:03 GMT, "Jerry" <jerryaa@prodigy.net> wrote:
> >
> > >I have read parts of Walter Maxwell's book Reflections II. He mentions
> the
> > >conjugate matching theorum. I still don t really understand it. In
> simple
> > >terms can somebody describe it and how it affects transmission lines,
> > >matching, antennas, tuners and getting the antenna system to operate
> > >efficiently?
> > >
> > >Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his
> book?
> > >(Why) or is it controversial?
> > >
> >

676. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 08:34:24 UTC
From: Val <val_a20@hotmail.com>
Message-ID: <3C3D5210.2C7897FC@hotmail.com>
Source record: 151164

Hi Jerry.

I've read the other "replies" to Your question with astonishment.
Noone tells You what it is about.

Conjugate matching for Newbies:
==========
The output impedance of Your transmitter is "marked" 50 ohms.
This is RESISTIVE.

An antenna that is to "short", a GP shorter than wavelength/4
ACTS like a capacitor in series with a resistor. If we for
simplicity assume that this "resistor" is 50 Ohms, You will need
a coil to match the antenna.

Now, assume that we can connect the antenna WITHOUT a
transmission line:
If the reactance of this coil is equal to the reactance of the
"antenna capacitor" multilpied with (-1), you have matched the
antenna. So, You need a Coil between tha antenna and the
transmitter. The properties of this Coil can be calculated.

If You have an antenna to LONG, it will act like a Resistance
in series with a Coil, and You will need a capacitor in series
for matching.

Reactance is a form of "AC resistance", but the Current Trough
a Reactance is out-of phase with the Voltage, so that NO POWER
will be dissapted. That is, the formula P=R x I-squared for
a pure Reactance (X) is instead Zero = X x I-squared.
As Capacitors are (more or less) pure Reactance, a capacitor
will not be warm if a current runs trough it.

To describe in simple terms how this affects transmisssion lines
can not be done. This is REALLY HARD, unless You have a
M.Sc. degree. Anyone who claims it different, is fooling You.
This is the probable reason why it is NOT in the newbie handbooks.
There is a very famous tool, the Smith-chart, which gives a grapic
wiev, that can be used without REALLY understanding what is
happening. This still is in use in this compitized age. But, in
my (very old) edition of the Antenna book, the Smith-charts ARE
descibed. So, my guess is that the Conjugate Matching Theorem
IS there, but perhaps not explicitly...

73 de V.

Jerry wrote:
>
> I have read parts of Walter Maxwell's book Reflections II. He mentions the
> conjugate matching theorum. I still don t really understand it. In simple
> terms can somebody describe it and how it affects transmission lines,
> matching, antennas, tuners and getting the antenna system to operate
> efficiently?
>
> Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his book?
> (Why) or is it controversial?

677. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 09:16:38 UTC
From: Robert <robert.61@gmx.at>
Message-ID: <3c3d5b9a$0$26072$3b214f66@news.univie.ac.at>
Source record: 151165

The desired channel has a frequency of 94.3 MHz, the disturbing channels
are
on 94.0 and 94.7 MHz.
Robert

Richard Harrison schrieb:

> I wrote:
> "The picture is not clear enough for me to read the frequency."
>
> UKW is ultra short wave, or the FM band on my old German radios. So, I
> guess Robert wants to separate FM stations. In the U.S. these are no
> closer than 200 KHz. At a carrier frequency of about 100 MHz, that`s a
> separation of only 0.2 percent, or too close to separate with a single
> tuned circuit at the carrier frequency.
>
> The superheterodyne has a lot going for it!
>
> Best regards, Richard Harrison, KB5WZI

678. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 10:55:24 UTC
From: Adrian Brentnall <amb_quality@dial.pipex.com>
Message-ID: <VA.00003a4d.0071a3cf@dial.pipex.com>
Source record: 151167

HI Robert
>
> The desired channel has a frequency of 94.3 MHz, the disturbing channels
> are
> on 94.0 and 94.7 MHz.

I don't think you'll find an amplifier that's selective enough to amplify the signal you want without also amplifying the other two.

Can you use a directional antenna? - if the signal on 94.3 is from a transmitter that's in a different direction to the other two then you may be able to increase its 'relative' strength that way. Having said that - the two signals you don't want are very strong by comparison with the one that you do want....

Hope this helps
Adrian
Suffolk UK

679. Re: Which antenna should I use?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 10:55:27 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C3D72D1.7E64FDDB@bellatlantic.net>
Source record: 151166

Someone further down the list (Ebech) has a Gotham vertical he'd probably let go for cheap. 120 feet is just about right for the ground radials you'll need.

'73 KI4Z

Brent wrote:

> Here's my question. I have room for one hf antenna about 120 ft I want to
> be able to use it on 15-80m if it get 10 and 160 great do big deal.
> Anyways I'm looking for suggestions any + / - would be great too. This
> antenna should be able to handle 1.5kw also.
>
> Thanks,
>
> Brent N9BC

680. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 13:38:17 UTC
From: richardharrison@webtv.net
Message-ID: <16098-3C3D9949-3@storefull-111.iap.bryant.webtv.net>
Source record: 151069

Robert wrote:
"The desired channel has a frequency of 94.3 MHz. The disturbing
channels are on 94.0 and 94.7."

94.7 is likely another FM station, interfering with 94.3 MHz. The signal
on 94.0 is even not odd, so is likely something other than an FM
station.

The difference in frequency between 94.7 and 94.3 is 0.4 MHz.

0.4 / 94.3 = .004

105 MHz may be the frequency used to convert received frequencies to
10.7 MHz for IF amplification. It will be the local oscillator frequency
in our example when the received frequency is 94.3 MHz.

The difference frequency when the interfering 94.7 MHz is beat against
105 MHz is 10.3 Mz.

The difference between 10.7 MHz and 10.3 MHz is 0.4 MHz.. This is the
same difference in the desirerd and interfering frequencies as before
the frequency conversion.

0.4 / 10.7 = .04

The difference as a part of the carrier frequency is vastly different.
0.4 / 94.3 versus 0.4 / 10.7.
The frequency ratio for the IF amplifier is almost 10 times better for
the separation of the interfering frequency from the desired frequency.

If you must have a 94.3 MHz signal cleaned of the interference, you
might hetrodyne the signals to 10.7 MHz, filter out the interference,
then reconvert the desired signal to 94.3 MHz.

Best regards, Richard Harrison, KB5WZI

681. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 13:40:42 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3D99DA.9D681681@coqui.net>
Source record: 151168

Robert wrote:
>
> The desired channel has a frequency of 94.3 MHz, the disturbing channels
> are
> on 94.0 and 94.7 MHz.
> Robert

A directional antenna would be the first effort.
If you are handy with VHF construction, you should be able to make some
simple traps for the adjacent stations that would allow you to amplify
the weaker signal.

-Bill

682. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 14:42:58 UTC
From: cbd@rescueteam.com
Message-ID: <f20522be.0201100642.d8ed7f0@posting.google.com>
Source record: 151070

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
news:<u3990s96ulmt40@corp.supernews.com>...
> They didn't use cell phones. They used the in-flight phones mounted in the
> seat backs. These are wired into the aircraft and to an antenna on the
> outside of the fuselage.
>
> They couldn't have used a cell phone due to the interference it would have
> caused being in range of so many towers. The cell phones wouldn't have
> worked.
>
> Man - the level of ignorance on Usenet astounds me sometimes!

AstroMan:
You may want to check the discussion of this topic on
alt.folklore.urban.
Googling for "cell phone airplane" in group alt.folklore.urban brings
up
a post on 9/19, regarding the "handoff problem" of cell phones, and
how some types, especially CDMA systems should work better, even when
in view of several towers.

My thoughts on this:

1) Central PA doesn't have as many cells as, say, New York City. As
such, the area covered by one cell may have been large enough to
prevent hand-off problems.
2) The Doppler shift depends on the radial velocity, not the absolute
speed. Passing a cell is like having a satellite overhead-- no
Doppler shift.
3) In an emergency, systems which are not reliable can be made to work
well enough-- no one said the cell phone calls were "pin drop
quality".
4) Why wouldn't the terrorists simply turn off the Skyphone circuit
breaker?

The search also brings up a nice quote from the Philly Daily News,

"No one has fully explained why the plane went down, or what exactly
happened during an eight-minute gap from the time all cell phone calls
from the plane stopped and the time it crashed."

No one said "Skyphone", and, if it had they might have said "after
the Skyphone went dead". That makes me feel more comfortable with a
non-centralized system like cell phones, rather than a centralized one
like Skyphone. Still, I'm open to evidence.

73
Charlie "Which way's Goshen?" D

683. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 14:50:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1ka1t$re8i0$1@ID-124126.news.dfncis.de>
Source record: 151071

Jerry asked -

> Why doesn't . . . . Joseph J. Carr mention it in his book?
==========
Hi Jerry,

He's following the great Frederick E.Terman in 1943. It's such a trivial and obvious matter it's not worth printer's ink.

William.L.Everitt, "Communications Engineering", made passing reference to it in 1932 AD and then dropped the subject without a thud. If you insist on an authoritative reference then his brief, simple, easy explanation is fine.

But expect letters of thanks from Internet dot.com service providers for resurrecting the subject. Do you hold shares?

Oh, by the way, the theorem, if it can be described as such, has no special association with radio transmitters and feedlines.

And when reading the many, varied, often conflicting explanations you may be offered on this newsgroup or from other sources, be on your guard against being led into the false belief the internal resistance of radio transmitters is 50 ohms - it isn't.

Peculiarly enough, conjugate matching to antennas applies much more to receivers than it does to transmitters because we do at least have a good idea of what the input resistance of a receiver is.

A conjugate match exists when the load resistance is made equal to the internal resistance of the generator and, if necessary, the sum of the generator and load reactances is tuned out (reduced to zero) by an additional series reactance. This is the OBVIOUS and indeed the ONLY way of delivering the maximum power available from any generator into a load.

Regarding radio transmitters, mere delivery of maximum available power is seldom the objective and conjugate matching is not applicable. When it is applicable it is done without even thinking about it. The colour of the plate is of greater interest.

****
Regards, Reg G4FGQ
Radio Modelling Programs.
Have a free lunch.
Http://www.g4fgq.com
****

684. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 15:33:42 UTC
From: richardharrison@webtv.net
Message-ID: <14631-3C3DB456-59@storefull-112.iap.bryant.webtv.net>
Source record: 151072

Val wrote:
"Reactance is a form of "AC resistance", but the Current Through a Reactance is out-of-phase with the Voltage, so that NO POWER will be dissipated."

Reactance is a form of impedance.

It was admirable of Val to attempt a short course in electricity but it is important to note that reactance has a 90-degree relationship between voltage and current, not 180 degrees, etc.

"AC Theory and Reactive Components" is a chapter in the ARRL Handbook. There are enough pages and illustrations to avoid some misconceptions from shorter treatments. Many other texts cover the same material and those and the Handbook are the places to look for a-c basics.

Some texts have good explanations of the maximum power transfer theorem for both a-c and d-c.

Best regards, Richard Harrison, KB5WZI

685. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 16:00:15 UTC
From: richardharrison@webtv.net
Message-ID: <14630-3C3DC89F-160@storefull-112.iap.bryant.webtv.net>
Source record: 151076

Reg wrote:
"It (a conjugate match) is such a trivial and obvious matter it`s not worth the printer`s ink."

Yes, but, a conjugate match at an antenna-transmission line junction is required to avoid rejection of a part of the power presented by the transmission line to the antenna. That rejected power is called a reflection. Sounds like a thoughtful book title.

Reflected power on a transmission line depends upon the antenna load matching the Zo of the line.

The power a transmitter is able to deliver into a Zo-line depends on how the load presented by the Zo line, whatever it is, matches the transmitter`s internal impedance. The Zo of the line is not what is matched because, for example, the transmission line could be a 1/2-wavelength of any Zo and deliver a transmitter load of exactly the same impedance as presented at its far end.

A conjugate match between the transmitter and its load permits extraction of maximum power from the transmitter.

Best regards, Richard Harrison, KB5WZI

686. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 16:41:07 UTC
From: n7ws@yahoo.com
Message-ID: <3c3dc138.3724777@news.triconet.org>
Source record: 151073

On Thu, 10 Jan 2002 04:04:55 GMT, "Jerry" <jerryaa@prodigy.net> baited his hook with:

|Dan, you are a real case. It's your kind with your attitude that gives
|amateur radio a bad name. An Elmer you are not

Hmmm. I didn't know ham radio had a bad name. Shame on you Danny for singlehandedly messing up the whole thing by wasting your time responding to Jerry Springer's troll.

|"Dan Richardson" <k6mhe@arrl.net> wrote in message
|news:5b0q3ug33tnrr9idg21dqs2m6arnvg0e73@4ax.com...
|> Rather than reading "parts" why not read it all?
|>
|> This subject has be hashed and rehashed may times. Check Deja View.
|>
|> Danny
|>
|>
|> On Thu, 10 Jan 2002 02:27:03 GMT, "Jerry" <jerryaa@prodigy.net> wrote:
|>
|> >I have read parts of Walter Maxwell's book Reflections II. He mentions
|the
|> >conjugate matching theorum. I still don t really understand it. In
|simple
|> >terms can somebody describe it and how it affects transmission lines,
|> >matching, antennas, tuners and getting the antenna system to operate
|> >efficiently?

If you can't understand Walter's explanation, it is doubtful you will understand any "simple" explanation you will get in this group. Re-read the book. And when you're done, read it again. At least that might keep you away from the keyboard.

|> >
|> >Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his
|book?
|> >(Why) or is it controversial?

They don't mention brain surgery or nuclear physics either. Would you like a simple explanation of those topics too?

687. Re: Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 16:52:00 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <e8U9PHwPbOxcQYDqycMlDDNOrkmk@4ax.com>
Source record: 151074

The Moskal's <larry@sgi.net> wrote:

>Does anyone know just how far the local zoning officer can go with dumb
>ordinances involving antenna heighth and proximity to property lines,
>ect? Our local ordinance says an antenna mounted on the ground can't be
>
>above 15 feet high, but a roof mount can be up to 20 feet above the
>highest point of the roof. I have mine on a 30 foot tower anchored to
>the gable of the roof. I also have a ground plane on the other side of
>the house that's close to the FCC limit of 70 feet. Do these local
>ordinances overrule the FCC? Where can I get the definitive answers to
>the questions I need to ask?

The ARRL has set up a "how to" chart for dealing with antenna restrictions. See
http://www.remote.arrl.org/news/stories/2002/01/07/2/?nc=1

They also have a book on antenna restrictions -- might be worth getting.

Bob
k5qwg

> Any help you could provide would be
>greatly appreciated. I also should mention that he said I could have
>only one antenna. Has anyone ever heard of this? Is this enforcable?
>I might just give him what he wants and take the one down and change the
>
>dual polarity to a five element flatsider right about the height of the
>telephone lines and tell him to go @#$% himself. Thanks for any help
>you can give me with this problem.
>
>
>
>

688. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 16:53:36 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a1kgu1$kv2$1@slb2.atl.mindspring.net>
Source record: 151075

Jerry:

Trolling trolling trolling over the sparkling sea...

MAXIMUM POWER TRANSFER THEOREM - sometimes called thed CONJUGATE MATCHING THEOREM --

Heh, heh... our picayune Mathematician colleagues would scoff that we techies glorify such a simple result with the title of "Theorem". At best they might call it a "lemma" or simply "an exercise left for the student". Remember your Math teachers?

In *plain* English words the so-called "Conjugate Matching Theorem" is stated as follows:

*** The value of a load impedance (Zo) which, when connected to a given source of internal impedance (Zi), maximizes the real power delivered into that load from the source, equals the complex conjugate of the internal impedance of the source. ***

Note: A point often missed, must be a subtle one I guess, is that this so-called theorem is a "load designer's" theorem.

It does not work the other way round! That is, the theorem is useful to anyone desiring to optimize a load Zo, when given a Zi, BUT is not of much use to those desiring to optimize a an internal source Zi to a given load Zo!

The optimum value of the internal source impedance required to maximize power into a given load is quite a *different* result!

Using mathematical symbols, the conjugate matching theorem can be stated as follows: if the internal impedance of the source is experessed as Zi = Ri + jXi, then the optimum load impedance Zo is equal to the complex conjugate of Zi, namely Zo = Ri - jXi.

Where: R is resistance, X is reactance, j is the imaginary unit from complex number theory, and those two catchy words "complex conjugate" simply mean, change the sign of the imaginary part. i.e. change the sign of the reactance!

A special and often encountered case is when only resistance is present and X is not. If reactance X is not present in either the source or the load, then X = 0, and Zo = Ro = Zi = Ri is the optimum solution. i.e. make the load resistance Ro equal to the source resistance Ri.

(Practically this means that the presence of reactance, in either the source or load, tends to prevent the optimum transfer of power, and that this can

be fixed by "cancelling" inductive reactance in one with an equal amount of capacitive reactance in the other or vice versa, before adjusting the load resistance to equal the source resistance.)

A mathematical proof of this famous conjugate matching theorem result requires the use of methods of differential calculus. It takes about 5 or 6 lines. to prove it, an outline of the proof is: write down an expression for the real power Pr dissipated in the load Zo, in terms of Zi = Ri +jXi and then seek the values of Ro and Xo which yeild the maximum value for Pr. This is usually done by taking the derivatives of Pr with respect to Ro and Xo, namely dPr/dRo and dPr/dXo and setting them both equal to zero and then solving the resulting two simultaneous equations for Ro and Xo in terms of Ri and Xi. The simple end result of this manipulation is that Ro = Ri and Xo = -Xi.

Below here are the gory details that the Mathematicians see as "too elementary to be a theorem". Do ya'll agree!: Note that EE texts leave this as an exercise for the student. Below is the "proof" completely worked out... straight from the EE Professor's solutions manual! Worth 20 points on the next EE freshman mid-term quiz! Heh, heh...

Maximum Power Transfer Theorem:

Given an electrical source of voltage with intenal impedance Zi = Ri + jXi, find the value of the load impedance Zo = Ro +jXo connected to this source which results in the maximum power delivered to the load.

Without loss of generality assume that the open circuit voltage of the source is unity (one volt rms):

The real power delivered to the load Zo can then be expressed as:

Pr = Ro/((Ro+Ri)(Ro+Ri)+(Xo+Xi)(Xo+Xi))

Taking derivatives of Pr with respect to Ro and Xo, and setting them both equal to zero, which defines the maximum of Pr, we get the following two equations to be solved simultaneously:

(1) dPr/dXo = -Ro(Xo+Xi)/((Ro+Ri)(Ro+Ri) + (Xo+Xi)(Xo+Xi)) = 0

2) dPr/dRo = ((Ro+Ri)(Ro+Ri)+(Xo+Xi)(Xo+Xi) - 2Ro(Ro+Ri))/((Ro+Ri)(Ro+Ri) + (Xo+Xi)(Xo+Xi)) = 0

Noting that both equations share a common denominator, namely ((Ro+Ri)(Ro+Ri) + (Xo+Xi)(Xo+Xi)), that the numerator of (2) has a common factor (Ro+Ri) on both sides of the minus sign, and eliminating these coomon factors, we get two more compact equations to be solved simultaneously for Ro and Xo which maximize the power Pr, in terms of Ri and Xi.

(3) Ro(Xo+Xi) = 0

(4) (Ro+Ri) + (Xo+Xi) - 2Ro = 0

Clearly from (3)

Xo = -Xi

and substituting this value of Xo into (4) gives

Ro = Ri.

As the Mathematicians say...

QED

"Jerry" <jerryaa@prodigy.net> wrote in message
news:XZ6%7.4574$B7.608063667@newssvr16.news.prodigy.com...
> I have read parts of Walter Maxwell's book Reflections II. He mentions
the
> conjugate matching theorum. I still don t really understand it. In
simple
> terms can somebody describe it and how it affects transmission lines,
> matching, antennas, tuners and getting the antenna system to operate
> efficiently?
>
> Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his
book?
> (Why) or is it controversial?
>
>

689. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 17:33:28 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <hrjr3ugl848tet3ekbi4gq6advh6ijufup@4ax.com>
Source record: 151077

On Thu, 10 Jan 2002 14:50:09 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>delivery of maximum available power is
>seldom the objective and conjugate matching is not applicable. When it is
>applicable it is done without even thinking about it.

Ah Punchinello!

Your formula for technical discussion should be bottled for concession
as Old Wife's tonic.

Reminds me of the joke about homeopathic chicken soup:
take one chicken and hang in the window
allow the shadow to fall across a pot of boiling water
boil down the water to several ounces
dilute with water.

73's
Richard Clark, KB7QHC

690. Re: polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 18:03:12 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201101003.16016fd7@posting.google.com>
Source record: 151078

Another way to look at it is to imagine having a dipole antenna that is rotating, in a plane broadside to the direction of propagation, at a rate equal to the transmit frequency.

That is, if you are transmitting on 7.000 MHz the dipole will be spinning at 7000000 revolutions per second.

In free space the polarization will be the same at both ends. However, as you introduce objects (electric wires, street lights, signs, houses, etc) they will absorb and reradiate the signal (commonly called 'reflections'). The resulting composite signal will have random polarization, and possibly become circular! It depends on the relative angle between the object and the incoming wave polarization. The same thing happens with multihop HF propagation.

691. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 18:18:19 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <LVk%7.348121$W8.13107429@bgtnsc04-news.ops.worldnet.att.net>
Source record: 151079

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:14630-3C3DC89F-160@storefull-112.iap.bryant.webtv.net...
> Reg wrote:
> "It (a conjugate match) is such a trivial and obvious matter it`s not
> worth the printer`s ink."
>
> Yes, but, a conjugate match at an antenna-transmission line junction is
> required to avoid rejection of a part of the power presented by the
> transmission line to the antenna. That rejected power is called a
> reflection. Sounds like a thoughtful book title.
>

In general, a "conjugate match" at the junction between the antenna and the transmission line does not prevent reflections from being created at the antenna. Only when the antenna impedance equals the Zo of the line will there be no reflections. In general, a conjugate match and an impedance match are not the same things. A conjugate match and an impedance match will be the same when the source impedance exactly equals Zo.

It is easy to set up an example where more power is delivered to a load with reflections (the conjuagte match) than to a load where there are no reflections (the impedance match).

> Reflected power on a transmission line depends upon the antenna load
> matching the Zo of the line.

Yes, and this condition is not necessarily a conjugate match.

>
> The power a transmitter is able to deliver into a Zo-line depends on how
> the load presented by the Zo line, whatever it is, matches the
> transmitter`s internal impedance. The Zo of the line is not what is
> matched because, for example, the transmission line could be a
> 1/2-wavelength of any Zo and deliver a transmitter load of exactly the
> same impedance as presented at its far end.
>
> A conjugate match between the transmitter and its load permits
> extraction of maximum power from the transmitter.
>
> Best regards, Richard Harrison, KB5WZI
>

Regards,

Steve VE9SRB

692. Re: K1MAN sending this letter.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 19:23:04 UTC
From: KC8JBO <kc8jbo@alt.net>
Message-ID: <a1l0bs$74f$2@pita.alt.net>
Source record: 151085
Cross-posted to:
alt.radio.scanner.flame_fest,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.antenna

```
"Krell" <krell1215@yahoo.com> wrote in message
news:a1j43u0ik1@enews4.newsguy.com...
>
> "KC8JBO" <kc8jbo@alt.net> wrote in message
news:a1hkl6$v8d$2@pita.alt.net...
> >
> > "Krell" <krell1215@yahoo.com> wrote in message
> > news:a1g19s030k3@enews2.newsguy.com...
> > > She's never free. In fact, she's very expensive.
> >
> > Get a lesser-known starlet, then. LOL!
>
> Hmmm...there's Roxanna Zal.

LOL!!!!!
```

693. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 20:45:24 UTC
From: la8ak.xnd@online.no
Message-ID: <3c3df848.10716798@news.online.no>
Source record: 151080

On Thu, 10 Jan 2002 10:16:38 +0100, Robert <robert.61@gmx.at> wrote:

>The desired channel has a frequency of 94.3 MHz, the disturbing channels
>are
>on 94.0 and 94.7 MHz.
>Robert

instead of requiring a selective amplifier, couldn't you solve the
problem using a good receiver?
--
remove ,xnd to reply

694. 450 MHz Mobile Trunk Mount whip antennas on ebay

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 20:51:35 UTC
From: lyman@duggan-family.org
Message-ID: <r9n%7.11198$_p.4048694@typhoon.tampabay.rr.com>
Source record: 151083

Search: 450 MHz Mobile Trunk Mount whip antenna

We put one up every Thursday night for 10 days and with "Buy it Now" option
You can see photos here: http://www.sonica.org/ham/450ant

Also an audio booster speaker for HT's every week.
Search: Audio Booster
http://www.naval.com/hts-3

73, ly

695. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 20:58:09 UTC
From: graywolf15222@yahoo.com
Message-ID: <a53b928c.0201101258.1aa767fe@posting.google.com>
Source record: 151081

Jerry,

Conjugate matching is what happens, when you are coupling the 50-ohm output of your transmitter or amplifier to a load that is not 50 ohm. You need some type of matching network such as a gamma or beta match or an antenna tuner.

For example when you adjust your antenna tuner so as to obtain a VSWR of 1:1 you are matching the 50-ohm transmitter to the complex impedance of your antenna system and by system I mean the antenna and transmission line.

Let's say that the complex impedance looking into the coax from the antenna is 60 ï¿½ j100 ohms. When you adjust your antenna tuner to a VSWR of 1:1 the transmitter is seeing 50 +/- j 0 ohms and the antenna tuner's output is still seeing 60 ï¿½ j 100 but if your were to measuring the complex impedance looking into the tuner's output connector you would measure 60 +j100. The tuner's output impedance is the opposite of the impedance looking into the coax. Since the antenna tuner's output is tuned to 60 + j100 and the complex impedance from the antenna system is 60 ï¿½ j100. The reactance values cancel out. This is conjugate matching. Picture it as if you were looking at yourself in a mirror. Raise your right arm and in the mirror it's appears to be you're left arm that was raised.

I hope this helps you. I tried to make it simple but it is a complex subject. However you are reading the right book.

Best of luck,

GW

"Jerry" <jerryaa@prodigy.net> wrote in message
news:<XZ6%7.4574$B7.608063667@newssvr16.news.prodigy.com>...
> I have read parts of Walter Maxwell's book Reflections II. He mentions the
> conjugate matching theorum. I still don t really understand it. In simple
> terms can somebody describe it and how it affects transmission lines,
> matching, antennas, tuners and getting the antenna system to operate
> efficiently?
>
> Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his book?
> (Why) or is it controversial?

696. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 21:02:22 UTC
From: tdonaly@cs.com
Message-ID: <20020110160222.26938.00000931@mb-mn.news.cs.com>
Source record: 151082

>

Peter wrote;
>Jerry:
>
>Trolling trolling trolling over the sparkling sea...
>
>MAXIMUM POWER TRANSFER THEOREM - sometimes called thed CONJUGATE MATCHING
>THEOREM --
>
>Heh, heh... our picayune Mathematician colleagues would scoff that we
>techies glorify such a simple result with the title of "Theorem". At best
>they might call it a "lemma" or simply "an exercise left for the student".
>Remember your Math teachers?

(Peter's proof snipped.)

Very good, Peter. Now do the same proof
when the source resistance is "dissipationless." Don't neglect to tell how to
actually construct a "dissipationless resistor."
Moreover, for extra points, you may want to
explain how to incorporate all this into a
class C vacuum tube amplifier. If you want to
cheat, you can get your ideas from previous
posts to this newsgroup, but in that event, you'll get an "F."

Tom Donaly KA6RUH

697. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 21:12:06 UTC
From: graywolf15222@yahoo.com
Message-ID: <a53b928c.0201101312.a6ec314@posting.google.com>
Source record: 151084

Perhaps you need to read a book or take a course on how to be polite and diplomatic.

Dan Richardson <k6mhe@arrl.net> wrote in message
news:<5b0q3ug33tnrr9idg21dqs2m6arnvg0e73@4ax.com>...
> Rather than reading "parts" why not read it all?
>
> This subject has be hashed and rehashed may times. Check Deja View.
>
> Danny
>
>
> On Thu, 10 Jan 2002 02:27:03 GMT, "Jerry" <jerryaa@prodigy.net> wrote:
>
> >I have read parts of Walter Maxwell's book Reflections II. He mentions the
> >conjugate matching theorum. I still don t really understand it. In simple
> >terms can somebody describe it and how it affects transmission lines,
> >matching, antennas, tuners and getting the antenna system to operate
> >efficiently?
> >
> >Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his book?
> >(Why) or is it controversial?
> >

698. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 21:30:30 UTC
From: aa1ll@email.com
Message-ID: <e85be400.0201101330.4d60a7c2@posting.google.com>
Source record: 151086

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<a1fq4s$qfef9$1@ID-124126.news.dfncis.de>...
> For a given antenna, there is always a soil conductivity/resistivity at
> whixh ground losses are at a maximum.
>
> Just as there is always a load resistance in which maximum power is
> generated when connected to a given generator.
> ---
> Reg, G4FGQ

Hi again Reg:

Sounds like a guessing game, now I'm guessing 377ohms per square if the antenna is a quarter wave away from the soil and is horizontal. This comes from having continuous E and H fields and having them be dissipated with zero reflection. This is also known as a "Salisbury Screen," and 377ohms is the ratio of E to H in free space.

Here's an arcane guess: You probably have to match 377 times (1 + tan(delta)) [where tan(delta) is the soil loss tangent] to the ratio of E/H at the soil's surface for a particular antenna configuration in order to have the soil suck up all the RF. This would be independent of polarization if the soil surface were isotropic.

73, Paul, AA1LL
http://www.qsl.net/aa1ll

699. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 21:39:24 UTC
From: richardharrison@webtv.net
Message-ID: <3312-3C3E0A0C-30@storefull-113.iap.bryant.webtv.net>
Source record: 151087

Steve, VE9SRB wrote:
"Only when the antenna impedance equals the Zo of the line will there be no reflections."

Good point! The Zo of the line is practically a pure resistance. I should not have used the conjugate word as an adjective for match regarding the junction of the line with the antenna. Doesn`t make any difference what the impedance looking toward the transmitter is. It`s the impedance bump the forward wave encounters when it hits the antenna that determines the reflection from the antenna. The line forces the wave to conform to Zo, in both directions of travel.

Best regards, Richard Harrison, KB5WZI

700. Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 22:23:19 UTC
From: Frank Valdor <Frank@nospam.valdor.de>
Message-ID: <3C3E1457.D14DD347@nospam.valdor.de>
Source record: 151088

Hi,

I'm currently planning a new (well, actually it's my first one) antenna tower.
Up to now I've been operating with a R-7 vertical so I don't have any reasonable
experience with directional antennas.

Maybe this question has been asked before:

Should I go for a cubical quad or a yagi beam?

I'm looking for good DX performance and coverage from 10m-20m (or even 30m).

I do have the space to set up a tower 30-40ft, so there's room
enough to accomodate a 2-3 element quad or 6-7 element yagi.
However I don't want to setup a "christmas tree" of 3 or even more
mono band yagis (which might offer max. performance).

Any hints / oppinions / "pros and cons" are appreciated.

Thanks in advance.

73,
Frank
DH5JG

701. Re: Hamstick for an aerial? Reccomendations?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 22:32:27 UTC
From: ik7565@erols.com
Message-ID: <3C3E167B.6FF9EC00@erols.com>
Source record: 151089

I use "hamsticks" (Valor, IronHorse, Pro-Am) from my balcony in vertical
configuration with 1/4w counterpoise attached to base of stick. Works
FB (WAS and 73 DXCC since last March).
I prefer the kind that don't have a setscrew so you can remove the
stinger without changing the resonant freq each time.

73 de Ian
N8IK

N4ZN wrote:
>
> On Thu, 20 Dec 2001 09:17:35 -0600, "N4IXT" <n4ixt@arrl.net> wrote:
>
> >I was looking at the Hamsticks on their site (www.hamstick.com), very
> >inexpensive solution (25 bucks). Was wondering if anyone had used these, or
> >if there was some other brand I should be looking at.
> >
> >Also, since I'll have it way up in the air, and not attached to a vehicle,
> >do you think I'll need some sort of counterpoise?
>
> You can use 2 hamsticks per band mounted horizontally feed end to feed
> end by bolting 2 of the mirror mount style mounts together and feed
> the contraption like a 1/2 wave dipole... kind of a shortened dipole.
>
> Personally, for ease of installation with minimum equipment... I'de go
> with a full size 1/2 wave dipole cut for the lowest band I was going
> to operate and use a tuner to help it out on the other bands.

702. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 23:02:20 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C3E1D30.AB1286C9@bellatlantic.net>
Source record: 151090

I'd go with a "Non Cubical Quad, the ones with Convex end elements. The classical "Cubical Quad" does NOT have Convex end elements. 2 Quad elements = a true 3 Element yagi in forward gain. 3 Quad elements has slightly more forward gain than a 4 Element yagi. 4 Quad Elements you're crazy (Like Me).

Quad Advantages:
a) Bandwidth is slightly wider
b) Requires a lighter duty rotator than a 7 element Tri-Band Yagi. Less wind load, lower inertia.
c) Less sensitive to atmospheric noise
d) Less turning radius required, shorter Boom
e) No Lossy Traps
f) Probably cheaper depending on lots of things (Especially how it's fed)

g) Work better at medium tower heights (40' you said)
h) Front to Back ratios are at least 3 dB higher
i) I believe modern Fiberglass spreaders and aluminum spiders are as rugged as most (Not all) Yagi's regarding Ice loading and wind survival..

Quad Disadvantages
The Yagi will likely require no tuning (Unless you're real pickey).. you just adjust to manufacturer's recommendations and put it up. Depending on how you feed a quad, you'll likely have to mess with it some. If you run a single feedline, there will be element interaction effects that might require some fiddling. I'd recommend using a remote controlled coax switch, and feed each element individually with the proper 75 ohm matching section and choke balun at each element feed. Also having a Crank up/Tilt over tower will make tuning it a breeze.

Reminder: I've been called "Loopy" on this news group.

'73 KI4Z

Frank Valdor wrote:

> Hi,
>
> I'm currently planning a new (well, actually it's my first one) antenna
> tower.
> Up to now I've been operating with a R-7 vertical so I don't have any
> reasonable
> experience with directional antennas.
>
> Maybe this question has been asked before:
>

> Should I go for a cubical quad or a yagi beam?
>
> I'm looking for good DX performance and coverage from 10m-20m (or even
> 30m).
>
> I do have the space to set up a tower 30-40ft, so there's room
> enough to accomodate a 2-3 element quad or 6-7 element yagi.
> However I don't want to setup a "christmas tree" of 3 or even more
> mono band yagis (which might offer max. performance).
>
> Any hints / oppinions / "pros and cons" are appreciated.
>
> Thanks in advance.
>
> 73,
> Frank
> DH5JG

703. Heavy-duty VHF/UHF base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 23:11:19 UTC
From: "Bob M." <xxxxx@yyyy.zzz>
Message-ID: <rcp%7.47795$K36.16431995@news1.rdc1.va.home.com>
Source record: 151091

I have the opportunity to put an antenna up anywhere on a new tower. I just need to get the antenna and some hard line to the site. The more hard line, the higher it can go. A multi-band antenna would allow me to connect several different radio systems to it, but so far the only candidates are the 144/220/440MHz Diamond and Comet, fiberglass, about 10 feet tall, and I don't know if they'll stand up to the wind, so to speak.

Anyone have some ideas or manufacturers that I should look into? If I have to select just a single band antenna, it'll probably be 440-450 MHz, but that would limit me significantly. There must be some good monoband antennas that can be bought.

Thanks in advance.

Bob, WA1MIK

704. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 23:18:20 UTC
From: dothetime@hotmail.com
Message-ID: <141e2b2a.0201101518.2c2b60d0@posting.google.com>
Source record: 151092

'Doc <w5lz@icok.net> wrote in message news:<3C3C970F.DFF79B6E@icok.net>...
> David,
> No chance of shipping it??
> 'Doc
Hi Doc,
I'm sorry that there are people out there that have nothing better to
do, and have elected themselves the internet police, they need to
lighten up. I sold my TriEx Tower to a ham in Rhode Island who was
only too happy to pick it up. A ham trucker from 7 land is considering
the Hy-Tower and if he decides to buy it he may have a buddy trucker
pick it up for him when he passes thru the area, so you see there are
alternatives to shipping. I don't believe what I did was in any way
improper.
If I can't sell it, I'll reconsider my options.
Those who supported me, thank you, but I realize you can never please
everyone in this world.
It is still available.
Dave

705. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-10 23:49:21 UTC
From: Bill <n8xv@yahoo.com>
Message-ID: <3C3E2880.8DD3580E@yahoo.com>
Source record: 151093

Frank Valdor wrote:

> Hi,
>
> I'm currently planning a new (well, actually it's my first one) antenna
> tower.
> Up to now I've been operating with a R-7 vertical so I don't have any
> reasonable
> experience with directional antennas.
>
> Maybe this question has been asked before:
>
> Should I go for a cubical quad or a yagi beam?
>
> I'm looking for good DX performance and coverage from 10m-20m (or even
> 30m).
>
> I do have the space to set up a tower 30-40ft, so there's room
> enough to accomodate a 2-3 element quad or 6-7 element yagi.
> However I don't want to setup a "christmas tree" of 3 or even more
> mono band yagis (which might offer max. performance).
>
> Any hints / oppinions / "pros and cons" are appreciated.
>
> Thanks in advance.
>
> 73,
> Frank
> DH5JG

I have had a 2 element 5 band quad up for over 5 years, it's feed with a single coax. It is at 75', it's been through high winds and ice storms. I try not to look up at it when the ice is heavy on it or the wind is blowing strong, it's a sorry sight to see. But it does take the weather well and works good even when ice covered. I do have mono band yagis for 10 & 20, both are 3 element, at times they do out play the quad, but on the same note the quad out does the yagis at times. I am now thinking about putting the 2 element quad on my 55' tower and installing a 40 meter quad on the 70' tower. I had a 4 element quad on 6 meters at one time, I also had a 6 element 6 meter yagi. For me the yagi out played the quad on 6 meters. I find the quads are a little more broadbanded than my yagis, front to back is about the same, the yagis seem to be tighter on the sides. Over all I vote for the quad on 10, 12, 15, 17, 20, 30 & 40 meters. Yagi on 6 and 2 meters. Loops on 80 & 160. I have never had weather damage to my quads, but I have on the yagis. I have several

friends that also have quads and like them. Any questions drop me a note.

73, Bill

706. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 00:05:42 UTC
From: Larry Gauthier <larryg5099@chartermi.net>
Message-ID: <u3sb2t1m35hp46@corp.supernews.com>
Source record: 151094

Frank,

I purchased a 5 band spider Gem Quad (Canada) for several reasons:

1. All WARC bands, _and_ 6 and 2 meters!

2. Optimal (or at least better) spacing on each band. This has two effects: the SWR curves and F/B ratios on each band are a little better than the fixed-spacing quads; and the elements are a little farther apart from each other than on a fixed-spacing quad (reducing interaction between elements)

3. Ability to TUNE each band independently - so when I want to adjust tuning and F/B ratio on 10 meters it doesn't completely undo my settings for the other bands.

4. Ability to FEED each band independently - although I do not do it this way. I feed the antenna to match my rig and amplifier/tuner [Icom 746, AT500/IC-2KL] - so I coupled 10/12, 15/17, and 20 meters is alone.

5. Lightweight, tight turning radius - I have this on a 56 foot fold-over tower with a medium rotor on a heavily treed lot, and can drop it to the ground and work on it single-handedly.

6. Previous positive experience with a quad on HF... low noise, good bandwidth, great for DX; along with negative experience with trapped tri-banders (ugh!).

Now, having said those positive things, I will also add that tuning the quad is a labor of love and requires patience. I would not even attempt it if it were not easy to drop the quad and adjust it (crank up, fold-over, whatever - or you gotta' love climbing towers!) and unless you own an MFJ 259 antenna analyzer.

-larry
K8UT

"Frank Valdor" <Frank@nospam.valdor.de> wrote in message
news:3C3E1457.D14DD347@nospam.valdor.de...
> Hi,
>
> I'm currently planning a new (well, actually it's my first one) antenna
> tower.
> Up to now I've been operating with a R-7 vertical so I don't have any
> reasonable
> experience with directional antennas.
>
> Maybe this question has been asked before:

>
> Should I go for a cubical quad or a yagi beam?
>
> I'm looking for good DX performance and coverage from 10m-20m (or even
> 30m).
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> I do have the space to set up a tower 30-40ft, so there's room
> enough to accomodate a 2-3 element quad or 6-7 element yagi.
> However I don't want to setup a "christmas tree" of 3 or even more
> mono band yagis (which might offer max. performance).
>
> Any hints / oppinions / "pros and cons" are appreciated.
>
> Thanks in advance.
>
> 73,
> Frank
> DH5JG

707. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 00:06:06 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C3E2C23.5380EA2C@bellatlantic.net>
Source record: 151095

You must have some problems with that many bands on a single coax. Frankly, I never tried a single feed Quad. Full size 3 el. Mono-Banders are tough to beat with one 2 element multi-band quad, and if you prefer the Quad, I understated my enthusiasm for the Quad!

'73 KI4Z

Bill wrote:

> Frank Valdor wrote:
>
> > Hi,
> >
> > I'm currently planning a new (well, actually it's my first one) antenna
> > tower.
> > Up to now I've been operating with a R-7 vertical so I don't have any
> > reasonable
> > experience with directional antennas.
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> > mono band yagis (which might offer max. performance).
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> >
> > Thanks in advance.
> >
> > 73,
> > Frank
> > DH5JG
>
> I have had a 2 element 5 band quad up for over 5 years, it's feed with a
> single coax. It is at 75', it's been through high winds and ice storms. I
> try not to look up at it when the ice is heavy on it or the wind is blowing
> strong, it's a sorry sight to see. But it does take the weather well and
> works good even when ice covered. I do have mono band yagis for 10 & 20,
> both are 3 element, at times they do out play the quad, but on the same

> note the quad out does the yagis at times. I am now thinking about
> putting the 2 element quad on my 55' tower and installing a 40 meter quad
> on the 70' tower. I had a 4 element quad on 6 meters at one time, I also
> had a 6 element 6 meter yagi. For me the yagi out played the quad on 6
> meters. I find the quads are a little more broadbanded than my yagis,
> front to back is about the same, the yagis seem to be tighter on the
> sides. Over all I vote for the quad on 10, 12, 15, 17, 20, 30 & 40
> meters. Yagi on 6 and 2 meters. Loops on 80 & 160. I have never had
> weather damage to my quads, but I have on the yagis. I have several
> friends that also have quads and like them. Any questions drop me a note.
>
> 73, Bill

708. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 00:32:08 UTC
From: Fernando Diaz <kp4dx@nospammediaone.net>
Message-ID: <coq%7.90014$WK1.23284669@typhoon.we.rr.com>
Source record: 151097

Hello Frank:

I have had monobanders, trap arrays and quads during my 33 years as a ham...I very strongly favor a WELL TUNED quad over any other antenna. I consider a little known company, GEM QUAD PRODUCTS, in Canada, the premier quad antenna in the 10 through 20 meters field. I currently use a 2 element Gem Quad at 38 feet and it has been praised by reports from DX'rs in California (my QTH) as well as around the world. Tests done under certain band conditions give performance results that are not theoretically possible with a 2 element quad, like > 50 dbs front to back...of course, this has been done with regular radio S meters and not with lab equipment....

I did my reflector tuning with a very simple procedure by using an SWR analyzer instead of the normal S meter reading of a receiver.... If you are interested (or anyone else), please e-mail me at the QRZ.com e-mail address and I will be happy to send the procedure, or if someone can tell me if protocol allows me to attach a file to a message, I will do that.

The major problem with Quads is that it is a 3 dimensional antenna and the assembly and tower mounting is usually not very easy, so, lots of planning is suggested.

Any questions, I would be happy to answer....(I'm very active on CW/SSB 10 through 20 meters daily)

73
Luis KP4DX

"Frank Valdor" <Frank@nospam.valdor.de> wrote in message
news:3C3E1457.D14DD347@nospam.valdor.de...
> Hi,
>
> I'm currently planning a new (well, actually it's my first one) antenna
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> Thanks in advance.
>
> 73,
> Frank
> DH5JG

709. FS/FT Radio Shack HTX-202 w/ acces!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 00:58:26 UTC
From: KC8SSG <kc8ssg@qsl.net>
Message-ID: <SMq%7.73$903.1043@news>
Source record: 151096
Cross-posted to:
alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

I have a 2m handie talkie with
Box
speaker mic
rechargable battery
AA battery pack
manual w/ schematics
AC walwart
works like new!I have used this for packet mostly.Also have older power supply that I could be dealt out of for an extra charge.I will trade for about anything.Looking for DC power strip, 2m mobile,6 meter stuff,mobile antennas, QTH antennas,you name it! I am a new ham and need alot of stuff still. Just ask, look to see what you got laying around!

reply here or to my email
kc8ssg@qsl.net
--
KC8SSG

710. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 01:40:20 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C3E424E.FE737FD@tampabay.rr.com>
Source record: 151098

hey mark
in your opnion what would you rather use for VHF 4 cushcraft 13b2 or 4 10 ele
cubical quads?

Mark Hall wrote:

> I'd go with a "Non Cubical Quad, the ones with Convex end elements. The
> classical "Cubical Quad" does NOT have Convex end elements. 2 Quad
> elements = a true 3 Element yagi in forward gain. 3 Quad elements has
> slightly more forward gain than a 4 Element yagi. 4 Quad Elements you're
> crazy (Like Me).
>
> Quad Advantages:
> a) Bandwidth is slightly wider
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> wind load, lower inertia.
> c) Less sensitive to atmospheric noise
> d) Less turning radius required, shorter Boom
> e) No Lossy Traps
> f) Probably cheaper depending on lots of things (Especially how it's fed)
>
> g) Work better at medium tower heights (40' you said)
> h) Front to Back ratios are at least 3 dB higher
> i) I believe modern Fiberglass spreaders and aluminum spiders are as
> rugged as most (Not all) Yagi's regarding Ice loading and wind survival..
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> The Yagi will likely require no tuning (Unless you're real pickey).. you
> just adjust to manufacturer's recommendations and put it up. Depending on
> how you feed a quad, you'll likely have to mess with it some. If you run a
> single feedline, there will be element interaction effects that might
> require some fiddling. I'd recommend using a remote controlled coax
> switch, and feed each element individually with the proper 75 ohm matching
> section and choke balun at each element feed. Also having a Crank up/Tilt
> over tower will make tuning it a breeze.
>
> Reminder: I've been called "Loopy" on this news group.
>
> '73 KI4Z
>
> Frank Valdor wrote:
>
> > Hi,
> >
> > I'm currently planning a new (well, actually it's my first one) antenna

> > tower.
> > Up to now I've been operating with a R-7 vertical so I don't have any
> > reasonable
> > experience with directional antennas.
> >
> > Maybe this question has been asked before:
> >
> > Should I go for a cubical quad or a yagi beam?
> >
> > I'm looking for good DX performance and coverage from 10m-20m (or even
> > 30m).
> >
> > I do have the space to set up a tower 30-40ft, so there's room
> > enough to accomodate a 2-3 element quad or 6-7 element yagi.
> > However I don't want to setup a "christmas tree" of 3 or even more
> > mono band yagis (which might offer max. performance).
> >
> > Any hints / oppinions / "pros and cons" are appreciated.
> >
> > Thanks in advance.
> >
> > 73,
> > Frank
> > DH5JG

711. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 02:20:07 UTC
From: AA1LL <nospam@newsranger.com>
Message-ID: <rZr%7.91$TS6.101@www.newsranger.com>
Source record: 151099

In article <Qi6%7.22881$tz1.19080@nwrddc01.gnilink.net>, M Kolber says...
>
>
>Reg Edwards wrote in message ...
>+AD4-It is popularly understood that an increase in soil resistivity always
>+AD4-results in increased losses in the ground such as the ground in the
>vicinity
>+AD4-of a vertical antenna.
>+AD4-
>+AD4-But this cannot be true because when soil resistivity increases to the
>point
>+AD4-when it can be considered to be an insulator the ground loss becomes very
>+AD4-small again.
>
>Yes, but then the wave would continue to propagate into the soil just as if
>it were in free space and for your purposes it would be all loss.
>
>The greatest losses therefore are when the soil appears the same as free
>space, then all the wave is absorbed, none reflected.
>
>Interesting question
>
>Mark
>WB2WHC
>
>
Good thinking, Mark, I think you hit it! You will get total absorbtion by the ground when the ground impedance equals the wave impedance or a thin slice of 377 ohms/square material if in the far field or at wl/4 from the antenna. This is called a Salisbury shield but I don't know how you would apply it to the near field of an antenna where the ratio of E to H is not exactly 377 + j0.

Cheers to Reg for thinking of the question and ciao from me,

73, Paul, AA1LL
Mason, NH
http://www.qsl.net/aa1ll

712. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 02:27:09 UTC
From: Bill <n8xv@yahoo.com>
Message-ID: <3C3E4D7D.98EDD60@yahoo.com>
Source record: 151100

Mark Hall wrote:

> You must have some problems with that many bands on a single coax. Frankly, I
> never tried a single feed Quad. Full size 3 el. Mono-Banders are tough to beat
> with one 2 element multi-band quad, and if you prefer the Quad, I understated
> my enthusiasm for the Quad!
>
> '73 KI4Z
>
> Bill wrote:
>
> > Frank Valdor wrote:
> >
> > > Hi,
> > >
> > > I'm currently planning a new (well, actually it's my first one) antenna
> > > tower.
> > > Up to now I've been operating with a R-7 vertical so I don't have any
> > > reasonable
> > > experience with directional antennas.
> > >
> > > Maybe this question has been asked before:
> > >
> > > Should I go for a cubical quad or a yagi beam?
> > >
> > > I'm looking for good DX performance and coverage from 10m-20m (or even
> > > 30m).
> > >
> > > I do have the space to set up a tower 30-40ft, so there's room
> > > enough to accomodate a 2-3 element quad or 6-7 element yagi.
> > > However I don't want to setup a "christmas tree" of 3 or even more
> > > mono band yagis (which might offer max. performance).
> > >
> > > Any hints / oppinions / "pros and cons" are appreciated.
> > >
> > > Thanks in advance.
> > >
> > > 73,
> > > Frank
> > > DH5JG
> >
> > I have had a 2 element 5 band quad up for over 5 years, it's feed with a
> > single coax. It is at 75', it's been through high winds and ice storms. I
> > try not to look up at it when the ice is heavy on it or the wind is blowing

> > strong, it's a sorry sight to see. But it does take the weather well and
> > works good even when ice covered. I do have mono band yagis for 10 & 20,
> > both are 3 element, at times they do out play the quad, but on the same
> > note the quad out does the yagis at times. I am now thinking about
> > putting the 2 element quad on my 55' tower and installing a 40 meter quad
> > on the 70' tower. I had a 4 element quad on 6 meters at one time, I also
> > had a 6 element 6 meter yagi. For me the yagi out played the quad on 6
> > meters. I find the quads are a little more broadbanded than my yagis,
> > front to back is about the same, the yagis seem to be tighter on the
> > sides. Over all I vote for the quad on 10, 12, 15, 17, 20, 30 & 40
> > meters. Yagi on 6 and 2 meters. Loops on 80 & 160. I have never had
> > weather damage to my quads, but I have on the yagis. I have several
> > friends that also have quads and like them. Any questions drop me a note.
> >
> > 73, Bill

Mark, the single feed works great. No different than using a single coax to feed multiband dipoles. Of course I'm not a real fussy type person. As far as SWR the quad covers most of all the bands with no problems, even the amp don't complain. I can't see as adjusting one band on the quad has has any effect on the others. But as someone else said it is a job doing the adjusting to start with, especially if you don't have a fold over of lay over tower. I do see the quad likes to hear my neighbors electric fence a little better than the yagi's do.

713. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 02:38:08 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C3E4FC7.5ADACC1D@bellatlantic.net>
Source record: 151101

Well.. I don't do VHF, but if I did, maybe I'd try 4 helixes in phase, or maybe a shortened, ground counterpoised vertical with a ton of radials buried. Sorry, I'm only "Loopy" on HF, I'll leave the VHF'ers alone!

'73 KI4Z

Dennis Kaylor wrote:

> hey mark
> in your opnion what would you rather use for VHF 4 cushcraft 13b2 or 4 10 ele
> cubical quads?
>
> Mark Hall wrote:
>
> > I'd go with a "Non Cubical Quad, the ones with Convex end elements. The
> > classical "Cubical Quad" does NOT have Convex end elements. 2 Quad
> > elements = a true 3 Element yagi in forward gain. 3 Quad elements has
> > slightly more forward gain than a 4 Element yagi. 4 Quad Elements you're
> > crazy (Like Me).
> >
> > Quad Advantages:
> > a) Bandwidth is slightly wider
> > b) Requires a lighter duty rotator than a 7 element Tri-Band Yagi. Less
> > wind load, lower inertia.
> > c) Less sensitive to atmospheric noise
> > d) Less turning radius required, shorter Boom
> > e) No Lossy Traps
> > f) Probably cheaper depending on lots of things (Especially how it's fed)
> >
> > g) Work better at medium tower heights (40' you said)
> > h) Front to Back ratios are at least 3 dB higher
> > i) I believe modern Fiberglass spreaders and aluminum spiders are as
> > rugged as most (Not all) Yagi's regarding Ice loading and wind survival..
> >
> > Quad Disadvantages
> > The Yagi will likely require no tuning (Unless you're real pickey).. you
> > just adjust to manufacturer's recommendations and put it up. Depending on
> > how you feed a quad, you'll likely have to mess with it some. If you run a
> > single feedline, there will be element interaction effects that might
> > require some fiddling. I'd recommend using a remote controlled coax
> > switch, and feed each element individually with the proper 75 ohm matching
> > section and choke balun at each element feed. Also having a Crank up/Tilt
> > over tower will make tuning it a breeze.
> >
> > Reminder: I've been called "Loopy" on this news group.

> >
> > '73 KI4Z
> >
> > Frank Valdor wrote:
> >
> > > Hi,
> > >
> > > I'm currently planning a new (well, actually it's my first one) antenna
> > > tower.
> > > Up to now I've been operating with a R-7 vertical so I don't have any
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> > > experience with directional antennas.
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> > > Maybe this question has been asked before:
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> > > Should I go for a cubical quad or a yagi beam?
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> > > I'm looking for good DX performance and coverage from 10m-20m (or even
> > > 30m).
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> > > I do have the space to set up a tower 30-40ft, so there's room
> > > enough to accomodate a 2-3 element quad or 6-7 element yagi.
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> > > mono band yagis (which might offer max. performance).
> > >
> > > Any hints / oppinions / "pros and cons" are appreciated.
> > >
> > > Thanks in advance.
> > >
> > > 73,
> > > Frank
> > > DH5JG

714. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 02:44:35 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C3E514A.3BAF292F@bellatlantic.net>
Source record: 151102

HaHa! A pair of dykes would solve that Electric Fence problem! Maybe you could couple into the Fence on 80/160 and make up for it? I've never heard of an Quad for those bands.

'73 Loopy Guy KI4Z

Bill wrote:

> Mark Hall wrote:
>
> > You must have some problems with that many bands on a single coax. Frankly, I
> > never tried a single feed Quad. Full size 3 el. Mono-Banders are tough to beat
> > with one 2 element multi-band quad, and if you prefer the Quad, I understated
> > my enthusiasm for the Quad!
> >
> > '73 KI4Z
> >
> > Bill wrote:
> >
> > > Frank Valdor wrote:
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> > > > Hi,
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> > > > I'm currently planning a new (well, actually it's my first one) antenna
> > > > tower.
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> > > > experience with directional antennas.
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> > > > Should I go for a cubical quad or a yagi beam?
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> > > > I do have the space to set up a tower 30-40ft, so there's room
> > > > enough to accomodate a 2-3 element quad or 6-7 element yagi.
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> > > > mono band yagis (which might offer max. performance).
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> > > > Any hints / oppinions / "pros and cons" are appreciated.
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> > > > Thanks in advance.
> > > >

> > > > 73,
> > > > Frank
> > > > DH5JG
> > >
> > > I have had a 2 element 5 band quad up for over 5 years, it's feed with a
> > > single coax. It is at 75', it's been through high winds and ice storms. I
> > > try not to look up at it when the ice is heavy on it or the wind is blowing
> > > strong, it's a sorry sight to see. But it does take the weather well and
> > > works good even when ice covered. I do have mono band yagis for 10 & 20,
> > > both are 3 element, at times they do out play the quad, but on the same
> > > note the quad out does the yagis at times. I am now thinking about
> > > putting the 2 element quad on my 55' tower and installing a 40 meter quad
> > > on the 70' tower. I had a 4 element quad on 6 meters at one time, I also
> > > had a 6 element 6 meter yagi. For me the yagi out played the quad on 6
> > > meters. I find the quads are a little more broadbanded than my yagis,
> > > front to back is about the same, the yagis seem to be tighter on the
> > > sides. Over all I vote for the quad on 10, 12, 15, 17, 20, 30 & 40
> > > meters. Yagi on 6 and 2 meters. Loops on 80 & 160. I have never had
> > > weather damage to my quads, but I have on the yagis. I have several
> > > friends that also have quads and like them. Any questions drop me a note.
> > >
> > > 73, Bill
>
> Mark, the single feed works great. No different than using a single coax to feed
> multiband dipoles. Of course I'm not a real fussy type person. As far as SWR the
> quad covers most of all the bands with no problems, even the amp don't complain. I
> can't see as adjusting one band on the quad has has any effect on the others. But
> as someone else said it is a job doing the adjusting to start with, especially if
> you don't have a fold over of lay over tower. I do see the quad likes to hear my
> neighbors electric fence a little better than the yagi's do.

715. Re: Heavy-duty VHF/UHF base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 02:55:26 UTC
From: codemaan <codeman@gj.net>
Message-ID: <a1ljsr02ivk@enews2.newsguy.com>
Source record: 151105

Need a little more information. How much wind (max mph gust speed?) Any icing? Need allot of gain out of your antenna? Or would 3/6 dbi be OK? Instead of expensive hardline (which is the best of course) would a run of Time LMR400 ;or another Time product do you?

I am using a Diamond 500 m(12ft?) at one site and a Diamond x-50 (~3ft) on another. I like them both. If wind velocity (excess of 90mph) is an issue, then go with the shorter model, but then you are giving up gain. Both have served me well. Yes, I know they are not commercial grade, but they are doing the job and I haven't got allot of money rapped up in the system.

"Bob M." <xxxxx@yyyy.zzz> wrote in message
news:rcp%7.47795$K36.16431995@news1.rdc1.va.home.com...
> I have the opportunity to put an antenna up anywhere on a new tower. I
just
> need to get the antenna and some hard line to the site. The more hard
line,
> the higher it can go. A multi-band antenna would allow me to connect
several
> different radio systems to it, but so far the only candidates are the
> 144/220/440MHz Diamond and Comet, fiberglass, about 10 feet tall, and I
> don't know if they'll stand up to the wind, so to speak.
>
> Anyone have some ideas or manufacturers that I should look into? If I have
> to select just a single band antenna, it'll probably be 440-450 MHz, but
> that would limit me significantly. There must be some good monoband
antennas
> that can be bought.
>
> Thanks in advance.
>
> Bob, WA1MIK
>
>

716. Re: conjugate matching -CORRECTIONS - K1PO slips up again!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 03:12:43 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a1ll6sbah1@nntp9.atl.mindspring.net>
Source record: 151104

Tom:

[snip]
"Tdonaly" <tdonaly@cs.com> wrote in message
news:20020110160222.26938.00000931@mb-mn.news.cs.com...
[snip]

Hey, hello and Happy New Year, what... only an F!!! For a treatise on
"dissipationless". What?

Well David Reyburn, W8EZE, he's a former Math Prof, already gave me a B-
because of errors and omissions in my proof of the matching theorem.

I think David's comments are valid, he provides corrections to my proof, and
my reply to him are worthwhile and so I'll post them here below...

[begin post]--------------------------------

David:

[snip]
> -----Original Message-----
> From: David Ryeburn [mailto:ryeburn@sfu.ca]
> Sent: Thursday, January 10, 2002 7:08 PM
> To: Peter O. Brackett
> Subject: Re: Conjugate matching
>
>
> As usual I enjoyed reading your today's posting in rraa.
>
> You wrote:
>
> >Heh, heh... our picayune Mathematician colleagues would scoff that we
> >techies glorify such a simple result with the title of "Theorem".
[snip]

Nice to e-meet you here.

Hey thanks for the "corrections" to my "theorem" proof. I hope that you
have posted them to the NG as well! I certainly will.

[snip]
> Picayune? Come on. One man's theorem is another man's counterexample ;-).
[snip]

Heh, heh... I hear you!

[snip]
> >Without loss of generality assume that the open circuit voltage of the
> >source is unity (one volt rms):
> >
> >The real power delivered to the load Zo can then be expressed as:
> >
> >Pr = Ro/((Ro+Ri)(Ro+Ri)+(Xo+Xi)(Xo+Xi))
>
> So far, so good.
>
> >Taking derivatives of Pr with respect to Ro and Xo, and setting them both
> >equal to zero, which defines the maximum of Pr,
>
> Defines? Maybe it's a saddle point. Maybe it's a minimum.
[snip]

On the saddle point possibility in the Pr objective function maximization, and the need to check the second derivatives, you are correct and indeed for a full "proof", that possibilty needs to be checked.

However, although I have not done so in the NG posting, an examination of the quadratic forms involved in a complete development of linear dynamic system energy relations you can assure yourself that the surface of the objective function Pr is indeed convex and that there is only one maximum. For the more pragmatic among NG readers, a simple graphing of the surface of Pr over the Ro, Xo plane will suffice. Too bad we can't post graphs on the NG, I have a nice one here in my full document.

[snip]
> >we get the following two equations to be solved simultaneously:
> >
> >(1) dPr/dXo = -Ro(Xo+Xi)/((Ro+Ri)(Ro+Ri) + (Xo+Xi)(Xo+Xi)) = 0
>
> You missed a factor of 2 there in the numerator of the derivative.
> Comes from the exponent 2 on the term (Xo+Xi) in the denominator. No
> great harm done. -2Ro(Xo+Xi) and -Ro(Xo+Xi) are zero under the same
> conditions. Also you forgot to square the denominator. No great harm
> done there either.
[snip]

Agreed! In fact I had that factor of 2 in my original MathType MS Word document and missed in during translation/typing into plain ASCII text for the NG posting. Sorry...

[snip]
>
> >2) dPr/dRo = ((Ro+Ri)(Ro+Ri)+(Xo+Xi)(Xo+Xi)
> -2Ro(Ro+Ri))/((Ro+Ri)(Ro+Ri)
> >+ (Xo+Xi)(Xo+Xi)) = 0
>
> This time you caught the 2 factor in -2Ro(Ro+Ri), and it's needed
> later on in what we do with this equation, so that's a good thing.
> Denominator still isn't squared, and it still doesn't matter.

>
> >Noting that both equations share a common denominator, namely
> >((Ro+Ri)(Ro+Ri) + (Xo+Xi)(Xo+Xi)),
>
> Even though the common denominator they share isn't quite that, and
> even though it doesn't matter what the (non-zero) denominator is or
> whether it is shared,since it's just the numerator's fault if a
> fraction is going to be zero, ...
[snip]

Agreed... you are correct again...

The usual formula for the derivative of a ratio of two functions from
elementary differential calculus involves the square of the denominator
function in the denominator of the resulting derivative.

[snip]
>
> >that the numerator of (2) has a common factor (Ro+Ri) on both sides
> >of the minus sign,
>
> Only common to two of the three summed terms, (Ro+Ri)(Ro+Ri) and
> -2Ro(Ro+Ri), but missing from the other term (Xo+Xi)(Xo+Xi), so you
> can only factor it out from where it actually is.
>
> >and eliminating these coomon factors, we get two more compact
> >equations to be solved simultaneously for Ro and Xo which maximize
> >the power Pr, in terms of Ri and Xi.
> >
> >(3) Ro(Xo+Xi) = 0
>
> Agreed. See, that missing factor of 2 didn't hurt.
>
> >(4) (Ro+Ri) + (Xo+Xi) - 2Ro = 0
>
> More like (Ro+Ri)(Ro+Ri-2Ro) + (Xo+Xi) = 0.
>
> >Clearly from (3)
> >
> >Xo = -Xi
>
> Yes.
>
> >and substituting this value of Xo into (4)
>
> Better, into *my* version of (4)
>
> >gives
> >
> >Ro = Ri.
>

> More like (Ro+Ri)(Ro+Ri-2Ro) = 0, or (Ro+Ri)(Ro-Ri) = 0. So we'd
> better worry about the possibility of Ro = -Ri too ;-)! (Please don't
> look at that denominator, squared or not, while entertaining the
> possibility that Xo = -Xi and Ro = -Ri.)
[snip]

I agree with all above...

[snip]
> Shall we introduce a negative resistances thread into
> rec.radio.amateur.antenna? Might provide some interesting postings. I
> could then just lurk, as usual, and smile.
[snip]

Lurker, you!!! Heh, heh...

[snip]
> Looking at the second derivative test to show which of these two (if
> either) is a local maximum is left to the reader as an exercise.
> Those second derivatives, even after simplification, are going to
> have the *cube* of the original denominator in them, and you multiply
> the second derivative with respect to Ro by the second derivative
> with respect to Xo and then subtract the square of the mixed second
> derivative (the one first with respect to Ro and then with respect to
> Xo). Makes me wish I were using Maple (the math program from the
> University of Waterloo I was using earlier today to check some
> calculations in a linear algebra textbook manuscript I am de-bugging
> for its author before the thing gets published and sold to students)
> instead of Eudora (my e-mail program). And typing math in Eudora is
> awful, compared to the equation editor I normally use!
[snip]

David, a more general approach would follow the "usual" development of the
energy relationships in linear dynamical systems and would result in a set
of quadratic forms from which the unimodal nature of the objective function
could be established.

[snip]
>
> >As the Mathematicians say...
> >
> >QED
>
> You get a B-.
[snip]

Only a B-!!! Spoken like a true math Prof...Heh, heh... I got the right
answer despite some errors along the way. Heh, heh... I am sure that
Oliver Heaviside could be rolling with laughter now.

[snip]
> Cheers!
>

> David, ex-W8EZE and retired Simon Fraser University math professor
> and theorem-prover (pure math, at that!)
>
>
> --
> David Ryeburn
> ryeburn@sfu.ca
[snip]

David... Nice to have a "pure math" guy here to keep us honest. sfu, huh... Last time I was up on Burnaby Mountain, I was meeting with Don George... a pseudo-mathematician, but a great engineer. Did you ever lecture to the Engineering, students at sfu? Where are you located now... did you leave Vancouver/Burnaby after retirement?

BTW... It so happens that I generally use MathType V.4 as an equation editor running inside MS Word for mathematical developments myself, what equation editor do you use? I've got pretty good at MathType over the years and they keep on improving that little product... nice.

Indeed I did develop that little max power transfer "proof" using the MathType tool as an editor. I then painfully translated the MathType into plain ASCII text for posting to the NG... I could send you an ADOBE version of the full document in "real" math as an email attachment if you like.

Although I have not vetted all of your suggested changes in detail, I note that most of your assertions about my "sloppy" proof are correct because I do see my dyslexic "mis-typing" in executed by my aching fingers while translating from my MathType document to the plain ASCII text for NG posting.

I translated things like (Ro+Ri)**2 (Excuse the Fortran_ism!) into (Ro+Ri)(Ro+Ri), etc. and I admit that I missed the typing factor of 2 in the numerator of which you speak despite it being in my original documents.

Thanks for keeping me honest... I know there are more than a few on the NG who suspect me of trying to obfuscate, but I assure you my intentions are always honest! Heh, heh...

In theory theory and practice are the same but in practice they are different.

Best wishes for the New Year and thanks again.

--Peter K1PO
--Cary, NC
[end paste]----------

"Tdonaly" <tdonaly@cs.com> wrote in message news:20020110160222.26938.00000931@mb-mn.news.cs.com...
> >
>
> Peter wrote;

> >Jerry:
> >
> >Trolling trolling trolling over the sparkling sea...
> >
> >MAXIMUM POWER TRANSFER THEOREM - sometimes called thed CONJUGATE MATCHING
> >THEOREM --
> >
> >Heh, heh... our picayune Mathematician colleagues would scoff that we
> >techies glorify such a simple result with the title of "Theorem". At
best
> >they might call it a "lemma" or simply "an exercise left for the
student".
> >Remember your Math teachers?
>
> (Peter's proof snipped.)
>
> Very good, Peter. Now do the same proof
> when the source resistance is "dissipationless." Don't neglect to tell
how to
> actually construct a "dissipationless resistor."
> Moreover, for extra points, you may want to
> explain how to incorporate all this into a
> class C vacuum tube amplifier. If you want to
> cheat, you can get your ideas from previous
> posts to this newsgroup, but in that event, you'll get an "F."
>
> Tom Donaly KA6RUH
>
>
>

717. Re: FS/FT Radio Shack HTX-202 w/ acces!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 03:36:26 UTC
From: KC8SSG <kc8ssg@qsl.net>
Message-ID: <_4t%7.84$903.1083@news>
Source record: 151103
Cross-posted to:
alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

Oh yea I'm really wanting a dual impendence desk mic too!
"KC8SSG" <kc8ssg@qsl.net> wrote in message news:SMq%7.73$903.1043@news...
> I have a 2m handie talkie with
> Box
> speaker mic
> rechargable battery
> AA battery pack
> manual w/ schematics
> AC walwart
> works like new!I have used this for packet mostly.Also have older power
> supply that I could be dealt out of for an extra charge.I will trade for
> about anything.Looking for DC power strip, 2m mobile,6 meter stuff,mobile
> antennas, QTH antennas,you name it! I am a new ham and need alot of stuff
> still. Just ask, look to see what you got laying around!
>
>
> reply here or to my email
> kc8ssg@qsl.net
> --
> KC8SSG
>
>
>

718. Re: Quad vs. Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 03:49:31 UTC
From: me@here.com
Message-ID: <3c3e5d8e.282142283@news.mindspring.com>
Source record: 151106

On Thu, 10 Jan 2002 05:17:55 GMT, vswrref@hotmail.com (Jeff Y.) wrote:

>Those swirls, downdrafts and crosswinds can really play haviic on
>them, not doubt, but it still better to get a good idea which way the
>winds are generally coming from and take the proper precautions.

I vividly remember a tornado passing by about .75 mi from my location.
Trees bent over, Ears popping, Nail biting, but we stayed in-tact.

>
>I'm used to the fact that being from the snowbelt states that just
>about everyone I knew who had a quad lost one due to the ice and in
>some cases survived the ice but failed when a moderate wind, 20 to 25
>MPH, came along and with the extra weight totaled them. I know it's
>not the same situation but I thought I'd point that out as well and
>where my view was coming from.
>
>BTW, what size Tohn tower are you using? 25G, 45G?
>
>
>Jeff

Actually I have 80 ft of 25G up hosting the Quad. even though I could
go higher, I still like to be conservative. I plan in the near future
to put up a 2 element yagi, or Quad on 40, but not on 25G. I think
better on 45G or larger. Get enough widloading up on one of these
toothpicks and they'll corksctew down. I also use the guy brackets
with 4ft long steel arms for the guy attatchments. This helps minimize
the twist, even on sudden stops from the rotator. When considering
erecting a tower, there's no such thing as overkill. Build to the best
of your budget can allow. I dont run any antennas with longer boom
legth than 30 ft. Longest was 34.5 ft. The Hygain 205. Even that was
pushing the limit. I still drive down rural roads and look at the High
voltage lines across the towers that carry them, and wonder what's the
best way to mount a rotator on one - hi hi.

cheers de Mike

>
>
>
>
>On Thu, 10 Jan 2002 04:30:37 GMT, me@here.com (skyhi) wrote:
>
>>On Wed, 09 Jan 2002 05:41:58 GMT, vswrref@hotmail.com (Jeff Y.) wrote:
>>

>><snip> for content...
>>
>>Point well take Jeff. I cannot disagree. However the point I was
>>making was not to oppose the structure or operation of either
>>antenna, but rather the differences I have encountered in the
>>use of both. Turning the elements into the wind is helpful for
>>preserving the Yagi type antennas, untill of course you have
>>several stacked. The primary reason for my changing to a single
>>boom type (reguardless of structural type) has more to do with
>>the overall windloading I am presenting to the top of my Rohn
>>Tower. The Quad simply exhibits a fraction of the side/side
>>moment and less compression on the tower. Hurricaines are
>>fairly easy to predict which way the wind is coming from, However,
>>we tend to get some real ugly t-storms that vary greatly in wind
>>intensity and direction. At that point, your'e guess is as good as
>>mine.
>>cheers
>>de
>>Mike
>>
>

719. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 04:13:21 UTC
From: me@here.com
Message-ID: <3c3e63b0.283712683@news.mindspring.com>
Source record: 151107

On Fri, 11 Jan 2002 01:40:20 GMT, Dennis Kaylor
<k4oxg@tampabay.rr.com> wrote:

>hey mark
>in your opnion what would you rather use for VHF 4 cushcraft 13b2 or 4 10 ele
>cubical quads?
>

My experiences favor the quad, reasons listed in a prior posting here.
Dont underestimate what a quad can do on VHF. I cant wait to get
6 on six. If all goes well, I'll build a second and stack em. I've
just got to do something with those 10 watts. I tend to recieve
nearly Identical reports on DX (HF htat is). running 100 watts to a
4 element Quad. It does seem a little more forgiving to height above
ground, however It still has to adhear th the same electrical
characteristics of Yagis. I have Yagis also on HF. Not a tramendous
differece in performance. Perhapps slightly more quiet. Prefered
antenna simply due to the ability to stack 5 monobanders on one boom.
No traps, induvidual feeds. On the flipside, it is 3 dimentional (I
built mine standing on top of a stepladder. Tunning can also be a
chore. A three element would have been easier to tweak.
cheers
de Mike

720. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 05:12:22 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C3E7433.11D9B5AC@att.net>
Source record: 151108

Ah, yes! Back to first-year EE in undergrad school . . .

Did it exactly that way, Peter, as a homework problem in fact. One of the first "real" applications of the "new" differential calculus that we were busy learning.

Just one comment to Jerry:

In all fairness, you should not address the newsgroup with a problem and literally demand a detailed response - to the point of insulting one of the respondees - without having presented at least some evidence of having done your own work first.
A brief overview of what you failed to comprehend would have given everyone a better set of clues as to how and at what level to respond. Merely naming something that you failed to understand upon first encountering it is not sufficient.

As several have taken their time to explain (and which Walt Maxwell does very well indeed in his book that you failed to finish, far beyond merely "mentioning" it), the concept is both childishly simple and devilishly complex, depending upon where and how it is applied and examined. While Peter made a workmanlike stab at conveying the gist of the matter, I suspect that even at that level of detail, you may still be somewhat in the dark about how it all applies to antennas, etc. That is what Maxwell tells you in his book . . .

You will find enormous talent and expertise among this group which is yours for the asking. But, learn to "ask nice" with reasonable questions and you will get more and better responses. Insulting those who respond is not the way to go . . .

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

"Peter O. Brackett" wrote:
>
> Jerry:
>
> Trolling trolling trolling over the sparkling sea...

> "Jerry" <jerryaa@prodigy.net> wrote in message
> news:XZ6%7.4574$B7.608063667@newssvr16.news.prodigy.com...

> > I have read parts of Walter Maxwell's book Reflections II. He mentions
> the
> > conjugate matching theorum. I still don t really understand it. In
> simple
> > terms can somebody describe it and how it affects transmission lines,
> > matching, antennas, tuners and getting the antenna system to operate
> > efficiently?
> >
> > Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his
> book?
> > (Why) or is it controversial?
> >
> >

--

721. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 05:18:03 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C3E7589.A3855D58@att.net>
Source record: 151109

Richard Harrison wrote:

> A conjugate match between the transmitter and its load permits
> extraction of maximum power from the transmitter.

Wow! Then, by definition the load resistance equals the internal resistance of the transmitter and the maximum efficiency of power transfer to the load is 50%.

Somehow, I don't think you meant to say that . . .

Seems to me that a more correct and useful statement would be that when the transmitter is presented with the resistive load for which it was designed, it will deliver its rated power at specified distortion levels and with specified efficiency and heat loading, etc.

My Icom IC-756PRO produces 100 watts r-f output; I strongly doubt that the finals are being presented with 200 watts of d-c input power, or else that little fan would run a lot harder! <:}

What am I missing here?

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
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722. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 05:39:15 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1m18e$ro4ns$2@ID-124126.news.dfncis.de>
Source record: 151112

> Jerry,
>
> Conjugate matching is what happens, when you are coupling the 50-ohm
> output of your transmitter or amplifier to a load that is not 50 ohm.
> You need some type of matching network such as a gamma or beta match
> or an antenna tuner.
>
> For example when you adjust your antenna tuner so as to obtain a VSWR
> of 1:1 you are matching the 50-ohm transmitter to the complex
> impedance of your antenna system and by system I mean the antenna and
> transmission line.
>
> Let's say that the complex impedance looking into the coax from the
> antenna is 60 - j100 ohms. When you adjust your antenna tuner to a
> VSWR of 1:1 the transmitter is seeing 50 +/- j 0 ohms and the antenna
> tuner's output is still seeing 60 - j 100 but if your were to
> measuring the complex impedance looking into the tuner's output
> connector you would measure 60 +j100. The tuner's output impedance is
> the opposite of the impedance looking into the coax. Since the antenna
> tuner's output is tuned to 60 + j100 and the complex impedance from
> the antenna system is 60 - j100. The reactance values cancel out. This
> is conjugate matching. Picture it as if you were looking at yourself
> in a mirror. Raise your right arm and in the mirror it's appears to be
> you're left arm that was raised.
>
>
> I hope this helps you. I tried to make it simple but it is a complex
> subject. However you are reading the right book.
==========

What do you do when the output impedance of the transmitter is not 50-ohms ?

Reg.

723. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 06:15:51 UTC
From: kf7qz@yahoo.com
Message-ID: <3c3e815b.2681245@news.gte.net>
Source record: 151110

and have elected themselves the internet police, they need to
>lighten up. I sold my TriEx Tower to a ham in Rhode Island who was
>only too happy to pick it up. A ham trucker from 7 land is considering

Im Not internet police but this group is for discussion of antennas,
Radio forsale is down the hall. Any common sense tells you that a
world wide group and Posting a Pickup only doenst make good judgement.
We used to have a forsale@local and A @ww on PBBS;s too but everyone
used every one they could spam. Now they are gone.

I used to belong to a discussion group here on usnet about another
subject that also had a forsale. People like you got upset because
they could post in both, even though it violated the charters. Other
got upset that we wouldnt leave it alone as it was only one or two,
and who were we net cops to tell them not too.. Then one or two became
10 or 20 then 50 lor 100.

Guess what, Now there is 2 Forsale groups and No discussion group.

The Ive gotta sell it no matter whats won. The I would like to only
discuss it lost.

Guess Rec.radio.amateur groups will all go that way now as I see more
more adds posted to all groups.

After all its only a few right now.

Good luck, Just cause ya;ll think Im a net nut, Ill unsubscribe and
let you sell your wares on the discussion group. but if you come in
here some day and ask a question and all you get is FOR SALE Ads,
Dont say I didnt warn ya.

724. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 06:29:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1m18f$ro4ns$3@ID-124126.news.dfncis.de>
Source record: 151113

> > For a given antenna, there is always a soil conductivity/resistivity at
> > whixh ground losses are at a maximum.
> >
> > Just as there is always a load resistance in which maximum power is
> > generated when connected to a given generator.
> > ---
> > Reg, G4FGQ
>
> Hi again Reg:
>
> Sounds like a guessing game, now I'm guessing 377ohms per square if
> the antenna is a quarter wave away from the soil and is horizontal.
> This comes from having continuous E and H fields and having them be
> dissipated with zero reflection. This is also known as a "Salisbury
> Screen," and 377ohms is the ratio of E to H in free space.
>
> Here's an arcane guess: You probably have to match 377 times (1 +
> tan(delta)) [where tan(delta) is the soil loss tangent] to the ratio
> of E/H at the soil's surface for a particular antenna configuration in
> order to have the soil suck up all the RF. This would be independent
> of polarization if the soil surface were isotropic.
==========

Paul, I have been thinking along the same lines myself. If the soil resistivity is 377 ohm-metres then a radio wave arriving at the surface from any angle is simply absorbed 100 percent and lost for ever.

Maximum absorbtion minimises the power available for the antenna to radiate upwards. At any other value of soil resistivity some of the power will be reflected back into the heavens. Only at zero ohms (salt water?) will all power be reflected up from the soil surface. At infinite ohms the soil permittivity will reflect some power upwards but it is debatable whether the power which goes downwards is a power loss or not.

The above might apply to a horizontal dipole which is not in contact with the soil. But suppose we have a simple 1/4-wave vertical above a few radial wires.

We now find the radiation resistance changes as the soil resistivity increases and the distribution of the current in the ground changes. Much depends on the length of the radials.

But intuitively, if everything else except radiation resistance and soil resistance remains constant, there MUST be some value of soil resistivity at which the losses are a maximum and efficiency is a minimum.

I began thinking along these lines as a means of testing the accuracy of antenna modelling programs which take soil characteristics into account. But right now the subject won't bear thinking about. I give up!

Reg, G4FGQ

725. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 06:39:44 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a1m16iqov1@bob.news.rcn.net>
Source record: 151111

"David Krakowsky" <dothetime@hotmail.com> wrote:
> 'Doc <w5lz@icok.net> wrote:

> > David,
> > No chance of shipping it??

> I'm sorry that there are people out there that have nothing
> better to do, and have elected themselves the internet police,
> they need to lighten up...

If you aren't willing to ship your stuff anywhere in the world,
why didn't you limit the distribution of your post?
Do you think that somebody in Australia reading this is
going to make a trip to your house to pick it up?

> I realize you can never please everyone in this world.

Especially when you are a bandwidth hog.

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

726. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 07:28:31 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <zuw%7.81$7d.14454@newshog.newsread.com>
Source record: 151114

"Billy Echols" <b_echols@bellsouth.net> wrote in message
news:_jDZ7.181226$BX4.10506529@e3500-atl1.usenetserver.com...
>
> "Roger Halstead" <rdhalste@tm.net> wrote in message
> news:j1yZ7.46$Dz3.35516@monger.newsread.com...
> >
> The cell phone transmission will easily hit multiple cells.

Yup, they hit many from 5000 feet, but they work.
We have a lot of short towers around here. They started out with them
running up around 300 feet or slightly less. Now that the area is filling in
the height is getting a lot shorter.

I forgot to turn mine off and I received a call at over 5000. That reminded
me to turn it off.

--
Roger (K8RI - EN73)
WWW.RogerHalstead.com
N833R World's oldest Debonair? (S#CD-2)

>
> Bill, WA2NYR/QRP
>
>
>

727. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 07:30:22 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <iww%7.82$7d.14454@newshog.newsread.com>
Source record: 151115

"Bill Nelson" <billn@spock.peak.org> wrote in message
news:a183fr$k5r$7@quark.scn.rain.com...
> Roger Halstead <rdhalste@tm.net> wrote:
>
> > BS, they work just fine. The regs say you aren't supposed to use them
while
> > airborn and the reason is that they tie ups so many sites, but they do
work.
> > And work well in emergencies.
>
> How can they tie up "so many sites"? By design, the cell phone will only
> associate with one cell at a time - although it will check the control
> channel signals from other cells to see if they would produce a better
> signal.
>
I have no idea, but I've forgotten to turn mine off and received calls. That
reminded me to turn it off.

--
Roger (K8RI - EN73)
WWW.RogerHalstead.com
N833R World's oldest Debonair? (S#CD-2)

> --
> Bill Nelson (billn@peak.org)
>

728. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 08:46:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C3EA664.AD041D@eznec.com>
Source record: 151116

It doesn't quite work like this. A plane wave is completely absorbed only if the soil's intrinsic impedance is 377 + j0. This is quite different from saying that the soil's resistivity is 377 ohm-meters. The intrinsic impedance is given by:

sqrt(j*omega*mu / (sigma + j*omega*epsilon))

where omega = 2*pi*frequency
sigma = soil conductivity in siemens/m
epsilon = soil permittivity = epsilon0 * relative permittivity
mu = soil permeability = mu0 for non-magnetic material

If you play with various values for the soil, you quickly find that the only way you can get 377 + j0 is by setting the soil conductivity to zero and the relative permittivity to 1. Then, of course, it's the same as air, and has the same intrinsic impedance of 1.

In the case of ground systems, there is indeed a combination of conductivity and permittivity that gives the highest ground system loss. But it's not only a function of the ground constants -- it's also a function of the radial length. If the change in ground constants increases the effective radial length to make the radials nearly a half electrical wavelength long, the loss can increase simply due to the increased effective radial length. So you can correctly say that for a given antenna, radial system, frequency, and soil permittivity, there's a soil resistivity that maximizes ground loss. But trying to simplify it further is likely to lead to wrong answers.

Anyone interested in knowing the intrinsic impedance the ground can easily get it from EZNEC v. 3.0, even the demo version. In the main window, just click Utilities/Ground Info. (You have to have Real ground specified for the Ground Type.) This window also gives the velocity factor, skin depth, complex relative permittivity, and complex propagation constant for the first ground medium.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> > > For a given antenna, there is always a soil conductivity/resistivity at
> > > whixh ground losses are at a maximum.
> > >
> > > Just as there is always a load resistance in which maximum power is
> > > generated when connected to a given generator.
> > > ---
> > > Reg, G4FGQ

> >
> > Hi again Reg:
> >
> > Sounds like a guessing game, now I'm guessing 377ohms per square if
> > the antenna is a quarter wave away from the soil and is horizontal.
> > This comes from having continuous E and H fields and having them be
> > dissipated with zero reflection. This is also known as a "Salisbury
> > Screen," and 377ohms is the ratio of E to H in free space.
> >
> > Here's an arcane guess: You probably have to match 377 times (1 +
> > tan(delta)) [where tan(delta) is the soil loss tangent] to the ratio
> > of E/H at the soil's surface for a particular antenna configuration in
> > order to have the soil suck up all the RF. This would be independent
> > of polarization if the soil surface were isotropic.
> ==========
>
> Paul, I have been thinking along the same lines myself. If the soil
> resistivity is 377 ohm-metres then a radio wave arriving at the surface from
> any angle is simply absorbed 100 percent and lost for ever.
>
> Maximum absorbtion minimises the power available for the antenna to radiate
> upwards. At any other value of soil resistivity some of the power will be
> reflected back into the heavens. Only at zero ohms (salt water?) will all
> power be reflected up from the soil surface. At infinite ohms the soil
> permittivity will reflect some power upwards but it is debatable whether the
> power which goes downwards is a power loss or not.
>
> The above might apply to a horizontal dipole which is not in contact with
> the soil. But suppose we have a simple 1/4-wave vertical above a few radial
> wires.
>
> We now find the radiation resistance changes as the soil resistivity
> increases and the distribution of the current in the ground changes. Much
> depends on the length of the radials.
>
> But intuitively, if everything else except radiation resistance and soil
> resistance remains constant, there MUST be some value of soil resistivity at
> which the losses are a maximum and efficiency is a minimum.
>
> I began thinking along these lines as a means of testing the accuracy of
> antenna modelling programs which take soil characteristics into account. But
> right now the subject won't bear thinking about. I give up!
> ----
> Reg, G4FGQ

729. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 09:14:21 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <jj9t3us61goosesbtkkokv8d2j3th8r1rm@4ax.com>
Source record: 151117

On Fri, 11 Jan 2002 05:18:03 GMT, "George, W5YR" <w5yr@att.net> wrote:

>
>
>Richard Harrison wrote:
>
>> A conjugate match between the transmitter and its load permits
>> extraction of maximum power from the transmitter.
>
>Wow! Then, by definition the load resistance equals the internal resistance
>of the transmitter and the maximum efficiency of power transfer to the load
>is 50%.
>
>Somehow, I don't think you meant to say that . . .

This is the perenial problem with this topic, inevitably the basis of
match is shifted away from the Conjugate Match to the Zo Match by the
careless addition of "efficiency" to the discussion of conjugation.

>
>Seems to me that a more correct and useful statement would be that when the
>transmitter is presented with the resistive load for which it was designed,
>it will deliver its rated power at specified distortion levels and with
>specified efficiency and heat loading, etc.

This is undoubtedly the exact expression found in the specification
for any transmitter's Output Z. It is for my Drake and Kenwood HF
rigs.

>
>My Icom IC-756PRO produces 100 watts r-f output; I strongly doubt that the
>finals are being presented with 200 watts of d-c input power, or else that
>little fan would run a lot harder! <:}
>
>What am I missing here?
>
>72/73/oo, George W5YR - the Yellow Rose of Texas

Hi George,

Missing? It is a simple matter to take the input current and multiply
by the input voltage. Both my rigs require a 20+ Ampere supply.
receive
5 A * 13.6 V = 68 W
transmit 100W
20 A * 13.6 V = 272 W

...or thereabouts.

The garden variety HF SSB rig has a push-pull, class AB amplifier at the output that is the major sink for that 20A from the supply.

What about your own? Are your finals running on less than 10A? What does Icom specify for DC Input?

73's
Richard Clark, KB7QHC

730. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 09:23:57 UTC
From: Robert <robert.61@gmx.at>
Message-ID: <3c3eaed1$0$17300$3b214f66@news.univie.ac.at>
Source record: 151118

> instead of requiring a selective amplifier, couldn't you solve the
> problem using a good receiver?

No question, a good receiver would be a solution. However my intention is,
that everyone of the twelve participants can receive that channel using
a standard stereo equipment.
Robert

731. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 10:42:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C3EC198.C74D305@eznec.com>
Source record: 151019

Correction:

Roy Lewallen wrote:

>. . .
> zero and the relative permittivity to 1. Then, of course, it's the same
> as air, and has the same intrinsic impedance of 1.

That last sentence should read ". . . and has the same intrinsic
impedance of 377 + j0."

Roy Lewallen, W7EL

732. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 10:50:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C3EC379.998654F9@eznec.com>
Source record: 151020

If a source has a fixed impedance and open circuit output voltage(*), then a load having an impedance equal to the complex conjugate of the source impedance will receive more power than a load of any other impedance.

You can take that to the bank.

But what does this have to do with transmitters and antennas? Not much.

Roy Lewallen, W7EL

(*) Known as a Thevenin equivalent source, or its dual the Norton equivalent source.

733. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 12:36:19 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1mnla$rph6b$1@ID-124126.news.dfncis.de>
Source record: 151021

> In the case of ground systems, there is indeed a combination of
> conductivity and permittivity that gives the highest ground system loss.
==========
Using one of the more advanced NEC programs, what is the soil resistivity
which give lowest radiating efficiency for a simple 1/4-wave antenna with
one 1/4-wave radial, near or on-the-surface ?

To keep things very simple, while varying soil resistivity assume soil
permittivity is unity or some convenient fixed value.

Reg

734. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 13:38:23 UTC
From: richardharrison@webtv.net
Message-ID: <20009-3C3EEACF-10@storefull-117.iap.bryant.webtv.net>
Source record: 151022

George, W5YR wrote:
"Then, by definition the load resistance equals the internal resistance of the transmitter and the maximum efficiency of power transfer to the load is 50%."

That would be true were not some of the internal resistance of the transmitter "dissipationless resistance".

An open switch has infinite resistance and zero dissipation.

Most of a transmitter`s output resistance comes from open-switch time.

Best regards, Richard Harrison, KB5WZI

735. AM Antenna (Justice or Super Select-A-Tenna)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 14:19:55 UTC
From: Daniel Simpson <dzan@qwest.net>
Message-ID: <1101200208195521 21%dzan@qwest.net>
Source record: 151023
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment

I have a Mckay Dymek AM7 with a Terk antenna plug into it I would like better reception then what i am getting and have been looking at the Justice or Super Select-A-Tenna Does anybody have opinions on these models or other sugestions.

Thank You
Dan

736. Re: AM Antenna (Justice or Super Select-A-Tenna)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 14:23:30 UTC
From: N9ZEF <paulb@powerweb.net>
Message-ID: <u3ttb4a1j72q61@corp.supernews.com>
Source record: 151024
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment

you should try the kiwa loop.
it is better than the two you are inquiring about.
but it is not cheap. about $300 iirc.

73
paul

"Daniel Simpson" <dzan@qwest.net> wrote in message
news:110120020819552121%dzan@qwest.net...
> I have a Mckay Dymek AM7 with a Terk antenna plug into it I would like
> better reception then what i am getting and have been looking at the
> Justice or Super Select-A-Tenna Does anybody have opinions on these
> models or other sugestions.
>
> Thank You
> Dan

737. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 14:41:05 UTC
From: Bill Ogden <ogden@us.ibm.com>
Message-ID: <3C3EF981.EEC92AD3@us.ibm.com>
Source record: 151025

I am in the process of erecting a 2-element 5-band quad. The loops were all premeasured and I will go with these measurements. I am using a coax switch (mounted on the boom) to switch one feed coax to the desired element. Using a Yaesu 450 rotator. Tower is 40 feet. Total feed length (to switch) is 150'.

At the moment, the quad is tied to the tower with the bottom loop less than a foot above ground. Everything seems to load and switch OK, although the SWR on 15m is higher than I would like (2:1). This may be due to the location (at ground level).

This is my first quad. If you have not played with one before, be prepared for a hassle in handling the thing. As several people have said, it is a three dimensional beast and can be quite awkward to move, erect, position, and so forth. In theory, it is less than 50 pounds (including coax, switch, an 8' aluminum mast, and so forth). However, 50 pounds in the awkward shape of a quad is messy for one person to handle. A Yagi is definitely easier to this respect.

I decided on a quad for the usual reasons: low tower, 5 bands, smaller rotator, possibly less "atmospheric noise", better bandwidth, etc.

Bill
W2WO

738. Re: Good antenna for VX5R?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 14:43:25 UTC
From: Brendan Minish <bminish@oceanfree.net>
Message-ID: <aeut3u45gsuk2imuai0ng3qclhs65bjck1@4ax.com>
Source record: 151027

On Mon, 07 Jan 2002 18:38:37 -0800, senecal@mapson.cs.ucdavis.edu
(Joshua Senecal) wrote:

>The only antennas that I've seen that offer 6m/2m/70cm are the Maldol
>AH510R and the Diamond SRH999. The Maldol comes SMA or BNC, but the
>Diamond is only SMA.

I have the diamond SRH999 and it is considerably worse than the stock
antenna on 2m & 70Cm

73's
Brendan EI6IZ
--
Brendan Minish

739. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 15:04:37 UTC
From: Val <val_a20@hotmail.com>
Message-ID: <3C3EFF05.49BF623B@hotmail.com>
Source record: 151026

Pooth!

How eager are You at doing this?

It of course CAN be done.
Go to the library. Search in Radio handbooks,
for example the ARRL VHF Handbook on the subject "cavity
filters"

(Leben Sie mi¿½glichen innerhalb Deutshlands? Ich glaube
dass es auch in den "Antennehandbuch" von Karl Rothammel
behandelt ist.. Publiziert auf der Militi¿½rverlags DDR,
aber trotzdem sehr gut!)

Make a cavity filter for 94.3. Not expensive, if You plan
on having it inside You house (equal temperature) but MUCH
work!

Best wishes/Vielen glueck!
V.

Robert wrote:
>
> The desired channel has a frequency of 94.3 MHz, the disturbing channels
> are
> on 94.0 and 94.7 MHz.
> Robert
>
> Richard Harrison schrieb:
>
> > I wrote:
> > "The picture is not clear enough for me to read the frequency."
> >
> > UKW is ultra short wave, or the FM band on my old German radios. So, I
> > guess Robert wants to separate FM stations. In the U.S. these are no
> > closer than 200 KHz. At a carrier frequency of about 100 MHz, that`s a
> > separation of only 0.2 percent, or too close to separate with a single
> > tuned circuit at the carrier frequency.
> >
> > The superheterodyne has a lot going for it!
> >
> > Best regards, Richard Harrison, KB5WZI

740. Re: polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 16:01:10 UTC
From: John O'Flaherty <wewelcomespam@blackhole.net>
Message-ID: <3C3F0C46.B06D043C@blackhole.net>
Source record: 151028

VE9SRB wrote:
>
> "John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
> news:3C3C7A9F.B6AAB65A@blackhole.net...
> >
> > Playing with an antenna modeling program, I found that having the last
> > 6 feet of a 30 foot wing of a dipole angled downward from the antenna
> > made the antenna have some circular, or at least mixed, polarization.
> >
> > That got me to wondering what circular polarization means.
> >
> > 1. Does it mean that the angle of polarization of the em wave changes
> > within each cycle as it passes the receiving antenna? That would seem to
> > be what would happen as the wave from the dog-eared dipole passed the
> > receiving antenna.
> >
>
> Circular polarization means that at a fixed point in space, the total
> electric field vector of the EM wave radiated by the antenna traces out a
> circle as a function of time. See more details below.

That would mean that the polarization changes within the cycle as it
passes a fixed point, right?

>
> > 2. Is circular polarization a yes/no thing, or can it be partial? Is it
> > really circular, or could it be, say, oval or triangular if you had a
> > funny shaped antenna?
> >
>
> In general, all antennas are elliptically polarized.
>
> Consider the radiated EM wave at a fixed point in space away from the
> antenna. The total electric field vector of the wave has an Ex component
> and an Ey component. At this fixed point in space, the total electric field
> vector would trace out an elliptical shape as a function of time.
>
> Pure circular polarization is a special case of elliptical polarization
> where the Ex and Ey components have equal amplitude and are 90 degrees out
> of phase.
>
> Pure linear polarization is a special case of elliptical polarization where
> either Ex or Ey is 0. In this case, the total electric field vector traces
> out a straight line as a function of time.

> > 3. Might an antenna have different polarizations in different
> > propagation directions?
>
> Yes.
>
> >
> > 4. In an ideal case, what would be the relative loss receiving a
> > perfectly circularly polarized signal on a horizontally polarized
> > antenna?
> >
>
> In an ideal case, where the circularly polarized wave has 0 dB axial ratio
> and the antenna is purely linearly polarized, the relative loss
> (polarization mismatch loss) is 3 dB. The linearly polarized antenna "sees"
> only 1/2 of the energy in the circularly polarized wave.
>
> In general, the mismatch loss is something other than 3 dB because it is
> unlikely that the "circularly polarized" wave has an axial ratio of 0 dB.
> The axial ratio is the relative field strength difference between the Ex and
> Ey field components expressed in dB. For example, if the circularly
> polarized wave has an axial ratio of 3 dB (quite common) then the
> polarization mismatch loss will vary between 1.77 dB and 4.77 dB depending
> on how the linearly polarized antenna is aligned wrt the circularly
> polarized wave (how it aligns with either Ex or Ey).

So if you had a very good vertical transmitter and a very good
horizontal receiver, would the received energy tend toward zero?

--
john

741. Re: www.sauderelectronics.com now online!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 16:09:07 UTC
From: Ben Silverman <ben@everyoneflydotcom>
Message-ID: <Xns9193711A6E93Ebeneveryoneflycom@209.249.90.101>
Source record: 151029
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

OldRadioGuy et al,

Thanks for the heads up on that link, eyes are getting older, missed that one!

I've also re-done the server to make the online catalog faster by minimizing the SSL traffic to the ordering process and not the whole store itself.

-Ben

old_radios@yahoo.com (OldRadioGuy) wrote in news:7579bf83.0201091243.40380635@posting.google.com:

> It has a comma in the link, it is http://www.sauderelectronics.com,/
>
>
>
>
> "Delayed Thinking" <delay@delaythinking.com> wrote in message
> news:<m2E_7.6058$DG5.68545@rwcrnsc53.ops.asp.att.net>...
>> why do you put a link at the top of your homepage that links to your
>> homepage?

742. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 16:31:56 UTC
From: jwalkermi@aol.com
Message-ID: <20020111113156.07948.00000988@mb-me.aol.com>
Source record: 151030

>N833R World's oldest Debonair? (S#CD-2)

Could be. My partner and I owned N9569Y, a 1962 Deb which I believe was one of the earlier ones. Sweetest flying single I ever flew.

Jack

743. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 16:40:57 UTC
From: Robert <robert.61@gmx.at>
Message-ID: <3c3f1541$0$30724$3b214f66@news.univie.ac.at>
Source record: 151031

Hi V.

I am a real beginner in technics. So for my question:
Are these cavity filters amplifiers or do they reduce
the signal?

Robert

Val schrieb:

> Pooth!
>
> How eager are You at doing this?
>
> It of course CAN be done.
> Go to the library. Search in Radio handbooks,
> for example the ARRL VHF Handbook on the subject "cavity
> filters"
>
> (Leben Sie mï¿½glichen innerhalb Deutshlands? Ich glaube
> dass es auch in den "Antennehandbuch" von Karl Rothammel
> behandelt ist.. Publiziert auf der Militï¿½rverlags DDR,
> aber trotzdem sehr gut!)
>
> Make a cavity filter for 94.3. Not expensive, if You plan
> on having it inside You house (equal temperature) but MUCH
> work!
>
> Best wishes/Vielen glueck!
> V.
>
> Robert wrote:
> >
> > The desired channel has a frequency of 94.3 MHz, the disturbing channels
> > are
> > on 94.0 and 94.7 MHz.
> > Robert
> >
> > Richard Harrison schrieb:
> >
> > > I wrote:
> > > "The picture is not clear enough for me to read the frequency."
> > >
> > > UKW is ultra short wave, or the FM band on my old German radios. So, I
> > > guess Robert wants to separate FM stations. In the U.S. these are no

> > > closer than 200 KHz. At a carrier frequency of about 100 MHz, that`s a
> > > separation of only 0.2 percent, or too close to separate with a single
> > > tuned circuit at the carrier frequency.
> > >
> > > The superheterodyne has a lot going for it!
> > >
> > > Best regards, Richard Harrison, KB5WZI

744. Assembling a Wire Mesh Dish for Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 16:49:53 UTC
From: Wayne Watson <mtnviews@earthlink.net>
Message-ID: <3C3F17E8.5F4BF4EC@earthlink.net>
Source record: 151032

I'm finally getting around to reassembling a dish for radio astronomy purposes that I acquired a few
years back. It's 10 feet in diameter and has radial spokes with screen-like (mesh) metal sectors
between the spokes. The mesh is inserted into slots on either side of the spokes. I'd say so far
this is not an easy process. At the moment, the dish is broken into about six sections with 2-3
spokes per section. Maybe I need to disassemble every section and treat this as though I'm starting
from scratch. Then on the other hand, maybe there's a tool that helps make the inserts of the mesh
into the spokes. Maybe it's really a two person effort. Any suggestions? In the mean time, it's back
to my giant puzzle.

(I called a sat dish store in the area and asked them. The fellow knew of the dish design and
politely suggested that I get another dish with a petal design. Maybe he's right.)

--
Wayne T. Watson (121.015 Deg. W, 39.262 Deg. N, 2,701 feet), Nevada City, CA

"Life is a tragedy for those who feel and a
comedy for those who think." -- Chinese Proverb

Web Page: http://home.earthlink.net/~mtnviews
Imaginarium Museum: http://home.earthlink.net/~mtnviews/imaginarium.html

745. Re: polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 16:54:08 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <QME%7.349476$W8.13210461@bgtnsc04-news.ops.worldnet.att.net>
Source record: 151033

"John O'Flaherty" <wewelcomespam@blackhole.net> wrote in message
news:3C3F0C46.B06D043C@blackhole.net...
> >
> > Circular polarization means that at a fixed point in space, the total
> > electric field vector of the EM wave radiated by the antenna traces out
a
> > circle as a function of time. See more details below.
>
> That would mean that the polarization changes within the cycle as it
> passes a fixed point, right?
>

The polarization of the wave does not change within the cycle. From the
perspective of an observer at a fixed point, the E-field vector rotates in a
circle as a function of time. At the fixed point, the position of the
E-field vector changes within the cycle.

> >
> >
> > In general, the mismatch loss is something other than 3 dB because it is
> > unlikely that the "circularly polarized" wave has an axial ratio of 0
dB.
> > The axial ratio is the relative field strength difference between the Ex
and
> > Ey field components expressed in dB. For example, if the circularly
> > polarized wave has an axial ratio of 3 dB (quite common) then the
> > polarization mismatch loss will vary between 1.77 dB and 4.77 dB
depending
> > on how the linearly polarized antenna is aligned wrt the circularly
> > polarized wave (how it aligns with either Ex or Ey).
>
> So if you had a very good vertical transmitter and a very good
> horizontal receiver, would the received energy tend toward zero?
>

In an ideal line of sight link, yes.

From a practical standpoint, ideal conditions do not exist. In many (most)
cases, the direct line of sight path does not exist. The communications
link is established only as a result of a number of reflected (multipath)
signals arriving at the receiver. In most cases, these reflected signals
will have undergone some level of polarization distortion (rotation, change
of sense, etc). At the horizontal receiver, there may be a number of
signals that are vertically polarized, horizontally polarized or more
likely, signals that are somewhere in between.

While multipath fading can be a problem in a communications link, many times it is only the multipath signals that allow the communications link to be established.

Steve VE9SRB

746. Re: Assembling a Wire Mesh Dish for Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 17:05:44 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3F1B68.3506920D@coqui.net>
Source record: 151034

Wayne Watson wrote:
>
> I'm finally getting around to reassembling a dish for radio astronomy purposes that I acquired a few
> years back. It's 10 feet in diameter and has radial spokes with screen-like (mesh) metal sectors
> between the spokes. The mesh is inserted into slots on either side of the spokes. I'd say so far
> this is not an easy process. At the moment, the dish is broken into about six sections with 2-3
> spokes per section. Maybe I need to disassemble every section and treat this as though I'm starting
> from scratch. Then on the other hand, maybe there's a tool that helps make the inserts of the mesh
> into the spokes. Maybe it's really a two person effort. Any suggestions? In the mean time, it's back
> to my giant puzzle.
>
> (I called a sat dish store in the area and asked them. The fellow knew of the dish design and
> politely suggested that I get another dish with a petal design. Maybe he's right.)

The key to easily sliding the screen panels into the grooves on dishes
like you describe is that everything needs to be in like new condition.
The tiniest little dings in the edge of the mesh or improper spacing of
the ribs will make it a nightmare.
I agree with the dish guy...or even buy a good used dish from
somebody...you can often find them free for the asking.

-Bill

747. Re: Yagi beam vs. cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 18:05:40 UTC
From: millersg@dmapub.dma.org
Message-ID: <a1n9hk$sc2$1@dmapub.dma.org>
Source record: 151035

Hello Frank,

Computer modeling/optimization of Yagis and Quads have provided a great amount of information about their performance capabilities. Despite what some claim, the performance differences between well designed, properly tuned Yagis and Quads is small. W4RNL has investigated many configurations of both types of antennas. His results are available at:

http://www.cebik.com/radio.html

Gain, VSWR and pattern (front-to-back) across the band depend more on the individual antenna design rather than whether it is a Quad or a Yagi.

The Quad offers a slight advantage in achievable gain since a horizontally polarized Quad performs similar to two Yagis stacked 1/4 wave apart. The difference is negligible, only about 1 dB for two element, short boom antennas and even less as the boom length gets longer. It is possible to switch between vertical and horizontal polarizations on a Quad (although few implement this capability). The Quad is also less prone to corona discharge and may be more quiet on receive at certain times. If your tower is guyed, the Quad requires more clearance above the top set of guys than a Yagi.

The Yagi (2-D) is easier to handle during installation than the Quad (3-D). Typical Yagis are generally more rugged than Quads although either can be mechanically designed to the same level of wind/ice survival.

Since Quads and Yagis give about the same performance, you should consider factors such as cost and mechanical issues (wind/ice survival, rotor/mast/tower requirements, ease of installation and maintenance) to make your decision.

By the way, others have posted several Quad versus Yagi performance claims that are incomplete generalizations. Many fail to realize antenna height, siting (terrain and surroundings) and propagation conditions can produce drastic differences in signal level. These parameters often show far more variance when 'comparing antennas' than the actual differences between well design Quads and Yagis.

Good luck - I'm sure whatever you install will be a
significant improvement over the R-7!

73,

In article <3C3E1457.D14DD347@nospam.valdor.de>,
Frank Valdor <Frank@nospam.valdor.de> wrote:
>Hi,
>
>I'm currently planning a new (well, actually it's my first one) antenna
>tower.
>Up to now I've been operating with a R-7 vertical so I don't have any
>reasonable
>experience with directional antennas.
>
>Maybe this question has been asked before:
>
>Should I go for a cubical quad or a yagi beam?
>
>I'm looking for good DX performance and coverage from 10m-20m (or even
>30m).
>
>I do have the space to set up a tower 30-40ft, so there's room
>enough to accomodate a 2-3 element quad or 6-7 element yagi.
>However I don't want to setup a "christmas tree" of 3 or even more
>mono band yagis (which might offer max. performance).
>
>Any hints / oppinions / "pros and cons" are appreciated.
>
>Thanks in advance.
>
>73,
>Frank
>DH5JG

--
Steve Miller N8SM millersg@dma.org http://www.dma.org/~millersg

748. Re: Quad vs. Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 20:12:17 UTC
From: vswrref@hotmail.com
Message-ID: <3c3f46c8.1118359@national-news.stargate.net>
Source record: 151036

Hi Mike,

The 45G is the only way to go for 40 meter big boy.

Jeff

On Fri, 11 Jan 2002 03:49:31 GMT, me@here.com (skyhi) wrote:

>On Thu, 10 Jan 2002 05:17:55 GMT, vswrref@hotmail.com (Jeff Y.) wrote:
>
>>Those swirls, downdrafts and crosswinds can really play haviic on
>>them, not doubt, but it still better to get a good idea which way the
>>winds are generally coming from and take the proper precautions.
>
>I vividly remember a tornado passing by about .75 mi from my location.
>Trees bent over, Ears popping, Nail biting, but we stayed in-tact.
>
>>
>>I'm used to the fact that being from the snowbelt states that just
>>about everyone I knew who had a quad lost one due to the ice and in
>>some cases survived the ice but failed when a moderate wind, 20 to 25
>>MPH, came along and with the extra weight totaled them. I know it's
>>not the same situation but I thought I'd point that out as well and
>>where my view was coming from.
>>
>>BTW, what size Tohn tower are you using? 25G, 45G?
>>
>>
>>Jeff
>
>Actually I have 80 ft of 25G up hosting the Quad. even though I could
>go higher, I still like to be conservative. I plan in the near future
>to put up a 2 element yagi, or Quad on 40, but not on 25G. I think
>better on 45G or larger. Get enough widloading up on one of these
>toothpicks and they'll corksctew down. I also use the guy brackets
>with 4ft long steel arms for the guy attatchments. This helps minimize
>the twist, even on sudden stops from the rotator. When considering
>erecting a tower, there's no such thing as overkill. Build to the best
>of your budget can allow. I dont run any antennas with longer boom
>legth than 30 ft. Longest was 34.5 ft. The Hygain 205. Even that was
>pushing the limit. I still drive down rural roads and look at the High
>voltage lines across the towers that carry them, and wonder what's the
>best way to mount a rotator on one - hi hi.
>
>cheers de Mike

>
>
>
>
>>
>>
>>
>>
>>On Thu, 10 Jan 2002 04:30:37 GMT, me@here.com (skyhi) wrote:
>>
>>>On Wed, 09 Jan 2002 05:41:58 GMT, vswrref@hotmail.com (Jeff Y.) wrote:
>>>
>>><snip> for content...
>>>
>>>Point well take Jeff. I cannot disagree. However the point I was
>>>making was not to oppose the structure or operation of either
>>>antenna, but rather the differences I have encountered in the
>>>use of both. Turning the elements into the wind is helpful for
>>>preserving the Yagi type antennas, untill of course you have
>>>several stacked. The primary reason for my changing to a single
>>>boom type (reguardless of structural type) has more to do with
>>>the overall windloading I am presenting to the top of my Rohn
>>>Tower. The Quad simply exhibits a fraction of the side/side
>>>moment and less compression on the tower. Hurricaines are
>>>fairly easy to predict which way the wind is coming from, However,
>>>we tend to get some real ugly t-storms that vary greatly in wind
>>>intensity and direction. At that point, your'e guess is as good as
>>>mine.
>>>cheers
>>>de
>>>Mike
>>>
>>
>

749. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 20:44:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C3F4EAD.587E7053@eznec.com>
Source record: 151037

What frequency?

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> > In the case of ground systems, there is indeed a combination of
> > conductivity and permittivity that gives the highest ground system loss.
> ==========
> Using one of the more advanced NEC programs, what is the soil resistivity
> which give lowest radiating efficiency for a simple 1/4-wave antenna with
> one 1/4-wave radial, near or on-the-surface ?
>
> To keep things very simple, while varying soil resistivity assume soil
> permittivity is unity or some convenient fixed value.
> ----
> Reg

750. Re: Good antenna for VX5R?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 20:49:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C3F4FE4.D46C10C8@eznec.com>
Source record: 151038

I had the same experience with a Diamond RHA627. But on all three bands.

Roy Lewallen, W7EL

Brendan Minish wrote:
>
> On Mon, 07 Jan 2002 18:38:37 -0800, senecal@mapson.cs.ucdavis.edu
> (Joshua Senecal) wrote:
>
> >The only antennas that I've seen that offer 6m/2m/70cm are the Maldol
> >AH510R and the Diamond SRH999. The Maldol comes SMA or BNC, but the
> >Diamond is only SMA.
>
> I have the diamond SRH999 and it is considerably worse than the stock
> antenna on 2m & 70Cm
>
> 73's
> Brendan EI6IZ
> --
> Brendan Minish

751. Re: Assembling a Wire Mesh Dish for Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 22:10:24 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C3F6215.A3F72731@gte.net>
Source record: 151039

Wayne Watson wrote:

> I'm finally getting around to reassembling a dish for radio astronomy purposes that I acquired a few
> years back. It's 10 feet in diameter and has radial spokes with screen-like (mesh) metal sectors
> between the spokes. The mesh is inserted into slots on either side of the spokes. I'd say so far
> this is not an easy process. At the moment, the dish is broken into about six sections with 2-3
> spokes per section. Maybe I need to disassemble every section and treat this as though I'm starting
> from scratch. Then on the other hand, maybe there's a tool that helps make the inserts of the mesh
> into the spokes. Maybe it's really a two person effort. Any suggestions? In the mean time, it's back
> to my giant puzzle.
>
> (I called a sat dish store in the area and asked them. The fellow knew of the dish design and
> politely suggested that I get another dish with a petal design. Maybe he's right.)
>

Tell us more about the mechanics of the dish. If it is a Raydx- it is top quality, but a bear to
assemble.

Dale W4OP

752. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 22:32:43 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C3F67F4.F27E717C@icok.net>
Source record: 151040

David,
No need to appologize. And I understand about the shipping,
but it doesn't hurt to ask. For those who don't like your post,
I'd suggest they ignore it. There are probably people who would
see it 'here' rather than on a local board, so why not. I also
don't see it as being 'off topic', it's an antenna isn't it?
Don't sweat the small stuff...
'Doc

753. to 'Doc

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 22:36:14 UTC
From: "Stef@no" <NOSPAMvisenta9@inwind.it>
Message-ID: <yNJ%7.12857$aD.436151@twister2.libero.it>
Source record: 151041

I'm planning to make the same choice of Jim with the Kenwood's automatic
remote turner. the vertical pole should be abt 7 meters.
Do you think that should works? (from 80 to 10 meters).
Should be quite good as antenna system? Should it work?
I'm not really interested in Dx contacts. and regarding the local noise?

best 73 de
Stefano - Venice Island - Italy

754. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 22:55:11 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C3F6D39.8722EA59@icok.net>
Source record: 151042

Why aren't you down harassing the others who post things
for sale in this group? Geez, at least he's selling an antenna!
'Doc

755. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-11 23:56:14 UTC
From: la8ak.xnd@online.no
Message-ID: <3c3f6af7.105626025@news.online.no>
Source record: 151043

On Fri, 11 Jan 2002 16:04:37 +0100, Val <val_a20@hotmail.com> wrote:

>
>(Leben Sie m�glichen innerhalb Deutshlands? Ich glaube
>dass es auch in den "Antennehandbuch" von Karl Rothammel
>behandelt ist.. Publiziert auf der Milit�rverlags DDR,
>aber trotzdem sehr gut!)
>
Vielleicht hat du die Rothammel nicht gesehen. Ich habe zeit 1962 drei
verschiedener B�cher dieser Serie und habe leider nicht solche
Schaltungen dar gesehen, DJ9HO UHF Unterlage I-V ist vielleicht besser

English: I don't think this is the book you need in this respect

73 und tsch�ss
LA8AK
--
remove ,xnd to reply

756. Re: Assembling a Wire Mesh Dish for Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 00:42:19 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c3f8a16_3@news1.prserv.net>
Source record: 151044

Wayne:
Bill had the right idea, I have picked up 4 - 10 foot dishes for the effort of removing them, and one is a fairly accurate one piece fiberglass job. Start asking around, as most BUD owners have abandoned them for DSS, and they can be had for nothing, already assembled.
--
Crazy George
Remove NO and SPAM from return address

757. Re: Heavy-duty VHF/UHF base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 01:19:42 UTC
From: "Bob M." <xxxxx@yyyy.zzz>
Message-ID: <OaM%7.49276$K36.16836991@news1.rdc1.va.home.com>
Source record: 151045

The tower is 600 feet high on top of a similarly endowed hill. I can put the antenna anywhere I want, but I'd probably limit it to between 100 and 300 foot levels. The building (well, where the equipment will be installed) is about 200 feet away (that's about 500 feet of coax). There will be other antennas on the tower, so icing will be a problem, as will falling ice from above. I need enough gain to offset the coax loss. Anything smaller than 1/2 inch is too lossy at 450MHz. Naturally, Andrews 7/8 would be nice, but 500 feet will cost me about $2k. I would consider LMR 500 or 600 or even 900.

I'm worried that the Diamond F718A just won't handle the harsh environment, so I've looked into a Celwave PD455 or PD458. These sell for $996 and $1250. Getting pricy. Compared to a Diamond for $200, which also has more gain than the Celwave models, I'd rather save the money. But I won't be able to change the antenna every few months if it can't stand up to the elements.

That's where I am at the present time. I wish I had a money tree, or some donations of coax and/or an antenna !

Bob M.
======
"codemaan" <codeman@gj.net> wrote in message
news:a1ljsr02ivk@enews2.newsguy.com...
> Need a little more information. How much wind (max mph gust speed?) Any
> icing? Need allot of gain out of your antenna? Or would 3/6 dbi be OK?
> Instead of expensive hardline (which is the best of course) would a run of
> Time LMR400 ;or another Time product do you?
>
> I am using a Diamond 500 m(12ft?) at one site and a Diamond x-50 (~3ft)
on
> another. I like them both. If wind velocity (excess of 90mph) is an
> issue, then go with the shorter model, but then you are giving up gain.
> Both have served me well. Yes, I know they are not commercial grade, but
> they are doing the job and I haven't got allot of money rapped up in the
> system.
>
>
>
>
> "Bob M." <xxxxx@yyyy.zzz> wrote in message
> news:rcp%7.47795$K36.16431995@news1.rdc1.va.home.com...
> > I have the opportunity to put an antenna up anywhere on a new tower. I
> just
> > need to get the antenna and some hard line to the site. The more hard
> line,
> > the higher it can go. A multi-band antenna would allow me to connect

> several
> > different radio systems to it, but so far the only candidates are the
> > 144/220/440MHz Diamond and Comet, fiberglass, about 10 feet tall, and I
> > don't know if they'll stand up to the wind, so to speak.
> >
> > Anyone have some ideas or manufacturers that I should look into? If I
have
> > to select just a single band antenna, it'll probably be 440-450 MHz, but
> > that would limit me significantly. There must be some good monoband
> antennas
> > that can be bought.
> >
> > Thanks in advance.
> >
> > Bob, WA1MIK
> >
> >
>
>

758. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 02:16:51 UTC
From: Leonard <louis@jado.prism.net>
Message-ID: <tt6v3u0gu6vbedtjfl2g28jf0meq267ln2@4ax.com>
Source record: 151046

On Thu, 10 Jan 2002 22:39:44 -0800, "Mark Walsh"
<mark@km6xu.die.spam.die.com> wrote:

>"David Krakowsky" <dothetime@hotmail.com> wrote:
>> 'Doc <w5lz@icok.net> wrote:
>
>> > David,
>> > No chance of shipping it??
>
>> I'm sorry that there are people out there that have nothing
>> better to do, and have elected themselves the internet police,
>> they need to lighten up...
>
>If you aren't willing to ship your stuff anywhere in the world,
>why didn't you limit the distribution of your post?
>Do you think that somebody in Australia reading this is
>going to make a trip to your house to pick it up?
>
>> I realize you can never please everyone in this world.
>
>Especially when you are a bandwidth hog.
>
>Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com
>

I am sure everyone appreciates your bandwidth conservation efforts.
Next time if you don't post you could save even more.

759. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 02:36:23 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a1o7f7$2bo$10@quark.scn.rain.com>
Source record: 151048

Robert <robert.61@gmx.at> wrote:

> I am a real beginner in technics. So for my question:
> Are these cavity filters amplifiers or do they reduce
> the signal?

Cavity filters reduce the signal level.

There are two ways to do it. The first is to make a cavity that peaks the desired signal (94.3 MHz in this case). This would be a pass filter. Unfortunately, these generally are not very sharp, so might not do a good job of minimizing the undesired signals.

The second way is to make two cavities that are notch filters. These can be made quite sharp. The two notches would be at 94.0 and 94.7. There would be some signal reduction at 94.3 - but an amplifier could always be used to regain the signal level. The noise floor might also increase.

--
Bill Nelson (billn@peak.org)

760. Re: Heavy-duty VHF/UHF base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 02:42:48 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a1o7r8$2bo$11@quark.scn.rain.com>
Source record: 151049

Bob M. <xxxxx@yyyy.zzz> wrote:

> I'm worried that the Diamond F718A just won't handle the harsh environment,
> so I've looked into a Celwave PD455 or PD458. These sell for $996 and $1250.
> Getting pricy. Compared to a Diamond for $200, which also has more gain than
> the Celwave models, I'd rather save the money. But I won't be able to change
> the antenna every few months if it can't stand up to the elements.

I have worked with Celwave antennas and their gain claims seem to be
realistic. I am not sure I can say the same for Diamond.

--
Bill Nelson (billn@peak.org)

761. Need KT-34 info

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 02:42:53 UTC
From: n7ws@yahoo.com
Message-ID: <3c3fa181.7443126@news.triconet.org>
Source record: 151050

I just worked 6Y5WJ on 20 meters and he is looking for assembly info on a KT-34.

Seems a fellow Jamaican ham has one on the ground and has no manual.

Josh has only email service and is looking for someone who could email the info.

I won't put his email address out here (to avoid spam) but if someone thinks they can help please contact me and I will furnish his email to you.

Thanks,

Wes N7WS

762. Re: FS/FT Radio Shack HTX-202 w/ acces!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 02:53:56 UTC
From: KC8SSG <kc8ssg@qsl.net>
Message-ID: <8zN%7.113$903.1363@news>
Source record: 151047
Cross-posted to:
alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap

SOLD!!!!!!
"KC8SSG" <kc8ssg@qsl.net> wrote in message news:SMq%7.73$903.1043@news...
> I have a 2m handie talkie with
> Box
> speaker mic
> rechargable battery
> AA battery pack
> manual w/ schematics
> AC walwart
> works like new!I have used this for packet mostly.Also have older power
> supply that I could be dealt out of for an extra charge.I will trade for
> about anything.Looking for DC power strip, 2m mobile,6 meter stuff,mobile
> antennas, QTH antennas,you name it! I am a new ham and need alot of stuff
> still. Just ask, look to see what you got laying around!
>
>
> reply here or to my email
> kc8ssg@qsl.net
> --
> KC8SSG
>
>
>

763. WTB: 3 piece guy wire/mast clamps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 03:08:11 UTC
From: k9sqg@aol.com
Message-ID: <20020111220811.14694.00000877@mb-bj.aol.com>
Source record: 151051

Need some guy wire clamps typically used with TV antenna installations. They are the three piece style that attach around the mast. Seems they are out of production and aren't sold at Radio Shack, Lowe's, Home Depot, Wal-Mart, K-Mart, etc. Any leads would be appreciated.

73s,

Evan

764. 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 03:10:14 UTC
From: pdrunen@aol.com
Message-ID: <20020111221014.12158.00000891@mb-fs.aol.com>
Source record: 151052

Hi Group,

I would like to put a 20m, 15m and 10m dipole on one coax line.
The 20m would form a vee, the 15m would be a hoz dipole and the 10m
would form an inverted vee.

I used the standard formula for each dipole lenght and put the data into NEC.
The VSWR plot(s) for the multiband antenna was no where near what I was
expecting. I when back and examined each dipole without the others to verify
the results were as expected.

I understand that adding extra dipoles to a single line feed will change the
resonant of the other dipoles. So, I was looking to find someone who has done a
similar concept and what dimensions were used.

How about a 40meter and 20meter dipole(s) at which same feed and using the
40meter as a 15meter antenna?

Thanks,

Paul

KJ4UO

765. Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 03:16:10 UTC
From: milo17@aol.com
Message-ID: <20020111221610.28555.00000855@mb-mp.aol.com>
Source record: 151053

Hello group,
I am currently using a 40 meter dipole fed with 50 ohm coax for
40/15 meters.My question is : would it be possible to feed this antenna with TV
300 ohm line, through a tuner to obtain multi-band operation ? If so, would the
feedline radiate at all ? Would efficiency be better or worse ? My concern is
Noise both to and from my transceiver. I picked up S9 noise level from my
television on 15 meters with an indoor dipole. I will be using a FT-817, 5
watts out to an outdoor dipole.
Any help is greatly appreciated !

Thanks to the group ,
Mike N2JVT

766. Re: Heavy-duty VHF/UHF base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 03:33:00 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <shbv3u0a099n4ls1h139q3tkqnfp1c2as8@4ax.com>
Source record: 151057

On Sat, 12 Jan 2002 01:19:42 GMT, "Bob M." <xxxxx@yyyy.zzz> wrote:

>Compared to a Diamond for $200, which also has more gain than
>the Celwave models

Are you sure of that or is that comparing advertising specs?

Danny

767. Re: Need KT-34 info

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 03:35:56 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3FAF1C.466B6FBB@coqui.net>
Source record: 151054

Wes Stewart wrote:
>
> I just worked 6Y5WJ on 20 meters and he is looking for assembly info
> on a KT-34.
>
> Seems a fellow Jamaican ham has one on the ground and has no manual.
>
> Josh has only email service and is looking for someone who could email
> the info.
>
> I won't put his email address out here (to avoid spam) but if someone
> thinks they can help please contact me and I will furnish his email to
> you.
>
> Thanks,
>
> Wes N7WS

There's a KT-34 owner somewhere in Kingston. I recall seeing one in the air, I think it was in the Benson Ave. area between Norbrook and Cherry Gardens. Maybe you could point him towards that guy?

-Bill

768. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 03:43:16 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3FB0D4.AE1AE9CC@coqui.net>
Source record: 151055

PDRUNEN wrote:
>
> Hi Group,
>
> I would like to put a 20m, 15m and 10m dipole on one coax line.
> The 20m would form a vee, the 15m would be a hoz dipole and the 10m
> would form an inverted vee.
>
> I used the standard formula for each dipole lenght and put the data into NEC.
> The VSWR plot(s) for the multiband antenna was no where near what I was
> expecting. I when back and examined each dipole without the others to verify
> the results were as expected.
>
> I understand that adding extra dipoles to a single line feed will change the
> resonant of the other dipoles. So, I was looking to find someone who has done a
> similar concept and what dimensions were used.
>
> How about a 40meter and 20meter dipole(s) at which same feed and using the
> 40meter as a 15meter antenna?
>
> Thanks,
>
> Paul
>
> KJ4UO

As a rule of thumb, dipoles seem to want to be shortened a bit in this
configuration. I've seen a number like 454/Mc tossed out as being
typical but given the obvious variations possible, anything might go.
In practice, using a 40 dipole on 15 generally works ok but that
evaluation may be affected by how critical you are about the SWR.
Wanting a 40 SSB dipole to be good on 15 CW might be a cruddy match
whereas 40 CW/15 SSB might be ideal.
Having both a 40 and a 15 on the same feedline will certainly make 15
difficult to trim.
-Bill WX4A

769. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 03:45:09 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C3FB145.756DD77F@coqui.net>
Source record: 151056

MILO17 wrote:
>
> Hello group,
> I am currently using a 40 meter dipole fed with 50 ohm coax for
> 40/15 meters.My question is : would it be possible to feed this antenna with TV
> 300 ohm line, through a tuner to obtain multi-band operation ? If so, would the
> feedline radiate at all ? Would efficiency be better or worse ? My concern is
> Noise both to and from my transceiver. I picked up S9 noise level from my
> television on 15 meters with an indoor dipole. I will be using a FT-817, 5
> watts out to an outdoor dipole.
> Any help is greatly appreciated !
>
> Thanks to the group ,
> Mike N2JVT

A good option to consider is to simply 'convert' it to a 40-10 G5RV.
-Bill WX4A

770. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 04:19:19 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C3FB947.2470D59A@IEEE.org>
Source record: 151058

PDRUNEN wrote:
> I would like to put a 20m, 15m and 10m dipole on one coax line.

Here's another idea. Put up a 32ft dipole fed with 300 ohm ladder-line. A feedline length of about 49ft will get you on 15m and 10m. Add another 8ft to 57ft and you can hit 20m. If you're lucky, you won't even need a tuner. Make it 59ft for 17m and 56ft for 12m.

I run a 32ft rotatable dipole fed with 300 ohm ladder-line. I vary the length of my feedline and don't need a tuner on 20m-10m.
--
cheers, CAM http://www.qsl.net/w5dxp

771. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 04:23:12 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C3FBA30.7A272C5@IEEE.org>
Source record: 151059

MILO17 wrote:
>
> Hello group,
> I am currently using a 40 meter dipole fed with 50 ohm coax for
> 40/15 meters.My question is : would it be possible to feed this antenna with TV
> 300 ohm line, through a tuner to obtain multi-band operation ?

Check out the No tuner shorty HF dipole on my web page. It is a 40m dipole
fed with ladder-line and requires no tuner if one varies the length of
the ladder-line for a near-perfect match on all bands 40m-10m.
--
cheers, CAM http://www.qsl.net/w5dxp

772. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 05:11:28 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C3FC568.CA260DC0@icok.net>
Source record: 151060

Mike,
Can you feed your antenna with 300 ohm twin lead? Yes. Would there be any benefit? Not really. Would it be more efficient? No. Would the feedline radiate? It could, but it isn't a sure thing. On the whole would it do you any good? Probably not. If your getting noise from your TV because of the antenna being in side, you would still have the same problem, proximity. Go ahead and use an outdoor antenna with the coaxial feed line.
'Doc

773. Re: Need KT-34 info

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 05:40:19 UTC
From: n7ws@yahoo.com
Message-ID: <3c3fcc30.137624355@news.triconet.org>
Source record: 151061

I'll pass it along.

Thanks

On Fri, 11 Jan 2002 23:35:56 -0400, Your Friend Bill <"Remove The NO In The
Reply To Address"@coqui.net> wrote:

|Wes Stewart wrote:
|>
|> I just worked 6Y5WJ on 20 meters and he is looking for assembly info
|> on a KT-34.
|>
|> Seems a fellow Jamaican ham has one on the ground and has no manual.
|>
|> Josh has only email service and is looking for someone who could email
|> the info.
|>
|> I won't put his email address out here (to avoid spam) but if someone
|> thinks they can help please contact me and I will furnish his email to
|> you.
|>
|> Thanks,
|>
|> Wes N7WS
|
|There's a KT-34 owner somewhere in Kingston. I recall seeing one in the
|air, I think it was in the Benson Ave. area between Norbrook and Cherry
|Gardens. Maybe you could point him towards that guy?
|
|-Bill
|

774. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 05:49:43 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C3FCEE0.609F740B@home.com>
Source record: 151062

I have been doing this foy years with 40 and 80 meter dipoles in
parallel. I have also added 20 and 30 Meter legs to the parallel
dipoles. Seperate the ends as far as possible. Run the 80M in one
direction and the 40M in another. I have always had to do some trimming
after I put them up.

Les, AA4F

PDRUNEN wrote:
>
> Hi Group,
>
> I would like to put a 20m, 15m and 10m dipole on one coax line.
> The 20m would form a vee, the 15m would be a hoz dipole and the 10m
> would form an inverted vee.
>
> I used the standard formula for each dipole lenght and put the data into NEC.
> The VSWR plot(s) for the multiband antenna was no where near what I was
> expecting. I when back and examined each dipole without the others to verify
> the results were as expected.
>
> I understand that adding extra dipoles to a single line feed will change the
> resonant of the other dipoles. So, I was looking to find someone who has done a
> similar concept and what dimensions were used.
>
> How about a 40meter and 20meter dipole(s) at which same feed and using the
> 40meter as a 15meter antenna?
>
> Thanks,
>
> Paul
>
> KJ4UO

775. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 06:35:20 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201112235.1f6d479@posting.google.com>
Source record: 151063

milo17@aol.com (MILO17) wrote in message
news:<20020111221610.28555.00000855@mb-mp.aol.com>...
> Hello group,
> I am currently using a 40 meter dipole fed with 50 ohm coax for
> 40/15 meters.My question is : would it be possible to feed this antenna with TV
> 300 ohm line, through a tuner to obtain multi-band operation ? If so, would the
> feedline radiate at all ? Would efficiency be better or worse ? My concern is
> Noise both to and from my transceiver. I picked up S9 noise level from my
> television on 15 meters with an indoor dipole. I will be using a FT-817, 5
> watts out to an outdoor dipole.
> Any help is greatly appreciated !
>
> Thanks to the group ,
> Mike N2JVT

Sure, it will work. The feedline won't radiate too much as long as you
have the antenna balanced. If you get noise on a coax fed dipole, you
will with the tv line fed antenna also. About all you can do is turn
the tv off or fix the tv.
Efficiency on 40m will be slightly worse due to the tuner losses. But
it won't be too drastic as long as you use the least inductance with
the tuner. It's worth it to be able to work all bands. You couldn't do
that with coax and not have large losses on some bands. I have a tv
line fed 40m dipole in my attic as a standby/storm antenna. MK

776. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 06:45:26 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201112245.4e47ffb3@posting.google.com>
Source record: 151064

pdrunen@aol.com (PDRUNEN) wrote in message
news:<20020111221014.12158.00000891@mb-fs.aol.com>...
> Hi Group,
>
> I would like to put a 20m, 15m and 10m dipole on one coax line.
> The 20m would form a vee, the 15m would be a hoz dipole and the 10m
> would form an inverted vee.
>
> I used the standard formula for each dipole lenght and put the data into NEC.
> The VSWR plot(s) for the multiband antenna was no where near what I was
> expecting. I when back and examined each dipole without the others to verify
> the results were as expected.

Did you change the source to match the elements driven, or use a
common short line to connect all the elements together? There are two
ways to model that. Place the dipoles at slightly different heights,
and change the source to match the band driven, or you can make a very
short wire to connect all the elements together and use one source
that is placed in the center of the short connector wire.
>
> I understand that adding extra dipoles to a single line feed will change the
> resonant of the other dipoles. So, I was looking to find someone who has done a
> similar concept and what dimensions were used.

If you place the antennas at right angles , you will have no
interaction to speak of. If in the same plane, try to spread apart as
far as possible.
>
> How about a 40meter and 20meter dipole(s) at which same feed and using the
> 40meter as a 15meter antenna?

Sure, it will work. MK

777. January Specials from www.sauderelectronics.com

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 07:22:14 UTC
From: Ben Silverman <ben@everyoneflydotcom>
Message-ID: <Xns9194176872EDEbeneveryoneflycom@209.249.90.101>
Source record: 151065
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Greetings,

I'd like to thank all of you who visted the website(http://www.sauderelectronics.com) and ordered, what great support the online community has shown for the site and its products. To answer many of you: Yes, the prices on the items are not introductory, they will remain the same as long as our customers(you) continue your great support. I'd specifically like to thank Frank Leaf who was extremely helpful in our online endeavor and volunteered to help with website improvements.

So, with no further ado, I announce our January USENET only specials! These specials are not posted anywhere else(except the website) and were designed for everyone who has supported our effort thus far:

1. Pack of 10 Silver Teflon PL259s for ONLY $8.00!
2. SMA Adaptors, mix and match, 3 for ONLY $10.00!
3. UHF SO239 3" Mag Mount, $2.00 off the regular price of $15.00 for ONLY $13.00!
4. Any order over $25.00 receives a special mystery gift FREE!

Order now at http://www.sauderelectronics.com

Thanks, and 73's

-Ben

778. ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 07:34:48 UTC
From: rasw <atdot.dotat@at.at>
Message-ID: <a1oous$35o2l$1@rn.area.com>
Source record: 151067

Folks:

I'm interested in installing a free standing ground-mounted vertical antenna. What's the best way of securing this to the ground? I don't think I can sledgehammer some mast deep enough to be secure.

Are there better techniques? Any suggestions?

Thanks!

Robert " A F 2 M"

email: callsign @ "robert.to"

779. Rat Shack Digital SWR meter (21-527)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 07:35:18 UTC
From: poolfool@gte.net
Message-ID: <5992a409.0201112335.440ed8e3@posting.google.com>
Source record: 151066

I was wondering if it was possible to modify this digital meter
somehow so I can also use it as a signal strength meter (db) ???
I heard that it can be done actually pretty easily, but thats all
I've heard. Any advice would be most appreciated,

Mark Klein

poolfool@gte.net

780. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 11:45:25 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c401ee9_2@corp.newsgroups.com>
Source record: 151068

"MILO17" <milo17@aol.com> wrote in message
news:20020111221610.28555.00000855@mb-mp.aol.com...
> Hello group,
> I am currently using a 40 meter dipole fed with 50 ohm
coax for
> 40/15 meters.My question is : would it be possible to feed this antenna
with TV
> 300 ohm line, through a tuner to obtain multi-band operation ? If so,
would the
> feedline radiate at all ? Would efficiency be better or worse ? My concern
is
> Noise both to and from my transceiver. I picked up S9 noise level from my
> television on 15 meters with an indoor dipole. I will be using a FT-817, 5
> watts out to an outdoor dipole.
> Any help is greatly appreciated !
>
> Thanks to the group ,
> Mike N2JVT

It will work fine Mike, but if you live in an area where you get alot of
rain, you may want ot consider 450 ohm line or 600 ohm line. the 300 ohm
stuff can become quite lossy when wet.
73 KC1DI

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.313 / Virus Database: 174 - Release Date: 1/2/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

781. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 11:51:43 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c402054_2@corp.newsgroups.com>
Source record: 150969

"rasw" <atdot.dotat@at.at> wrote in message
news:a1oous$35o2l$1@rn.area.com...
> Folks:
>
> I'm interested in installing a free standing ground-mounted vertical
> antenna. What's the best way of securing this to the ground? I don't
think
> I can sledgehammer some mast deep enough to be secure.
>
> Are there better techniques? Any suggestions?
>
> Thanks!
>
> Robert " A F 2 M"
>
> email: callsign @ "robert.to"
>
>

There are Comercially made mounts you can buy.. What length of Vertical are
you planning? the taller the more depth you will need.. I've had good
sucess diging a hole with a post hole digger and sinking a 1-1/2 inch pipe
about 3 to four feet deep for regular trap verticals. When I had my 80
footer up I used a pipe welded to an old tire rim and burried about 5 feet
deep but that was a guyed antenna.

anyway a web search on vertical mounts should give you some ideas of what
available.
73 Dave kc1di

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.313 / Virus Database: 174 - Release Date: 1/2/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

782. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 13:35:47 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <TYW%7.6405$kt2.1166335139@newssvr15.news.prodigy.com>
Source record: 150970

GW, thanks for the example. Are you a teacher? I had understood conjungate matching, (to a point). Other writers didn t call it conjugate matching. There are some other writers out there who say you have to cut your dipole to get an exact 1:1 SWR; that you have to have your transmatch at the antenna; and that all power reflected back to the line is lost. From Maxwell's statement, it would seem one could use a "random length" dipole cut to a length for the lowest frequency in use and use a near lossless line like ladder line or open wire line, and an antenna tuner and you would have an "all" band antenna.

It would be nice to have just one dipole out there instead of the four that I have for 12,17,20, and 40.(and 15 using the 40 meter dipole) If I understand Maxwell, I could use a 40 meter dipole and use it on 40,30,20,17,15 and 12 meters if I have a near lossless line and, proper matching. Since SWR really doesn t matter since power is eventually reflected back to the load anyway, minus any attenuation on the line. (?)

It would seem like there would be practical limitations, if that were true. I did however, get out on my Butternut HV6X on 17 meter with my tuner getting SWR down to 1.4:1. 12 meter was another story. But in this solar cycle anything is possible and even an inefficient antenna can get out.
"graywolf" <graywolf15222@yahoo.com> wrote in message
news:a53b928c.0201101258.1aa767fe@posting.google.com...
> Jerry,
>
> Conjugate matching is what happens, when you are coupling the 50-ohm
> output of your transmitter or amplifier to a load that is not 50 ohm.
> You need some type of matching network such as a gamma or beta match
> or an antenna tuner.
>
> For example when you adjust your antenna tuner so as to obtain a VSWR
> of 1:1 you are matching the 50-ohm transmitter to the complex
> impedance of your antenna system and by system I mean the antenna and
> transmission line.
>
> Let's say that the complex impedance looking into the coax from the
> antenna is 60 - j100 ohms. When you adjust your antenna tuner to a
> VSWR of 1:1 the transmitter is seeing 50 +/- j 0 ohms and the antenna
> tuner's output is still seeing 60 - j 100 but if your were to
> measuring the complex impedance looking into the tuner's output
> connector you would measure 60 +j100. The tuner's output impedance is
> the opposite of the impedance looking into the coax. Since the antenna
> tuner's output is tuned to 60 + j100 and the complex impedance from
> the antenna system is 60 - j100. The reactance values cancel out. This
> is conjugate matching. Picture it as if you were looking at yourself

> in a mirror. Raise your right arm and in the mirror it's appears to be
> you're left arm that was raised.
>
>
> I hope this helps you. I tried to make it simple but it is a complex
> subject. However you are reading the right book.
>
> Best of luck,
>
>
> GW
>
>
>
>
>
>
> "Jerry" <jerryaa@prodigy.net> wrote in message
news:<XZ6%7.4574$B7.608063667@newssvr16.news.prodigy.com>...
> > I have read parts of Walter Maxwell's book Reflections II. He mentions
the
> > conjugate matching theorum. I still don t really understand it. In
simple
> > terms can somebody describe it and how it affects transmission lines,
> > matching, antennas, tuners and getting the antenna system to operate
> > efficiently?
> >
> > Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his
book?
> > (Why) or is it controversial?

783. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 13:54:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1pijr$sds6n$1@ID-124126.news.dfncis.de>
Source record: 150975

Roy asked -

> What frequency?
>
==========

Roy, you are being humorous but mostly evasive. In the time taken to think about it and ask your question you could have done the job and provided an estimate of soil conductivity everybody is eagerly waiting for.

Just enter ground permittivity = unity and set a frequency at which the vertical is approximately the required 1/4-wavelength.

Then vary ground conductivity in a few very crude steps between sea water and Sahara sand. Simple!

If you can't find a conductivity which minimises radiating efficiency then the program's modelling performance is deficient.

Regards, Reg, G4FGQ

784. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 13:57:27 UTC
From: Greg Blair <gblair@sympatico.ca>
Message-ID: <3C4040C7.548E22AC@sympatico.ca>
Source record: 150971

Go to your local lumber yard and purchase a chain link fence galvanized
fence post.

Pound it into the ground with a big hammer.

Leave about 1 foot sticking out.

Clamp your antenna to the exposed stump.

This also helps out as it functions as a ground rod.

Add additional ground rods if you want.

Don't forget to add your favorite number of radials.

rasw wrote:
>
> Folks:
>
> I'm interested in installing a free standing ground-mounted vertical
> antenna. What's the best way of securing this to the ground? I don't think
> I can sledgehammer some mast deep enough to be secure.
>
> Are there better techniques? Any suggestions?
>
> Thanks!
>
> Robert " A F 2 M"
>
> email: callsign @ "robert.to"

785. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 14:12:40 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <3VibMvBYREQ8EAe+@ifwtech.com>
Source record: 150972

rasw wrote:
>Folks:
>
>I'm interested in installing a free standing ground-mounted vertical
>antenna. What's the best way of securing this to the ground? I don't think
>I can sledgehammer some mast deep enough to be secure.
>
>Are there better techniques? Any suggestions?

In ground that is not stony, you can drill the pipe into the ground by cutting two large teeth in the bottom, and using a mast clamp to attach a cross-bar to turn it. This is much more controlled than the sledgehammer method. Use a level to make sure the pipe is going in exactly vertical.

Choose the largest pipe that the vertical's clamps will fit over, with a heavy wall - in other words, real water pipe and not electrical conduit or anything like that.

A little water in the bottom of the borehole will help ease the pipe down, but not too much because you don't want to soften the ground. Pull the pipe out after every few inches and clear out the plug of earth. Take care not to rock the pipe sideways because that will open out the top of the hole.

For a light vertical up to about 30ft, you need to go down about 3ft in solid clay, or maybe more in very soft earth or sand.

Better still, use a slightly smaller pipe to drill the borehole (light conduit or even rigid plastic is OK for this) and then you'll find that the full-size pipe will tap in easily with the sledgehammer, firming up the earth around it.

If the top of the borehole is not a tight fit on the pipe, or if the pipe starts to open up the hole when the vertical moves around in the wind, dig out about 1ft square by 6in deep around the top of the pipe and fill it with concrete to spread the load at ground level.

Obviously this method is only suitable for light verticals, but it works very well in the right kind of soil.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

786. Re: Assembling a Wire Mesh Dish for Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 14:16:39 UTC
From: Otis Cribblecobblis <alaininvc@netscape.net>
Message-ID: <3C404547.7623A8CB@netscape.net>
Source record: 150928

Stop in at one of the astronomy NG's; they are really a helpful group
over there!

Wayne Watson wrote:
>
> I'm finally getting around to reassembling a dish for radio astronomy purposes that I acquired a few
> years back. It's 10 feet in diameter and has radial spokes with screen-like (mesh) metal sectors
> between the spokes. The mesh is inserted into slots on either side of the spokes. I'd say so far
> this is not an easy process. At the moment, the dish is broken into about six sections with 2-3
> spokes per section. Maybe I need to disassemble every section and treat this as though I'm starting
> from scratch. Then on the other hand, maybe there's a tool that helps make the inserts of the mesh
> into the spokes. Maybe it's really a two person effort. Any suggestions? In the mean time, it's back
> to my giant puzzle.
>
> (I called a sat dish store in the area and asked them. The fellow knew of the dish design and
> politely suggested that I get another dish with a petal design. Maybe he's right.)
>
> --
> Wayne T. Watson (121.015 Deg. W, 39.262 Deg. N, 2,701 feet), Nevada City, CA
>
> "Life is a tragedy for those who feel and a
> comedy for those who think." -- Chinese Proverb
>
> Web Page: http://home.earthlink.net/~mtnviews
> Imaginarium Museum: http://home.earthlink.net/~mtnviews/imaginarium.html

--
?_

787. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 14:29:52 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1piju$sds6n$3@ID-124126.news.dfncis.de>
Source record: 150976

Try gelignite or semtex. Ask neighbours to evacuate homes leaving their windows open.

788. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 14:34:33 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C404979.388E9957@IEEE.org>
Source record: 150973

Jerry wrote:
>
> GW, thanks for the example. Are you a teacher? I had understood conjungate
> matching, (to a point). Other writers didn t call it conjugate matching.
> There are some other writers out there who say you have to cut your dipole
> to get an exact 1:1 SWR; that you have to have your transmatch at the
> antenna; and that all power reflected back to the line is lost.

An antenna tuner (transmatch) achieves a system Z0-match and re-routes
virtually all the reflected power back toward the antenna. You can have
the case where the transmitter is putting out 100 watts and the antenna
is radiating nearly all of that 100 watts while the SWR is 5.8:1. I
chose that SWR as an example because the forward power would be 200 watts
and the reflected power would be 100 watts, i.e. half the power is
reflected back from the antenna. But the tuner re-routes it right back
toward the antenna.

> From
> Maxwell's statement, it would seem one could use a "random length" dipole
> cut to a length for the lowest frequency in use and use a near lossless line
> like ladder line or open wire line, and an antenna tuner and you would have
> an "all" band antenna.

I have such an antenna on my web page and I don't even use an antenna tuner
for 80m-10m operation.

> It would be nice to have just one dipole out there instead of the four that
> I have for 12,17,20, and 40.(and 15 using the 40 meter dipole) If I
> understand Maxwell, I could use a 40 meter dipole and use it on
> 40,30,20,17,15 and 12 meters if I have a near lossless line and, proper
> matching. Since SWR really doesn t matter since power is eventually
> reflected back to the load anyway, minus any attenuation on the line. (?)

I have just such an antenna on my web page. It's called the 'shorty' version.

> It would seem like there would be practical limitations, if that were true.

The practical limitation is that coax is too lossy to handle very high
SWRs so you are forced to go to ladder-line or open-wire line.
--
cheers, CAM http://www.qsl.net/w5dxp

789. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 14:44:59 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C404BEB.13CE3FDD@IEEE.org>
Source record: 150974

'Doc wrote:
>
> Mike,
> Can you feed your antenna with 300 ohm twin lead? Yes. Would
> there be any benefit? Not really. Would it be more efficient?
> No.

There might be a benefit and it might be more efficient. With 300 ohm line, the necessity for a good match at the antenna disappears. In other words, for any given SWR, the 300 ohm line will be less lossy (when it is dry) than ordinary coax.

For instance, using EZNEC, a 66ft dipole resonant on 40m has a feedpoint impedance causing an 8:1 SWR on 50 ohm coax on 15m. Those conditions can cause excess losses. However, the 300 ohm line with an SWR of 4:1 exhibits negligible losses working into that same 96-j164 ohm impedance.
--
cheers, CAM http://www.qsl.net/w5dxp

790. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 14:50:11 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C404D23.7AFC6BC4@IEEE.org>
Source record: 150977

rasw wrote:
> I'm interested in installing a free standing ground-mounted vertical
> antenna. What's the best way of securing this to the ground? I don't think
> I can sledgehammer some mast deep enough to be secure.
>
> Are there better techniques? Any suggestions?

What I do is use a post hole digger to sink a 2x4 a few feet into
the ground. Then I attach the aluminum tubing to the 2x4 using
U-bolts with a piece of PVC around the aluminum tubing for
insulation. For very heavy antennas, I use two 2x4's in a
4x4 configuration using treated lumber, of course.
--
cheers, CAM http://www.qsl.net/w5dxp

791. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 15:19:52 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020112101952.08616.00001944@mb-ch.aol.com>
Source record: 150978

Jerry - You got it! Only I would suggest you not choose a 40 meter dipole to start with. On the even harmonics, it will be harder to match. It is better to not be resonant on any frequency than to fight the even harmonics. The antenna "should" be at least 3/8 wavelength on the lowest frequency you plan to operate. I used 102 feet because I had an old G5RV laying around. It tunes 160-10 meters and gets out well even though it is "short on 160.

Now the problem, if you would call it that, is that the antenna exhibits many lobes on the higher frequencies. Instead of the broadside figure 8 pattern you see with a dipole, the multi band antenna pattern will look more like a four leaf clover and then a daisy as you go up. This could be good if you are lucky enough to have a lobe in the drection you want to work but it is hit or miss and the nulls are steep.

You can fix this problem and even out the pattern by using a top fed inverted L configuration. I have mine with the center at 60 feet. One side is horizontal and the other drops straight down. The antenna is one half horizontal and one half vertical. Hence the inverted L. About 135 feet of ladder line back to the tuner. I think this antenna is superior to a dipole because the coverage is more omni directional. It certainly plays better than my old horizontal G5RV.

I am surprised more hams don't use this configuration. Cebik praises it pretty highly. You can learn more about the top fed inverted L on Cebik's site.
www.cebik.com
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

792. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 15:23:51 UTC
From: k1bqt@aol.com
Message-ID: <20020112102351.28361.00003689@mb-fe.aol.com>
Source record: 150979

> There are some other writers out there who say you have to cut your dipole to get an exact 1:1 SWR; that you have to have your transmatch at the antenna<.

Nonesense. I'm working on a follow-up article right now stating that using a tuner is fine--as long as you screw the antenna up sufficiently to work with it!

73

Rick K1BQT

793. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 15:27:51 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020112102751.08616.00001948@mb-ch.aol.com>
Source record: 150980

I'll give you the same reply I posted on the thread about conjugate matching.

Why limit yourself to only three bands? Use a tuner and ladder line and work all the bands with one antenna. The antenna "should" be at least 3/8 wavelength on the lowest frequency you plan to operate. I used 102 feet because I had an old G5RV laying around. It tunes 160-10 meters and gets out well even though it is "short on 160.

Now the problem, if you would call it that, is that the antenna exhibits many lobes on the higher frequencies. Instead of the broadside figure 8 pattern you see with a dipole, the multi band antenna pattern will look more like a four leaf clover and then a daisy as you go up. This could be good if you are lucky enough to have a lobe in the drection you want to work but it is hit or miss and the nulls are steep.

You can fix this problem and even out the pattern by using a top fed inverted L configuration. I have mine with the center at 60 feet. One side is horizontal and the other drops straight down. The antenna is one half horizontal and one half vertical. Hence the inverted L. About 135 feet of ladder line back to the tuner.

I think this antenna is superior to a dipole because the coverage is more omni directional. It certainly plays better than my old horizontal G5RV. Your nest of dipoles is going to favor two directions and if the antennas are at right angles to each other, your to be pointing in different directions on each band.

I am surprised more hams don't use the L configuration. Cebik praises it pretty highly. You can learn more about the top fed inverted L on Cebik's site.
www.cebik.com
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

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794. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 15:47:24 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C405A8C.FDCA07EF@IEEE.org>
Source record: 150982

K4IA wrote:
> Jerry - You got it! Only I would suggest you not choose a 40 meter dipole to
> start with. On the even harmonics, it will be harder to match. It is better
> to not be resonant on any frequency than to fight the even harmonics.

This is somewhat of an old wive's tale. What you say is true if you are using coax for the feedline but absolutely not true if you are using ladder-line or open wire line. Here's why:

The feedpoint of a 40m dipole used on 20m is around 6000 ohms according to EZNEC. Assume we feed the dipole with 450 ohm ladder-line. The SWR on the ladder-line will be 6000/450 = 13.33:1. The ladder-line will transform the impedance because of the SWR. If the ladder-line length is made an odd multiple of 1/4WL, then the impedance seen by the transmitter will be 450/13.33 = 33.76 ohms which gives a 50 ohm SWR of 1.5:1 which is ACCEPTABLE EVEN WITHOUT AN ANTENNA TUNER.

Using random lengths of ladder-line, the impedance seen by the transmitter can vary between 34 ohms and 6000 ohms with reactance. If one knows what one is doing, one doesn't have to worry about antenna length as long as the antenna is 1/2WL on the lowest operating frequency. Much too short antennas can result in sky high SWRs even using ladder-line.

Moral: Don't worry about even harmonics in a dipole if you are feeding it with ladder-line or open-wire line.
--
cheers, CAM http://www.qsl.net/w5dxp

795. W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 15:48:24 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c405ac8$1@news.bnb-lp.com>
Source record: 150981

The W9INN Antennas Page is available at the web site listed below.

A quote from Bill-W9INN explaining the term 'resonactor' has now been
added.

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

796. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 15:58:20 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C405D1C.2B3B99EA@IEEE.org>
Source record: 150983

K4IA wrote:
> Why limit yourself to only three bands? Use a tuner and ladder line and work
> all the bands with one antenna. The
> antenna "should" be at least 3/8 wavelength on the lowest frequency you plan to
> operate. I used 102 feet because I had an old G5RV laying around. It tunes
> 160-10 meters and gets out well even though it is "short on 160.

I would have to disagree with you about 160m. According to EZNEC, a 102
ft. dipole on 160m would have a feedpoint impedance of 5.8-j1474 ohms
and an SWR of 900:1 on the 450 ohm ladder-line at the antenna. Assuming
a matched line loss of 0.05 dB, the losses in the ladder-line would
be about 8 dB. Assuming no tuner losses, only 1/7 of the power
reaches the antenna.
--
cheers, CAM http://www.qsl.net/w5dxp

797. Re: airborne cell phones

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 16:17:23 UTC
From: Dave Ball <dave.ball@gte.net>
Message-ID: <nkZ%7.471$Gp4.215846@paloalto-snr2.gtei.net>
Source record: 150984

According to the BBC, the flight that crashed in Pennsylvania was called
from via the "air phone." From the article, "...spent his last 15 minutes
speaking to a GTE air phone operator..."

http://news.bbc.co.uk/hi/english/world/americas/newsid_1548000/1548711.stm

Found with a quick Google search
Dave
N7NIP

"Bob Miller" <bamiller@texas.net> wrote in message
news:BmM2PBulXxEF63d98vF8RyMHSkdz@4ax.com...
> "AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote:
>
> >I'd like to see a reference to an authoritative news article that says
that
> >some passengers were using cell phones.
>
> Well, it happened 4 months ago, so I can't point you to a specific
article, but
> virtually all of the cable tv news shows, as well as newspapers and
magazines,
> mentioned passengers were using personal cell phones.
>
> I guess you don't spend much time with the news.
>
> You're certainly welcome to do a Google.com search and catch up.
>
> Bob
> k5qwg
>

798. FS: Hy-Gain TH7 Pick up only near Chicago

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 16:46:43 UTC
From: David Ornee <daveornee@mindspring.com>
Message-ID: <a1ppbe$6b7$1@slb6.atl.mindspring.net>
Source record: 150985

For Sale: 13 year old Hy-Gain TH7 just taken down yesterday. For Pick up only in Chicago area. $300.
KQ9W, David Ornee, Western Springs, IL

799. Stacked Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 17:06:59 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C406CE6.C6672AFE@bellatlantic.net>
Source record: 150986

I just read W4RNL's excellent articles about all sorts of antennas. The NEC simulations are outstanding, and give lots of insight into the Yagi/Quad discussions. From what I read, it would appear that a Stacked 2-element Quad has a lot going for it. Here's what I learned:

1) Run Double #14 wire elements, Spaced 5": Adds to the bandwidth, Gain, and F/B ratio.

2) Use a Spider Quad: Provides more optimum spacing of course.

3) Feed each band seperately with 1/4 Wave sections, a remote switch which opens both sides. This reduces the intercoupling of the "other bands" and provides cleaner patterns.

4) Seperate the Two 2-element Quads by 30', center to center, feed them In-Phase (of course). W4RNL studied vertical stacking, but I'm thinking horizontal "stacking" would be easier to implement with a single rotator, on a typical tower, and provide a balanced height.

W4RNL's analysis was getting an additional 2.1 dBi gain for the second Stacked Quad! Overall, on 20M he was showing 12 or more dB of Gain, and great bandwidth/FB ratios! Am I dreaming here? The multiband 2 element is way easier to tune than a 4 el, and the stacking factors are apparently pretty well known. Should I take down my 4el Quad, redo it with spaced double wire elements, and add a 30' horizontal boom, and convert to dual 2-element configuration? Also I'm thinking I could get a 1 Wave Length 40 meter "Vertical" steerable Loop in there somewhere. I'm not sure my GEM Quad spreaders are up for double wire duty, but there's not much icing here in the Wash. DC area, and with some extra cross bracing, it might work,. Currently my boom is only 25 feet, but with the GEM quad spider configuration, I could cut that in half for the side booms, add a 30' cross boom, and voila! With a crank up/down tower, should stay up if brought down when not in use. If what I read is true, this might be a Poor Man's solution to those Super Rich Guy Stacked Christmas tree Mono-Band Yagi's with 50' booms at 100', with tubular towers that turn I see on DX web sights.

Any Thoughts?

'73 KI4Z

800. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 17:20:00 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <4f_%7.2835$bC1.568075501@newssvr17.news.prodigy.com>
Source record: 150987

CAM,Thanks for your input. I can see how you can get low SWR's with your setup. Looks like it takes up a lot of room inside though. I would have to settle for a ladder line or open line that might be an odd multiple of 1/4 wave on some frequency, maybe 20 meters. How will that fly on 40, 17, 15, 12, and 10?
"CAM" <Cecil.A.Moore@IEEE.org> wrote in message news:3C405A8C.FDCA07EF@IEEE.org...
> K4IA wrote:
> > Jerry - You got it! Only I would suggest you not choose a 40 meter dipole to
> > start with. On the even harmonics, it will be harder to match. It is better
> > to not be resonant on any frequency than to fight the even harmonics.
>
> This is somewhat of an old wive's tale. What you say is true if you are using
> coax for the feedline but absolutely not true if you are using ladder-line
> or open wire line. Here's why:
>
> The feedpoint of a 40m dipole used on 20m is around 6000 ohms according to
> EZNEC. Assume we feed the dipole with 450 ohm ladder-line. The SWR on the
> ladder-line will be 6000/450 = 13.33:1. The ladder-line will transform
> the impedance because of the SWR. If the ladder-line length is made an
> odd multiple of 1/4WL, then the impedance seen by the transmitter will
> be 450/13.33 = 33.76 ohms which gives a 50 ohm SWR of 1.5:1 which is
> ACCEPTABLE EVEN WITHOUT AN ANTENNA TUNER.
>
> Using random lengths of ladder-line, the impedance seen by the transmitter
> can vary between 34 ohms and 6000 ohms with reactance. If one knows what
> one is doing, one doesn't have to worry about antenna length as long as
> the antenna is 1/2WL on the lowest operating frequency. Much too short
> antennas can result in sky high SWRs even using ladder-line.
>
> Moral: Don't worry about even harmonics in a dipole if you are feeding
> it with ladder-line or open-wire line.
> --
> cheers, CAM http://www.qsl.net/w5dxp

801. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 17:27:30 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <6m_%7.2837$aR1.569050173@newssvr17.news.prodigy.com>
Source record: 150988

I suspect that using a tuner causes losses in the range of 30 %. And with
the upcoming dip in the solar cycle, I need all the output I can get. Tuner
with my Kenwood works, but I hate the on air tuning. And it does not do a
real good job matching. Am using a 901B. It does a respectable job tuning
off line using my Autek Have a 969 on order. Would be very nice not to
have to use a tuner though.
"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C405A8C.FDCA07EF@IEEE.org...
> K4IA wrote:
> > Jerry - You got it! Only I would suggest you not choose a 40 meter
dipole to
> > start with. On the even harmonics, it will be harder to match. It is
better
> > to not be resonant on any frequency than to fight the even harmonics.
>
> This is somewhat of an old wive's tale. What you say is true if you are
using
> coax for the feedline but absolutely not true if you are using ladder-line
> or open wire line. Here's why:
>
> The feedpoint of a 40m dipole used on 20m is around 6000 ohms according to
> EZNEC. Assume we feed the dipole with 450 ohm ladder-line. The SWR on the
> ladder-line will be 6000/450 = 13.33:1. The ladder-line will transform
> the impedance because of the SWR. If the ladder-line length is made an
> odd multiple of 1/4WL, then the impedance seen by the transmitter will
> be 450/13.33 = 33.76 ohms which gives a 50 ohm SWR of 1.5:1 which is
> ACCEPTABLE EVEN WITHOUT AN ANTENNA TUNER.
>
> Using random lengths of ladder-line, the impedance seen by the transmitter
> can vary between 34 ohms and 6000 ohms with reactance. If one knows what
> one is doing, one doesn't have to worry about antenna length as long as
> the antenna is 1/2WL on the lowest operating frequency. Much too short
> antennas can result in sky high SWRs even using ladder-line.
>
> Moral: Don't worry about even harmonics in a dipole if you are feeding
> it with ladder-line or open-wire line.
> --
> cheers, CAM http://www.qsl.net/w5dxp

802. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 17:41:23 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C40748D.142BF9EA@bellatlantic.net>
Source record: 150989

If I were going to install a pipe deep into the ground, I'd do what they do for Telephone Poles for supporting boat docks here in the Annapolis Maryland area. I'd rig up the water hose to the end of a 10' long piece of 1.5" or larger water pipe or better yet Black Gas pipe, and "Jet" it into the ground. If it gets stuck, you'll have to pipe wrench it around, or give it some Sledge hammer action, but will eventually go in without all the "Fan Fare" of driving it in. Use a Step Ladder with some cinder blocks to weight it down to steady the pipe. Cut some teeth in the end so the "wrench around" maneuver is more effective. Put the water on real slow so you end up with a "Snug" hole. This will take all day, but plenty of opportunity to catch the "game" or 6-Pack it. If you're going to use the pipe as a ground rod too, drill 3/16th inch holes in it as it goes in, sealed with a bunch of wraps of Electrical Tape to keep the water pressure going down.. When it's in, let it set a day or two, untill all the water drains out, then pack it tight with Rock Salt, then blow out the electrical tape with a minute or so of full water pressure. Reseat the pipe, disconnect the hose, and for the next few weeks, keep the pipe full of rock salt and topped off with water. Your ground conductivity will increase substantially over the next few weeks. Keep the pipe packed with rock salt and topped off. When you have a ring of dead grass 6' or so around the pipe, you might want to consider annual treatments instead of monthly!

Of course I don't Condone Ground Counterpoised Verticals, but if you're into it this is "The Way".

Looped and getting Loopier
'73 KI4Z

rasw wrote:

> Folks:
>
> I'm interested in installing a free standing ground-mounted vertical
> antenna. What's the best way of securing this to the ground? I don't think
> I can sledgehammer some mast deep enough to be secure.
>
> Are there better techniques? Any suggestions?
>
> Thanks!
>
> Robert " A F 2 M"
>
> email: callsign @ "robert.to"

803. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 17:43:46 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C4075D2.D7D182CC@IEEE.org>
Source record: 150990

Jerry wrote:
> CAM,Thanks for your input. I can see how you can get low SWR's with your
> setup. Looks like it takes up a lot of room inside though. I would have to
> settle for a ladder line or open line that might be an odd multiple of 1/4
> wave on some frequency, maybe 20 meters. How will that fly on 40, 17, 15,
> 12, and 10?

My setup takes up no room inside. I have knife switches mounted on a
piece of plexiglas installed in the window of my hamshack. With those
knife switches, I switch in/out loops of ladder-line that are mounted
on the outside of the window. You can ascertain everything I am doing
by downloading and using the free demo version of EZNEC from eznec.com.

It is pretty well known that if the antenna is 1/2WL, the ladder-line
should be close to 1/2WL increments and if the antenna is one wavelength,
the ladder-line should be close to odd multiples of 1/4WL. What is not
so universally understood is that those matching techniques work for
virtually any length of dipole. For an antenna with a feedpoint
impedance of 450+j450 ohms, a 3/8WL matching section works well. And
for 450-j450 ohms, a 1/8WL matching section works well. This is
intuitively obvious to anyone who understands the Smith Chart.
--
cheers, CAM http://www.qsl.net/w5dxp

804. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 17:58:34 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C4078FA.134458FC@bellatlantic.net>
Source record: 150991

One Last thought: The hardware store has these rubber/hose clamp connections that will seal a bunged up water pipe end. You can rig this up to a water hose fitting, and when the need to Sledge it happens, disconnect the hose clamp, pull off your fitting rig, and wail on it big time. If the pipe end mushrooms too much, cut off the end and keep at it. When you think the pipe is deep enough, just cut if off, and call it done.

'73 KI4Z

Mark Hall wrote:

> If I were going to install a pipe deep into the ground, I'd do what they do for
> Telephone Poles for supporting boat docks here in the Annapolis Maryland area.
> I'd rig up the water hose to the end of a 10' long piece of 1.5" or larger
> water pipe or better yet Black Gas pipe, and "Jet" it into the ground. If it
> gets stuck, you'll have to pipe wrench it around, or give it some Sledge hammer
> action, but will eventually go in without all the "Fan Fare" of driving it in.
> Use a Step Ladder with some cinder blocks to weight it down to steady the
> pipe. Cut some teeth in the end so the "wrench around" maneuver is more
> effective. Put the water on real slow so you end up with a "Snug" hole. This
> will take all day, but plenty of opportunity to catch the "game" or 6-Pack it.
> If you're going to use the pipe as a ground rod too, drill 3/16th inch holes in
> it as it goes in, sealed with a bunch of wraps of Electrical Tape to keep the
> water pressure going down.. When it's in, let it set a day or two, untill all
> the water drains out, then pack it tight with Rock Salt, then blow out the
> electrical tape with a minute or so of full water pressure. Reseat the pipe,
> disconnect the hose, and for the next few weeks, keep the pipe full of rock
> salt and topped off with water. Your ground conductivity will increase
> substantially over the next few weeks. Keep the pipe packed with rock salt and
> topped off. When you have a ring of dead grass 6' or so around the pipe, you
> might want to consider annual treatments instead of monthly!
>
> Of course I don't Condone Ground Counterpoised Verticals, but if you're into it
> this is "The Way".
>
> Looped and getting Loopier
> '73 KI4Z
>
> rasw wrote:
>
> > Folks:
> >
> > I'm interested in installing a free standing ground-mounted vertical
> > antenna. What's the best way of securing this to the ground? I don't think
> > I can sledgehammer some mast deep enough to be secure.

> >
> > Are there better techniques? Any suggestions?
> >
> > Thanks!
> >
> > Robert " A F 2 M"
> >
> > email: callsign @ "robert.to"

805. ANTENNA IDEA!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 18:12:35 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <n0%%7.254680$WW.13364529@bgtnsc05-news.ops.worldnet.att.net>
Source record: 150992

Would it be practical to have a sloped 65' piece of wire, attached to a vertical 80 mtr loading coil mounted on a piece of pvc pipe on a chimney? This coil would also have a top hat. The bottom end of the wire would go to a tuner & appropriate radials.

806. Re: ANTENNA IDEA!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 18:30:31 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C40807B.DE7B3603@bellatlantic.net>
Source record: 150993

You'll need to draw us a picture, but if you can run a 65' piece of wire in open air, why polute/crap up things with a Loading Coil (AKA Attenuator) and Radials (AKA Attenuator)? I'd check your other options of getting on 80, especially since you have a tuner.

'73 KI4Z

marvin rosen wrote:

> Would it be practical to have a sloped 65' piece of wire, attached to a
> vertical 80 mtr loading coil mounted on a piece of pvc pipe on a chimney?
> This coil would also have a top hat. The bottom end of the wire would go to
> a tuner & appropriate radials.

807. Re: ANTENNA IDEA!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 18:43:26 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C4083CE.E393DA2A@coqui.net>
Source record: 150994

marvin rosen wrote:
>
> Would it be practical to have a sloped 65' piece of wire, attached to a
> vertical 80 mtr loading coil mounted on a piece of pvc pipe on a chimney?
> This coil would also have a top hat. The bottom end of the wire would go to
> a tuner & appropriate radials.

The sloped 65' piece of wire will make a nice 80 meter antenna all by
itself and with a little bit of pruning would give a good 50 ohm match
without a tuner. Consider it as a 'leaning' quarter-wave vertical.
-Bill

808. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 19:07:42 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C408934.75F84A2B@bellatlantic.net>
Source record: 150995

That TV twin lead crap is marginal in any configuration, I'd go for the heavier duty, wider spaced, 450 ohm vinyl "ladder line" at a minimum. It will last maybe 2 or 3 years and then need replacement. If you could manage a longer dipole section you'd probably be happier. If an 80 meter dipole section is possible, we're talking a serviceable and well behaved antenna then. Noise shouldn't be a problem. But, if you can manage a full wavelength LOOP on 80, fed with that 'Ladder Line" and tuner, 40 meters and above will be more what you want.

Looped and getting Loopier

'73 KI4Z

MILO17 wrote:

> Hello group,
> I am currently using a 40 meter dipole fed with 50 ohm coax for
> 40/15 meters.My question is : would it be possible to feed this antenna with TV
> 300 ohm line, through a tuner to obtain multi-band operation ? If so, would the
> feedline radiate at all ? Would efficiency be better or worse ? My concern is
> Noise both to and from my transceiver. I picked up S9 noise level from my
> television on 15 meters with an indoor dipole. I will be using a FT-817, 5
> watts out to an outdoor dipole.
> Any help is greatly appreciated !
>
> Thanks to the group ,
> Mike N2JVT

809. Re: WTB: 3 piece guy wire/mast clamps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 19:16:56 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C408B5F.BF4687B2@bellatlantic.net>
Source record: 150996

Would small muffler clamp like brackets work?

'73 KI4Z

K9SQG wrote:

> Need some guy wire clamps typically used with TV antenna installations. They
> are the three piece style that attach around the mast. Seems they are out of
> production and aren't sold at Radio Shack, Lowe's, Home Depot, Wal-Mart,
> K-Mart, etc. Any leads would be appreciated.
>
> 73s,
>
> Evan

810. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 19:37:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C409093.A01D471@eznec.com>
Source record: 150997

I repeat, what frequency? The conductivity at which loss is maximum is a function of frequency.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Roy asked -
>
> > What frequency?
> >
> ================
> Roy, you are being humorous but mostly evasive. In the time taken to think
> about it and ask your question you could have done the job and provided an
> estimate of soil conductivity everybody is eagerly waiting for.
>
> Just enter ground permittivity = unity and set a frequency at which the
> vertical is approximately the required 1/4-wavelength.
>
> Then vary ground conductivity in a few very crude steps between sea water
> and Sahara sand. Simple!
>
> If you can't find a conductivity which minimises radiating efficiency then
> the program's modelling performance is deficient.
> ---
> Regards, Reg, G4FGQ

811. Re: Heavy-duty UHF base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 19:41:24 UTC
From: "Bob M." <xxxxx@yyyy.zzz>
Message-ID: <Ej008.50266$K36.17177397@news1.rdc1.va.home.com>
Source record: 150998

The Diamond claims over 11db gain. The Celwave models are 8 and 10db. The one that costs more has less gain, so they must be doing something else for $1240.

I'm worried about falling ice and high winds. I'd have no problem with a Diamond at my house, where the environment is much better. Also, getting up 300 feet to replace a busted antenna is not something I will be able to do nor afford too often, hence the harsh environment requirement.

At this point, I've committed to going just UHF on the tower, so this may change the requirements a bit. I don't think any commercial antenna will do multiple ham bands.

Bob M.
======
"Dan Richardson" <k6mhe@arrl.net> wrote in message
news:shbv3u0a099n4ls1h139q3tkqnfp1c2as8@4ax.com...
> On Sat, 12 Jan 2002 01:19:42 GMT, "Bob M." <xxxxx@yyyy.zzz> wrote:
>
> >Compared to a Diamond for $200, which also has more gain than
> >the Celwave models
>
> Are you sure of that or is that comparing advertising specs?
>
> Danny
>

812. Re: Butternut HF5V-III wont tune on 20 Meters pse help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 19:49:31 UTC
From: edvanc@mediaone.net
Message-ID: <fr008.21709$yC.2459893@typhoon.mn.mediaone.net>
Source record: 150999

Hi Eric,

Twenty meter tuning is determined by the placement of the 30M coil tap on the 40M coil. As per the instruction manual, it may be necessary to move the strap up a turn or down a turn, depending upon where resonance falls in your installation. An MFJ 259B will help determine this. In some instances, it may be necessary to rotate the 30M coil around a partial turn on the 40M coil tap to find the right spot. That should solve the problem.

Good luck and 73,

Ed, W0VC

In article <IeR_7.482$gt2.156612@dfiatx1-snr1.gtei.net>, ebourlet@gte.net says...
>
>I have recently resurrected an old Butternut HF5v-III. My problem is that it
>will not work on 20 Meters. The manual says that it should have a low SWR on
>the entire 20 meter band and no tuning is required. I have the 1/4 wave 75
>ohm section and measured the velocity factor so I know its the proper
>length. Do you have any Idea what other problems there may be ? I am feeding
>it with a 30' section of rag-58. Thanks for any ideas you can provide.
>WB7OYL
>
>

813. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 20:14:35 UTC
From: Tom Brown <tab@signalgrp.com>
Message-ID: <3C40992B.A389936A@signalgrp.com>
Source record: 150923

I'd be a lot happier if the *intrusive* media player was omitted.
Why is a media player needed dfor an info site? Just cutesy?

Tom N4TAB

~~~~~~~~~~~~~~~~~~

Charles Johnston wrote:
>
> The W9INN Antennas Page is available at the web site listed below.
>
> A quote from Bill-W9INN explaining the term 'resonactor' has now been
> added.
>
> --
~~~~~~~~~~~~~~~~~~

814. Re: Stacked Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 20:38:35 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C409ECD.DE2BC74@icok.net>
Source record: 151000

Mark,
You asked if you were dreaming. Yes, but theres not much wrong with that, just remember not to trip while your walking around! Personally, I think that taking down a 4-el quad to put up two 'stacked' 2-el quads, would be a good 'government' project, or not very practical when you take a look at the mechanical aspects. Not exactly like putting a '48 Packard on top of your tower, maybe more like a '98 Toyota.
I hope someone tries it 'cause I'd really like to see the results. But if I already had the 4-el, I think I'd leave it alone...
'Doc

815. Re: ANTENNA IDEA!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 20:45:39 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <Tf108.81406$fe1.1140441@bgtnsc06-news.ops.worldnet.att.net>
Source record: 151001

i thought that by adding the loading coil i could also get on 160 mtrs.
"Your Friend Bill" <"Remove The NO In The Reply To Address"@coqui.net> wrote
in message news:3C4083CE.E393DA2A@coqui.net...
> marvin rosen wrote:
> >
> > Would it be practical to have a sloped 65' piece of wire, attached to a
> > vertical 80 mtr loading coil mounted on a piece of pvc pipe on a
chimney?
> > This coil would also have a top hat. The bottom end of the wire would go
to
> > a tuner & appropriate radials.
>
> The sloped 65' piece of wire will make a nice 80 meter antenna all by
> itself and with a little bit of pruning would give a good 50 ohm match
> without a tuner. Consider it as a 'leaning' quarter-wave vertical.
> -Bill
>

816. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 20:46:31 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C40A0AA.4AE06AD4@icok.net>
Source record: 151002

Robert,
Know anyone who drills water wells in your area?
'Doc

817. Re: ANTENNA IDEA!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 20:50:16 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C40A188.BF52E7EC@coqui.net>
Source record: 151003

marvin rosen wrote:
>
> i thought that by adding the loading coil i could also get on 160 mtrs.

But then it probably wouldn't work right on 80 :-)

-Bill

818. Re: ANTENNA IDEA!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 20:54:24 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C40A280.ABF73CFC@coqui.net>
Source record: 151004

Your Friend Bill wrote:
>
> marvin rosen wrote:
> >
> > i thought that by adding the loading coil i could also get on 160 mtrs.
>
> But then it probably wouldn't work right on 80 :-)
>
> -Bill

let me add something to this....if you were to configure the gadgetry at
the top end in the form of a trap (coil + capacitor) and then extend off
with another 50-60 feet of wire you might have the makings of a decent
80/160 antenna.

-Bill

819. Re: to 'Doc

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 20:55:56 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C40A2DE.9E6C7410@icok.net>
Source record: 151006

Stefan0,
Sure, it will 'work'. But the question is how 'well' will it
work. You can make any very short antenna 'work' with a 'large'
enough matching network. The performance of a very short antenna
isn't always worth the time and effort, though...
'Doc

820. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 20:56:02 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201121256.7ca292af@posting.google.com>
Source record: 151005

k4ia@aol.comnojunk (K4IA) wrote in message
news:<20020112102751.08616.00001948@mb-ch.aol.com>...
> I'll give you the same reply I posted on the thread about conjugate matching.
>
> Why limit yourself to only three bands? Use a tuner and ladder line and work
> all the bands with one antenna. The
> antenna "should" be at least 3/8 wavelength on the lowest frequency you plan to
> operate. I used 102 feet because I had an old G5RV laying around. It tunes
> 160-10 meters and gets out well even though it is "short on 160.
>
> Now the problem, if you would call it that, is that the antenna exhibits many
> lobes on the higher frequencies. Instead of the broadside figure 8 pattern you
> see with a dipole, the multi band antenna pattern will look more like a four
> leaf clover and then a daisy as you go up. This could be good if you are lucky
> enough to have a lobe in the drection you want to work but it is hit or miss
> and the nulls are steep.
>
> You can fix this problem and even out the pattern by using a top fed inverted L
> configuration. I have mine with the center at 60 feet. One side is
> horizontal and the other drops straight down. The antenna is one half
> horizontal and one half vertical. Hence the inverted L. About 135 feet of
> ladder line back to the tuner.
>
> I think this antenna is superior to a dipole
> because the coverage is more omni directional. It certainly plays better than
> my old horizontal G5RV. Your nest of dipoles is going to favor two directions
> and if the antennas are at right angles to each other, your to be pointing in
> different directions on each band.

It would depend on the bands being used. It might fill in the gaps of
a long dipole on the high bands, but I think the nulls and the
expected bad effects are kind of overstated. By the time you have your
antenna up in the real world with all the reflections and diffraction
in the ionosphere, I think it kind of evens it out a bit compared to a
model. Also unless his dipoles are super high up, the effects of the
nulls on the ends isn't really that drastic either. I worked loads of
stations almost exactly off the ends of dipoles , that still had good
signals. Mainly for the same reasons as the previous. I bet the
overall performance and efficiency of the right angle 1/2 wave dipoles
will be higher than the top fed L in "most" cases. The G5RV wasn't
really a good gauge as a reference. On the lower bands such as 80 and
40 meter close in stuff, I'd rather have the dipoles any day. But like
you say, if fed with coax, you are limited. On the low bands like
160/80 dx, the L would probably be better. I recently had a 20m dipole

up at about 40 ft for SSTV. I noticed no real directivity at all. I had it broadside to the NW/SE, and I still had good results in the opposite directions. Anyway, I like L's for vertical type uses such as low band dx, but for a horizontal wire as a general use antenna, I'd rather have the dipoles. Even if real high up on the high bands. But this can't really be confused with using a long 80m dipole and a tuner on 10m, compared to a normal coax fed 1/2 dipole on 10m. In most cases, the 1/2 wl dipole will work much better. The real problem I've noticed on using a 80m dipole on 10m is the TOA seems to be very high. It models that way also. I think this kills you worse than all the nulls. I tried one camping one time, and it was pathetic on 10m. The antenna acted like a monster cloud warmer, which is not what you want on 10m. I also remember using EDZ's on 20m. You would think it would seem pretty directive, but it didn't really in the real world. It actually seemed to be better in almost all directions. But that may be partly the dreaded appellation effects at work. :/ MK

821. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 21:07:42 UTC
From: Tom Brown <tab@signalgrp.com>
Message-ID: <3C40A59E.FFCA3B5F@signalgrp.com>
Source record: 150927

An hour ago and 3 minutes ago. It wants to enable mplayer.exe.

No no.

Netscape 4.76.

Tom N4TAB

~~~~~~~~~~~~~~~

Charles Johnston wrote:
>
> Hello Tom,
> I don't know when you last visited the site but the music is now
> selectable and is turned off by default for every new visitor that
> arrives. I thought it a bit intrusive too......now that is history.
> Thanks for your comments....
>
> --
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
~~~~~~~~~~~~~~~

822. 160 meter antenna recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 21:30:38 UTC
From: AB2HR <ab2hr@arrl.net>
Message-ID: <lda14ugfoip0fa453kc0mn3fof96tj2q01@4ax.com>
Source record: 151007

Hey folks, live in a suburban area, and am interested in
working 160 meters. I don't have any covenants or restrictions to
work around, but the size of my lot is typically suburban. I have
access to my lot and the lot next door to me. I'm interesting in
hearing what might work as far as a 160 meter antenna. I've been
playing with the idea of mounting a 45 foot vertical (with capacitance
hat to complete the 1/4 wave vertical) on my garage roof (about 8-10
feet high). From there, I'm looking at four relatively heavy ground
wires forming a ground plane from the roof and attaching to a ground
"web" (would run as many and as long smaller gage copper wires as
needed) to the ground.
Obviously, a 45 foot vertical mast would need guying, and
that's just one of the downsides. I live in an older 2-story house,
the length of which is possibly 70-80 feet long... Would it be out of
line to think that a bent dipole along the roof of the house might
work? We're talking older (100+ years) woodframe construction here,
the only detuning factors I can think of are the rain gutters and the
45 foot mast holding up my Windom at one end of the house.
Ideas folks? Would really like to play on 160, but right now,
don't have the antenna for it. Would like some ideas on something to
homebrew...

Thanks in advance!

Raymond Sirois AB2HR
SysOp: The Lost Chord BBS
607-733-5745
telnet:\\thelostchord.dns2go.com:6000

823. LDG RT-11 Antenna coupler

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 21:31:34 UTC
From: Anthony Duffy <a.duffy@sympatico.ca>
Message-ID: <3C40AB36.7070706@sympatico.ca>
Source record: 151008

Is anyone using the LDG RT-11 remote auto antenna coupler? And if so, what do you think of it and the antenna setup your using with it. Anyone tried a loop yet?

73, Tony
VA3ATD
London, Ontario

824. antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 21:37:48 UTC
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
Message-ID: <mfr1ygvp7wz.fsf@panix1.panix.com>
Source record: 151009

Hi,
I'm trying to locate some 500 ohm non-inductive termination resistors. The recipient wants 2 watt or 1 watt units, and I'm having no luck locally. He says "film" resistors are a problem, and one question is if carbon-film resistors are a problem, or is he conflating them with metal film resistors?

Ohmite OY series seem as if they might do, being ceramic composition resistors, but they're not listed as being non-inductive.

I need these by the first days of February, and would like to have as many as 5. Any suggestions about what will work, and where I can find them?

73, doug

825. Re: 160 meter antenna recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 21:44:46 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C40AE4E.AC59E1D2@IEEE.org>
Source record: 151011

AB2HR wrote:
> Hey folks, live in a suburban area, and am interested in
> working 160 meters. I don't have any covenants or restrictions to
> work around, but the size of my lot is typically suburban. I have
> access to my lot and the lot next door to me.

Given your circumstances, it's hard to beat an inverted-L.
--
cheers, CAM http://www.qsl.net/w5dxp

826. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 21:45:43 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C40AE87.18994714@coqui.net>
Source record: 151010

Doug Faunt N6TQS +1-510-655-8604 wrote:
>
> Hi,
> I'm trying to locate some 500 ohm non-inductive termination
> resistors. The recipient wants 2 watt or 1 watt units, and I'm having
> no luck locally. He says "film" resistors are a problem, and one
> question is if carbon-film resistors are a problem, or is he conflating
> them with metal film resistors?
>
> Ohmite OY series seem as if they might do, being ceramic composition
> resistors, but they're not listed as being non-inductive.
>
> I need these by the first days of February, and would like to have as
> many as 5. Any suggestions about what will work, and where I can find
> them?
>
> 73, doug

The carbon film resistors that I have dug into are typically only 3-5
'turns' of carbon. If it were a VHF circuit that might be a concern but
I don't think that inductance would be a bother at HF.

-Bill

827. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 21:46:26 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C40AEB2.EFD6E2A1@IEEE.org>
Source record: 151012

Doug Faunt N6TQS +1-510-655-8604 wrote:
>
> Hi,
> I'm trying to locate some 500 ohm non-inductive termination
> resistors. The recipient wants 2 watt or 1 watt units, and I'm having
> no luck locally. He says "film" resistors are a problem, and one
> question is if carbon-film resistors are a problem, or is he conflating
> them with metal film resistors?
>
> Ohmite OY series seem as if they might do, being ceramic composition
> resistors, but they're not listed as being non-inductive.
>
> I need these by the first days of February, and would like to have as
> many as 5. Any suggestions about what will work, and where I can find
> them?

I've got 600 ohm 50 watt non-inductive resistors but they may be
overkill. Send me an email if interested.
--
cheers, CAM http://www.qsl.net/w5dxp

828. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 22:04:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1qdu9$slcpn$1@ID-124126.news.dfncis.de>
Source record: 151015

Conductivity at which loss is a maximum may very well be a function of frequency. But who cares? Nobody is interested in that. Conductivity is the independent variable in this investigation and the frequency is fixed.

Frequency is that at which the vertical is 1/4-wavelength in height. The single shallow-buried radial is also 1/4-wavelength in length. What could be more simple ?

Suggested values -
Vertical height = 20 metres.
Radial length = 20 metres.
Frequency = 3.75 MHz.
Soil Permittivity = 1.0
Vary conductivity from sea water to Sahara desert to find value at which efficiency is lowest.

Regards, Reg G4FGQ
==========

Roy Lewallen <w7el@eznec.com> wrote in message
news:3C409093.A01D471@eznec.com...
> I repeat, what frequency? The conductivity at which loss is maximum is a
> function of frequency.
>
> Roy Lewallen, W7EL
>
> Reg Edwards wrote:
> >
> > Roy asked -
> >
> > > What frequency?
> > >
> > ==========
> > Roy, you are being humorous but mostly evasive. In the time taken to
think
> > about it and ask your question you could have done the job and provided
an
> > estimate of soil conductivity everybody is eagerly waiting for.
> >
> > Just enter ground permittivity = unity and set a frequency at which the
> > vertical is approximately the required 1/4-wavelength.
> >
> > Then vary ground conductivity in a few very crude steps between sea
water
> > and Sahara sand. Simple!

> >
> > If you can't find a conductivity which minimises radiating efficiency
then
> > the program's modelling performance is deficient.
> > ---
> > Regards, Reg, G4FGQ

829. ARNewsline 1274 - Jan 11 2002

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 22:09:43 UTC
From: radionews@aol.com
Message-ID: <20020112170943.11298.00002051@mb-cg.aol.com>
Source record: 151013

AMATEUR RADIO NEWSLINE(tm) REPORT #1274 - January 11 2002

Amateur Radio Newsline report number 1274 with a release date of
Friday, January 11th 2002 to follow in 5-4-3-2-1.

The following is a Q-S-T. No more taxicab Q-R-M plaguing a popular ham satellite and lots of FCC enforcement actions highlight this weeks Amateur Radio Newsline report number 1274 coming your way right now.

(Billboard Cart Here)

**

HAM RADIO IN SPACE: TAXI TO SATELLITE QRM ENDED

Some good news for satellite operators. Thanks to some hard work by the International Amateur Radio Union, the troublesome F-M signals to ham satellites from Mexican taxi cabs are for the most part gone. Amateur Radio Newsline's Norm Seeley, KI7UP, has the details:

--

According to the IARU Monitoring System newsletter it now appears that FM radio transmissions from the taxi drivers in the cities of San Luis and Sonora, Mexico area are no longer getting into the 2-meter uplink of the UOSAT 14 ham satellite.

The issue was raised by many involved in ham radio satellite communications including Ray Soifer, W2RS, of AMSAT North America. The newsletter says that it was Soifers plea to the VHF and Satellite Committee at the 2001 IARU Region 2 Conference in Guatemala City generated extra interest and concern about this and similar problems. This lead to some very productive discussions between the Mexican telecommunications administration and the Federación Mexicana de Radio Experimentadores which is Mexicos national Amateur Radio society.

Credit also is given to Alejandro Pereida, XE2BSS, for his thorough technical analysis of the problem and for his persistence in pursuing the matter from beginning to end. The end being the removal of the interfereing signals from the UOSAT 14 two meter uplink passband.

For the Amateur Radio Newsline, I'm Norm Seeley, KI7UP, not far from the U.S. - Mexico border in Scottsdale Arizona.

--

The newsletter reports that after a lot of correspondence and negotiations on this issue took place over the past eighteen months. It also credits Lorne Libin, XE1V, as being an important mediator during this period. (AMSAT)

**

HAM RADIO AND THE LAW: NEW HAMPSHIRE HAM WINS ANTENNA CASE

Meantime, a lot closer to the ground, the ARRL Letter reports that a New Hampshire ham appears to have won a battle to erect an antenna support structure on his property. But says the League, it remains to be seen, however, whether Jerry Muller, K0TV, of Hudson will be allowed to erect the extensive system of three towers that he'd originally planned.

Unlike many amateur antenna battles, this case did not pit Muller against the town. In December 1998, Muller applied for a permit to erect three 100-foot antenna structures on his property, and the town of Hudson granted the permit. Three of Muller's neighbors appealed the grant of the permit, but the Hudson Zoning Board affirmed the grant. The neighbors then sued the town and won, resulting in the order for Muller to dismantle the towers.

Now, in a 4-0 vote, with one justice abstaining, the Supreme Court of New Hampshire has reversed a lower court ruling but it is not a 100% victory. Writing for the court, New Hampshire Chief Justice David A. Brock concluded that the lower court's order requiring Muller to dismantle his towers violated the limited federal preemption known as PRB-1 as well as New Hampshire's statutory codification of PRB-1. However Brock also agreed with the lower court that Muller's three-tower installation did not qualify as a "customary, incidental and subordinate" accessory use permitted by Hudson's ordinance.

While another amateur in Hudson has a tower at the same height, there are no instances of three such towers on the same property. Nevertheless, Brock said that Muller's installation may be permitted within the framework of PRB-1, if Muller can demonstrate that his three towers are necessary to "reasonably accommodate" his communications needs. (ARRL)

**

THE WAR: 73’S GREEN SAYS US COMMUNICATIONS ILL PREPARED FOR TERROR ATTACKS

73 Magazine El Supremo Wayne Green, W2NSD -- thats his title not ours. El Supremo Green says that the United States is ill prepared to handle communications in the event of another terror attack. Writing in his Never Say Die editorial column, Green says that no matter how the terrorist network hits us, the one thing we are going to need is communications. And this says Green, this is another item that the government has been lax in providing.

Green notes that anytime there is an emergency, the first things to disappear are electric power and telephone service. This includes cellular as well as wired phones. He notes that police, fire, rescue and other services have no way to inter-communicate until ham radio operators arrive on the scene. He says that if ham radio is going to be called on to provide services anywhere and at any time, then we need at least 600,000 licensed hams trained and ready to help, and not just the 100,000 or so that are now really active.

Green’s comments begin on page four of the January issue of 73 Magazine. (73 Magazine)

**

THE WAR: PIRATE HAM OPERATION FROM AFGHANISTAN

You may find this hard to believe, but even with a war going on some joker is pirating the YA5T call-sign and pretending to be on the air from war-torn Afghanistan.

According to Peter Casier, ON6TT, and the Radio Society of Great Britain all the operators who had previously put YA5T on the air have left Afghanistan. Casier tells the RSGB that he expects to travel back to Islamabad on the 20th of January and then to Kabul within the following few days. Until then, any station you work claiming to be on the air from Afghanistan is most probably somewhere else in the world.

We will have more D-X news later on in this weeks newscast. (RSGB)

**

BREAK 1

This is ham radio news coming to you from the United States of America. We are the Amateur Radio Newsline, heard on bulletin stations around the world, including the Condor Connection repeater intertie thanks to KC6SFP and heard throughout the South-Western United States.

(5 Sec Pause Here)

**
FCC: THE VANITY CALL SIGN PROGRAM MAY RESUME SHORTLY

Some god news for hams waiting for vanity call signs. According to an ARRL bulletin, the vanity program which was put on hold since October 14th as the result of the post 9-1-1 Anthrax mail scare may could be in operation shortly.

The vanity gridlock got started after mail received between October 15th and November 1st was diverted from the FCC's Gettysburg, Pennsylvania, office for decontamination in the Washington, DC, area. That mail, believed to contain more than 100 vanity applications filed on paper, has not been returned to Gettysburg.

Current FCC policy says that paper and electronic vanity applications get equal processing priority, so the Commission halted vanity processing altogether until it could resolve the mail snafu.

FCC staffers in Gettysburg have been attempting to work around the roadblock. Using vanity fee payment data from the FCC's fiscal agent, Mellon Bank in Pittsburgh, the FCC's Wireless Telecommunications Bureau in Gettysburg has been contacting applicants directly to have them resubmit their applications. The FCC now is asking applicants whose paper vanity filings may have arrived at Mellon Bank between October 15th and November 1st and who have not been contacted to get in touch with the FCC to find out if they need to forward a copy or facsimile of their original paperwork. The request affects only vanity applicants who filed on paper and not electronic filers.

More information on whats happening in the ham radio vanity call sign program can be found at the ARRL Website. Its in cyberspace at www.arrl.org under W1AW

Bulletins for the year 2002.

And late word in. The FCC has begun processing some vanity call signs as this newscast is prepared. (ARRL)

**

ENFORCEMENT: EX-KV4FZ'S NEW LICENSE APPLICATION DESIGNATED FOR HEARING

I'm Bill Pasternak, WA6ITF. The FCC has designated a new ham radio license application filed by Herbert L. Schoenbohm, the ex-KV4FZ, for a public hearing. According to the order released on January 9th, the hearing will determine whether Schoenbohm possesses the requisite character qualifications to be a Commission licensee. Schoenbohm lost a series of appeals during the 1990's and was ordered off the air last year. He was given twenty days to request that the hearing on his new application be held. If he fails to do so, his application will be dismissed. More on this story, next week. (FCC)

**

ENFORCEMENT: YOU CANT SEND FELONY COMPLAINT AFFIDAVITS TO OTHER HAMS

The FCC wants to hear immediately from any ham who receives notification that a felony complaint has been lodged against him or her by Glen Baxter, K1MAN. This after the government tells the Belgrade Lake Maine operator to stop sending other radio operators so-called Standard Felony Complaint Affidavits. Speaking on his Rain Enforcement Log, FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth says that this is not the first time Baxter has been warned:

--
Hollingsworth: "We reiterated a warning issued by the United States Attorney in Maine to a Belgrade Lakes operator who had sent so-called Felony Complaint Affidavits to licensees who had refused to clear the frequency for his broadcasts, or bulletin shows or whatever they are. Complaints about the nature of the transmissions are also under review as well, and we will be looking at those. That went to Glenn Baxter, K1MAN.

The United States Attorney in that case has warned Baxter that if he continues sending the so-called Felony Complaint Affidavits he may be subject to federal criminal charges for misrepresentation and for using the U.S. Mail to make threats."
--

If you receive one of these Standard Felony Complaint Affidavits, or notification that one has been filed against you please contact Riley Hollingsworth as soon as you can. He can be reached by e-mail to fccham@fcc.gov. (FCC)

**

ENFORCEMENT: FCC - ALLEGEDLY UNCOORDINATED IN CALIFORNIA

Still with enforcement news, the FCC has notified Dean K. Perrins, N6HWI, of Freemont California that his alleged uncoordinated repeater on 443.725 MHz is causing interference to the coordinated K6TWI system. This is a repeater which operates on the same frequency.

The FCC says that it has information that Perrins has been notified several times
regarding the interference problem but that he has not taken any steps to resolve the problem. Perrins was given twenty days from the date of notification to respond to the FCC. (FCC)

**

ENFORCEMENT: FCC - ALLEGEDLY UNCOORDINATED IN FLORIDA

In still another repeater interference case Joseph Bushel Jr., W2DWR, of Live Oak Florida has been directed by the FCC to respond to a complaint that he is operating a repeater on 146.94 MHz after being denied coordination by the Florida Repeater Council. The FCC says that Bushel's repeater is causing interference to the coordinated K4EHM system and the government wants him to explain his actions. The FCC also wants W2DWR to respond to an allegation that he was observed transmitting a digital voice recording an that frequency without ever identifying the transmission. (FCC)

**

ENFORCEMENT: FCC- DON'T TALK ON THAT REPEATER

Meanwhile, another Florida ham identified as Thomas Banks, KB4AN of Port Saint Lucie Florida has been notified by the FCC that he is to refrain from using an area repeater. Specifically, the FCC has told Banks that he is not to be heard over the Saint Lucie Repeater Association's AF4CN machine as requested by the system's trustee. (FCC)

**

AWARDS: ARRL EDUCATOR AWARDS NOMINATIONS SOON CLOSE

According to the American Radio Relay League, nominations close January 31st for League awards that recognize excellence in teaching. The ARRL Instructor of the Year, Educator of the Year and Professional Instructor of the Year awards will be presented, as well as the ARRL Excellence in Recruiting Award. All winners receive engraved plaques. Complete information and nomination forms are available at www.arrl.org. (ARRL)

**

AWARDS: DARA NOMINATIONS TO CLOSE

The nominating period for the 2002 Dayton Hamvention Awards is quickly coming to an end. The deadline for nominations is also January 31st.

There are three awards presented each year. They are the Radio Amateur of the Year, Special Achievement, and Technical Excellence. All amateurs Novice through Extra are eligible.

Awards are decided by the Awards Committee, based partially upon the information received. Magazine articles, newsletters, newspaper clippings, videos and the like are appreciated but cannot be returned.

Nominations can be sent to Post Office Box 964, Dayton Ohio 45401. They can also be filed electronically by completing the e-form on the web at www.hamvention.org. (DARA)

**

BREAK 2

From the United States of America, we are the Amateur Radio Newsline, with links to the world from our only official website - www.arnewsline.org.

(5 sec pause here)

**

AWARDS: NEWSLINE NAMES FOUR AS SUPER SUPPORTERS

The Amateur Radio Newsline has named four hams who will receive its first Super Supporter Award certificates. Don Wilbanks, KC5MFA, has the names:

--

In alphabetic order, the first certificate goes to Roy Blanchard, N5YHS, right here in New Orleans. It was Blanchard whose assistance made it possible for Amateur Radio Newsline to become a federally tax exempt coropration.

The second is earmarked to Dale Cary, WD0AKO for his decade plus work in putting the Amateur Radio Newsline on the Internet and creating the Amateur Radio Newsline website.

Sandy Donahue, W4RU, receives a Super Supporter certificate for his many years of coordinating the arrival of the Newsline Young Ham of the Year Award in Huntsville Alabama, and the recipients registration at Spacecamp. And for the last several years he has also helped to defray the cost of the mini-banquet held to honor the winners.

Last but by no means least, Todd Hitzeroth, N6ZXJ, was recognized for his years of volunteering with Newsline at its Dayton Hamvention booth and engineering the Ham Radio Town Meetings. What makes his contribution unique is that Hitzeroth lives in California and pays his own way to and from Dayton each year.

With congratulations to all four recipients, I’m Don Wilbanks, KC5MFA.

--

Approval for the creation of the Amateur Radio Newsline Super Supporter certificates and naming of the first four recipients took place at the organizations Board of Directors Meeting held in Glendale California on December 30th 2001. A synopsis of the minutes of that meeting will be posted to our website within the next few weeks. (ARNewsline(tm))

**

INTERNATIONAL-ISRAEL: “FIRST” BRINGS IN NEW HAMS

A new group of radio amateurs has emerged in Israel from a rather unexpected place. According to Hagal International, the new Israeli hams are from an all volunteer Search and Rescue group called First.

First members are on call to provide wilderness rescues in areas such as the Israeli desert and canyons. For communications, First members have long carried two-way hand helds operating in point to point simplex mode. The limitations of simplex in rugged terrain means that there are times when they cannot keep in touch.

Recognizing a need for improved communications, First contacted to Israel Amateur Radio Club to ask if the nationwide repeater system could be made available for search and rescue use. And according to veteran ham radio instructor Moshe Inger, 4Z4PF, when First members learned that they would first have to pass an Israeli ham radio exam, they did not flinch one bit. They studied, passed the test and there are now dozen new hams from Eilat in the South to Golan in the North. (Hagal International)

**

INTERNATIONAL-UK: G3YJO BECOMES SIR MARTIN SWEETING

Meantime, over in the United Kingdom word that Martin Sweeting, G3YJO, on being knighted. Sweeting is the Chief Executive of Surrey Satellite Technology and Director of the Surrey Space Centre. He will join Sir Jimmy Young and Sir Ben Kingsley to collect his Knights Bachelor medal from the Royal Palace. Professor Sir Martin Sweeting, F.R.S., was knighted for his services to the U-K in microsatellite engineering. (RSGB)

**

HAM RADIO IN SPACE: QUIET HOURS FOR AO-40

AMSAT reports that AO-40 satellite ground controllers have begun adjusting the spacecraft's attitude as it enters a period of adverse sun angles. The satellite is currently in a long period during which Earth eclipses the sun near perigee. These periods will continue well into next June. As a result, AO-40's operating schedule has been modified to reflect the decreasing attitude longitude. (AMSAT)

**

HAPPY BIRTHDAY: JOHANNES KEPLER AT AGE 470

VK2KGM notes the 470th recorded birthday of Johannes Kepler last December. Kepler was the first astronomer to determine a mathematical relationship existed that could be used to predict the motion of planets. This became the basis for the Keplerian data we use today for satellite orbits. (AMSAT)

**

DX

In DX, word that F2JD is active from the Philippines as DU1 slash G0SHN on 20, 15 and 10 meters SSB and CW. Listen for him from now until June of this year. QSL as directed on the air. (RSGB)

Three Finnish operators will be active from Tonga through the 15th of January, with an emphasis on 160 to 30 meters. They will work CW, SSB and RTTY with three stations using verticals and dipoles. (Modern DX)

**

THAT FINAL ITEM: FANTASTIC VOYAGE REDUX

And finally this week, the world of medical communications research has finally caught up with the lights of Hollywood. This, as the government approves a tiny radio camera-in-a-capsule that patients can swallow. It is a camera that will transmit pictures to give doctors a close-up view of what is inside of you. Amateur Radio Newsline’s Mert Garlick, N6AWE, has more:

--

The new transmitting video pill is made by Given Imaging Ltd. in Israel. It is called the M2A Swallowable Imaging Capsule. It is also exceeding tiny. In fact it is so small that it is easily swallowed by the patient.

Its inventors say that it then painlessly winds its way through the digestive tract and uses wireless technology to transmit full color pictures to a belt pack receiver worn by the patient. That unit also decodes the signal and records the information as the patient goes about his or her daily routine.

A U.S. spokesman for Given Imaging says that doctors who wish to use the video imaging pill will have to buy a specialized $20,000 computer workstation. Each camera capsule costs about $450.

For the Amateur Radio Newsline, I’m Mert Garlick, N6AWE, in Los Angeles. Roy.

--

The entire system is reminiscent of the science fiction movie "Fantastic Voyage." In that film a submarine and its crew of medical specialists are miniaturized and injected into the bloodstream of a critically injured man to perform an operation to save his life while receiving instructions by two way radio. (Science Today)

**

NEWSCAST CLOSE

With thanks to Alan Labs, Amateur News Weekly, AMSAT, the ARRL, the CGC Communicator, CQ Magazine, the FCC, the Ohio Penn DX Bulletin, Radio Netherlands, Rain, the RSGB and Australia's Q-News, that's all from the Amateur Radio Newsline(tm). Our e-mail address is newsline @arnewsline.org. More information is available at Amateur Radio Newsline's(tm) only official website located at www.arnewsline.org. You can also write to us or support us at Amateur Radio Newsline(tm), P.O. Box 660937, Arcadia, California 91066.

For now, with Bill Pasternak, WA6ITF, at the editors desk, I'm Roy Neal, K6DUE, saying 73, and we thank you for listening. Amateur Radio Newsline(tm) is Copyright 2002. All rights reserved.

830. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 22:30:24 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020112173024.01548.00001572@mb-cu.aol.com>
Source record: 151014

No I disagree. But then I am no expert. I know I had a terrible time tuning a 160 mtr dipole on 80 but I have no problem tuning 102 feet on 80.

Help me understand this because I sure don't and I know you do. Isn't it more accurate to say, "The moral is don't worry about using the antenna on even harmonics IF you can be sure your feed line is a multiple of 1/4 wavelength."

If the feedline is not a multiple of 1/4 (and it won't be on all bands) then you will be facing some rather large mismatches. If the feed is 1/4 wavelength, when you switch bands to the next even harmoic, the feedline will be 1/2 wavelength and your transmitter will see the nasty result: the exact impedance at the antenna.

Further, on the band where you are resonant, wouldn't the tranforming effect of the 1/4 wavelength feedline will take your 72 ohm antenna and turn it into a monster?

Look at Tables 1 and 2 of Chapter 25 (Coupling the Transmitter to the Line) of the 18th edition of the ARRL Antenna Handbook. It compares a 100 foot flat top to a 66 foot (40 mtr) inverted V. The flat top looks a lot tamer at the end of 100 feet of ladder line. The 40 mtr antenna has big impedances and large +/- J swings whereas the 100 footer looks a lot easier to match -- much lower impedances and +/- J.

Am I missing something?
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

831. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 22:41:21 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020112174121.01548.00001573@mb-cu.aol.com>
Source record: 151016

I hear you on that. But if the other guy is 599 then I am only 5 7.5 9 so it still works. Interesting that the loss in 100 feet of ladder line feeding the 100 foot flatop antenna on all other bands is less than 1 db.

Are there other losses I should be concerned about?
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

832. Telrex christmas tree

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 22:50:54 UTC
From: pete stark <pstark@charter.net>
Message-ID: <u41ferji3sa4e5@corp.supernews.com>
Source record: 151017

Does anyone remember the stacking distances for the Telrex christmas tree arrays?
I have 4-L 20 3-L 15 and 3-L 10 and I need to know spacing distance.

Pete
K8OHM

833. Re: Heavy-duty UHF base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 23:02:00 UTC
From: codemaan <codeman@gj.net>
Message-ID: <a1qev202ofh@enews4.newsguy.com>
Source record: 151018

"Bob M." <xxxxx@yyyy.zzz> wrote in message
news:Ej008.50266$K36.17177397@news1.rdc1.va.home.com...
> The Diamond claims over 11db gain. The Celwave models are 8 and 10db. The
> one that costs more has less gain, so they must be doing something else
for
> $1240.

The commercial Celwave antennas I've seen appear to be made of much thicker fiberglass and aluminum parts than the Diamond ham models. Hence, they are more durable and should withstand the environmental elements much better (proper installation of course) . Then of course, they are marketed to governmental and the business sector so the price is automatically escalated a few thousand percent and that is why they cost in excess of $1000.

>
> I'm worried about falling ice and high winds. I'd have no problem with a
> Diamond at my house, where the environment is much better.

The Diamond 500 I have seems to be very flexible and I would think would shed ice pretty easy. Diamond claims a 90mph wind cabability for the model 500 and a higher wind velocity for the shorter models.

Also, getting up
> 300 feet to replace a busted antenna is not something I will be able to do
> nor afford too often, hence the harsh environment requirement.

I would rather replace a ~five pound Diamond model 500 antenna that I can manage with one hand while tightening the mounting brackets that a ~30lb(?) Celwave. Eather way, I know what you mean, you don't want to climb that 300 ft tower. Man, are you lucky to have permission to install a ham antenna on such a tall tower. Now that little Diamond VHF x50 for $100 (or whatever equivalent UHF model) would surely survive on the tower.

>
> At this point, I've committed to going just UHF on the tower, so this may
> change the requirements a bit. I don't think any commercial antenna will
do
> multiple ham bands.

834. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 23:18:25 UTC
From: Billy <billy@bloggs.com>
Message-ID: <a1vru1$65n$1@news6.svr.pol.co.uk>
Source record: 150868

Give good old Maplin a try ..... been that long since ive used mine
i have forgotten how to use it !! ..... any xsperts out and about ?

Cheers

Billy

835. Re: Heavy-duty VHF/UHF base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-12 23:46:37 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <aslAPJz4oQWAn+P4ceDh0PW29+mJ@4ax.com>
Source record: 150919

"Bob M." <xxxxx@yyyy.zzz> wrote:

>
>I'm worried that the Diamond F718A just won't handle the harsh environment,
>so I've looked into a Celwave PD455 or PD458. These sell for $996 and $1250.
>Getting pricy. Compared to a Diamond for $200, which also has more gain than
>the Celwave models, I'd rather save the money. But I won't be able to change
>the antenna every few months if it can't stand up to the elements.
>
>That's where I am at the present time. I wish I had a money tree, or some
>donations of coax and/or an antenna !

I'd stop agonizing, and just do the logical thing: find a reasonably well-built
ham vertical that covers 2 or 3 bands, put it up, and use it. If the weather
kills it, fine, go with a better-built commercial job for one band.

Bob
k5qwg
>
>Bob M.
>======

836. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 00:50:00 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <YQ408.19643$mi7.3760278@typhoon.southeast.rr.com>
Source record: 150920

Depends on how heavy the vertical is. I've put two wood (1x2) pieces into a hole in the back yard, drilled an horizontal hole through them and the mast. I ran a 3/8 bolt through the holes to make a hinge. By mainpulating the mast, I have a foldover 10 foot mast for an R-7000. The antenna is very bulky and weighs about 28 pounds.

This is probably too much weight for the assembly, but it is still up after two years! If you have a lighter weight vertical in mind, it should work.

Good luck,

Bill, W4WNT

rasw <atdot.dotat@at.at> wrote in message news:a1oous$35o2l$1@rn.area.com...
> Folks:
>
> I'm interested in installing a free standing ground-mounted vertical
> antenna. What's the best way of securing this to the ground? I don't
think
> I can sledgehammer some mast deep enough to be secure.
>
> Are there better techniques? Any suggestions?
>
> Thanks!
>
> Robert " A F 2 M"
>
> email: callsign @ "robert.to"
>
>

837. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 00:54:55 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <zV408.19652$mi7.3765136@typhoon.southeast.rr.com>
Source record: 150921

While I have the greatest respect for the folks who created the computer antenna analysis programs, I believe in trying lots of different antennas. I've built and used tri band verticals with elevated radials and used one coax to feed 2x40m and 1x80m antennas. I also have a 20m/30m dipole fed with one coax at 25 feet elevation. Worked Heard Is. with that one on 30m!! Keep the different dipoles at 90 degrees to one another.

Good luck and keep building.

Bill, W4WNT

Leland Cox <lcox107@home.com> wrote in message news:3C3FCEE0.609F740B@home.com...
> I have been doing this foy years with 40 and 80 meter dipoles in
> parallel. I have also added 20 and 30 Meter legs to the parallel
> dipoles. Seperate the ends as far as possible. Run the 80M in one
> direction and the 40M in another. I have always had to do some trimming
> after I put them up.
>
> Les, AA4F
>
> PDRUNEN wrote:
> >
> > Hi Group,
> >
> > I would like to put a 20m, 15m and 10m dipole on one coax line.
> > The 20m would form a vee, the 15m would be a hoz dipole and the 10m
> > would form an inverted vee.
> >
> > I used the standard formula for each dipole lenght and put the data into NEC.
> > The VSWR plot(s) for the multiband antenna was no where near what I was
> > expecting. I when back and examined each dipole without the others to verify
> > the results were as expected.
> >
> > I understand that adding extra dipoles to a single line feed will change the
> > resonant of the other dipoles. So, I was looking to find someone who has done a
> > similar concept and what dimensions were used.
> >
> > How about a 40meter and 20meter dipole(s) at which same feed and using the
> > 40meter as a 15meter antenna?

> >
> > Thanks,
> >
> > Paul
> >
> > KJ4UO

838. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 01:04:33 UTC
From: Harold <hsnyder@houston.flightlessbird.com>
Message-ID: <B2508.115277$6m1.4024302@typhoon.austin.rr.com>
Source record: 150925

This might be a dumb question, but so what.

How do you vary the length of the feed line?

Harold
WD5KCA

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C3FB947.2470D59A@IEEE.org...
> PDRUNEN wrote:
> > I would like to put a 20m, 15m and 10m dipole on one coax line.
>
> Here's another idea. Put up a 32ft dipole fed with 300 ohm ladder-
> line. A feedline length of about 49ft will get you on 15m and 10m.
> Add another 8ft to 57ft and you can hit 20m. If you're lucky, you
> won't even need a tuner. Make it 59ft for 17m and 56ft for 12m.
>
> I run a 32ft rotatable dipole fed with 300 ohm ladder-line. I
> vary the length of my feedline and don't need a tuner on 20m-10m.
> --
> cheers, CAM http://www.qsl.net/w5dxp

839. Re: 160 meter antenna recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 01:07:20 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <c5508.19678$mi7.3778261@typhoon.southeast.rr.com>
Source record: 150922

Find ON4UN's excellent book on Low Band DXing. John spends quite a bit of time discussing elevated radials, which sound like what you can use here.

Good Luck,

Bill, W4WNT

AB2HR <ab2hr@arrl.net> wrote in message news:lda14ugfoip0fa453kc0mn3fof96tj2q01@4ax.com...
> Hey folks, live in a suburban area, and am interested in
> working 160 meters. I don't have any covenants or restrictions to
> work around, but the size of my lot is typically suburban. I have
> access to my lot and the lot next door to me. I'm interesting in
> hearing what might work as far as a 160 meter antenna. I've been
> playing with the idea of mounting a 45 foot vertical (with capacitance
> hat to complete the 1/4 wave vertical) on my garage roof (about 8-10
> feet high). From there, I'm looking at four relatively heavy ground
> wires forming a ground plane from the roof and attaching to a ground
> "web" (would run as many and as long smaller gage copper wires as
> needed) to the ground.
> Obviously, a 45 foot vertical mast would need guying, and
> that's just one of the downsides. I live in an older 2-story house,
> the length of which is possibly 70-80 feet long... Would it be out of
> line to think that a bent dipole along the roof of the house might
> work? We're talking older (100+ years) woodframe construction here,
> the only detuning factors I can think of are the rain gutters and the
> 45 foot mast holding up my Windom at one end of the house.
> Ideas folks? Would really like to play on 160, but right now,
> don't have the antenna for it. Would like some ideas on something to
> homebrew...
>
> Thanks in advance!
>
>
> Raymond Sirois AB2HR
> SysOp: The Lost Chord BBS
> 607-733-5745
> telnet:\\thelostchord.dns2go.com:6000

840. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 01:17:12 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c40e01e@news.bnb-lp.com>
Source record: 150924

I have a 5-band "trapped" dipole (W9INN MPD-5-78') as an inverted vee
at 54 ft and at 90 degrees to it a homebrew 17m inverted vee. 6
resonant antenna elements (bands) on one rg8x feedline.

That combo also, interestingly enough, is a 3:1 vswr on 12m (and
tunes up fine) so actually this is a 7 band arrangement on one
feedline. 300 DXCC countries in 6 years and counting.....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

841. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 01:20:43 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c40e0f1@news.bnb-lp.com>
Source record: 150926

Hello Tom,
I don't know when you last visited the site but the music is now
selectable and is turned off by default for every new visitor that
arrives. I thought it a bit intrusive too......now that is history.
Thanks for your comments....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

842. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 03:06:43 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c40f9cd@news.bnb-lp.com>
Source record: 150929

Hello Tom,
The site tests OK with Netscape 6.2 . Any of the version 4 Netscape browsers are not supported directly. My site stats show fewer than 4% of my visitors use Netscape of any version thus the impetus to troubleshoot this matter and possibly break it for the other 96% of my visitors is low.

I think you might like Netscape 6.2..it is a nice looking internet suite......thanks for letting me know about this performance issue.....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

843. Re: 160 meter antenna recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 03:18:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1rm2f$svudb$1@ID-124126.news.dfncis.de>
Source record: 150944

AB2HR wrote -
> Hey folks, live in a suburban area, and am interested in
> working 160 meters. I don't have any covenants or restrictions to
> work around, but the size of my lot is typically suburban. I have
> access to my lot and the lot next door to me. I'm interesting in
> hearing what might work as far as a 160 meter antenna.
==========
Hello Ray,

I agree entirely with CAM. Cecil is not so talkative as he usually is. A simple end-fed inverted-L is the best all-round, all-band HF antenna there is, even when there's much more real-estate available than you have.

1. Use 18 to 14 gauge enamelled copper wire. Unless you live in a hurricane area it will last for years.

2. Make the vertical section as high above real ground as you can.

3. Make overall length as long as you can up to a maximum of 0.3 wavelengths at the lowest frequency you would like to use it at. This is roughly 160 feet on the160 meter band but is very non-critical. But you can expect satisfying reports even with overall lengths as short as 0.2 wavelengths, about 80 feet total on 160m.

4. A small advantage of the shorter overall lengths is a little better performance on the 15 and 10 meter bands. But predictions are purely statistical. At your QTH you may find things the other way about.

5. To increase overall length of an inverted-L turn it into an inverted U. Or if you have another tree available, go sideways few a few feet at the end to increase length. But again, it's very non-critical what you do.

6. The grounding arrangements for an inverted-L on 160m are an important consideration. But make your mind a blank about Marzipan-the-Magician's magic number of 120 buried radials using miles of wire. You can easily become bored with the number 120 in monthly magazines, annual handbooks, compendiums and in contributions to this newsgroup. At higher freqencies, 14MHz and above, ground electrodes, plates, rods, matter much less.

7. It is more convenient, faster and more reliable to test performance of this type of antenna on receive rather than on transmit. Make tests at the lowest frequencies you intend to use with signals from reliable strong broadcasters.

8, Let the first ground connection be to your domestic Hot/Cold/Domestic heating system pipes and 60Hz power supply ground.. They should all be bonded together, anyway, for domestic safety reasons. Do some test

9. There will be some improvement in radiating efficiency if some shallow buried wires (up to 12 inches deep but 3 inches is fine) are lumped together with the indoors domestic stuff. These 'radial' buried wires can be strewn at random under the antenna. If you must then follow the garden path. There's no point in having them longer than the height of the antenna. In good, fertile, moist garden soil there's not much point in making ground radials, buried at 10 inches, much longer than 1/12th free-space wavelngths, 40 or 50 feet.

10. If you have any wire left on the reel use it to increase the number of radial wires rather than their length.

11. If you didn't notice any improvement in performance by increasing the number of radials from four to eight, then stop. If you should get to 16 stop again. Nobody ever gets above 32.

Just recently I worked transatlantic (into Georgia) from the UK on 1.845 MHz on SSB using 70 watts into an inverted-L antenna, overall length about 150 feet. Ground electrodes = domestic plumbing + six radial wires, the longest of which is 50 feet at a depth of 10 inches. The other radials are much shorter. My signal strength was reported as S8 and obviously sufficiently above his local noise level. I have very good soil in which to lay my few radials. Soil conductivity is around 15 milli-Siemens (resistivity = 70 ohm-metres) at VLF. But at my old QTH I have worked stateside with a similar antenna and a ground conductivity of only 3 milli-siemens (sandy soil, 300 ohm-metres) using only 4 long radials (plus the domestic plumbing of course. Always include that.

844. Re: Heavy-duty UHF base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 03:43:10 UTC
From: "Bob M." <xxxxx@yyyy.zzz>
Message-ID: <in708.50410$K36.17311034@news1.rdc1.va.home.com>
Source record: 150930

I would bow to your visual experience. Thanks for the confirmation.

I would not have given this any thought if I had unlimited access to replace any broken antenna, but I think that in order to make ham radio not look too foolish, it would be better to go with something as good as the commercial guys (which means $1k) rather than the less expensive, and possibly more likely to break, Diamond. This has to be one of those jobs that goes up and people forget about, hence all the worrying.

I'm not the one installing the antenna: the commercial riggers will handle that, so weight is not my problem. I just have to provide the antenna and about 500 feet of coax real soon. Might as well take a big gulp and order something. Has anyone priced GOOD (as in Andrews) 7/8 hardline recently? Talk about OUCH ! I guess this is considered lucky?!?!

But thanks all for the comments anyway. I'll find out the makes and models of the existing stuff on the tower, as well as coax size, next week.

Bob M.
======
"codemaan" <codeman@gj.net> wrote in message
news:a1qev202ofh@enews4.newsguy.com...
>
> "Bob M." <xxxxx@yyyy.zzz> wrote in message
> news:Ej008.50266$K36.17177397@news1.rdc1.va.home.com...
> > The Diamond claims over 11db gain. The Celwave models are 8 and 10db.
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> > one that costs more has less gain, so they must be doing something else
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> > $1240.
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> fiberglass and aluminum parts than the Diamond ham models. Hence, they
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> more durable and should withstand the environmental elements much better
> (proper installation of course) . Then of course, they are marketed to
> governmental and the business sector so the price is automatically
escalated
> a few thousand percent and that is why they cost in excess of $1000.
>
>
> >
> > I'm worried about falling ice and high winds. I'd have no problem with a
> > Diamond at my house, where the environment is much better.

>
> The Diamond 500 I have seems to be very flexible and I would think would
> shed ice pretty easy. Diamond claims a 90mph wind cabability for the
model
> 500 and a higher wind velocity for the shorter models.
>
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> Also, getting up
> > 300 feet to replace a busted antenna is not something I will be able to
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> > nor afford too often, hence the harsh environment requirement.
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> I would rather replace a ~five pound Diamond model 500 antenna that I can
> manage with one hand while tightening the mounting brackets that a
~30lb(?)
> Celwave. Eather way, I know what you mean, you don't want to climb that
300
> ft tower. Man, are you lucky to have permission to install a ham antenna
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> such a tall tower. Now that little Diamond VHF x50 for $100 (or whatever
> equivalent UHF model) would surely survive on the tower.
>
>
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> > At this point, I've committed to going just UHF on the tower, so this
may
> > change the requirements a bit. I don't think any commercial antenna will
> do
> > multiple ham bands.
>
>
>

845. Re: 3 piece guy wire/mast clamps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 04:10:51 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c410cdd_4@news1.prserv.net>
Source record: 150932

Evan:
Having grown up in fringe area TV before cable, I knew exactly what you described. So I pulled out the old Radio Master to look up the South River part number. Nope, and it isn't in the old Rohn listings, either. Scratching my head, I finally remembered where those came from! General Cement, U2-026. Now all you have to find is someone with a lot of NOS GC hardware. It was still in the 1972 catalog.
73,
W5VPQ
Crazy George

Remove NO and SPAM from return address
K9SQG <k9sqg@aol.com> wrote in message
news:20020111220811.14694.00000877@mb-bj.aol.com...
> Need some guy wire clamps typically used with TV antenna installations. They
> are the three piece style that attach around the mast. Seems they are out of
> production and aren't sold at Radio Shack, Lowe's, Home Depot, Wal-Mart,
> K-Mart, etc. Any leads would be appreciated.
>
> 73s,
>
> Evan

846. Re: Cubex scorpion II quad antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 04:13:28 UTC
From: Neil <va7dx>
Message-ID: <IP708.20553$NO5.1136228@news2.calgary.shaw.ca>
Source record: 150931

I've been using one for about a year and am perfectly happy with it. Meets or exceeds the performance of my 8el yagi at the same height. Of course, I'm biased... I use quads on 2m thru 40m.

"eric" <F1ISJ@wanadoo.fr> wrote in message news:a198ju$fu7$1@wanadoo.fr...
> Hello
>
> Is someone use the Cubex scorpion II quad antenna ?
>
> What do you think of it ?
>
> Thanks
>
> --
> 73'
>
> Eric
> F1ISJ@wanadoo.fr
>
>
>

847. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 04:17:53 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020112231753.08119.00002022@mb-fi.aol.com>
Source record: 150933

Check out Cecil's web page. He shows you exactly how to do it. Very clever
idea and very acheivable. I think he was a genius for coming up with the idea.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

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Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

848. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 04:20:56 UTC
From: mike.luther@ziplog.com
Message-ID: <u422p8t4okp826@corp.supernews.com>
Source record: 150934

In <a1oous$35o2l$1@rn.area.com>, "rasw" <atdot.dotat@at.at> writes:

>I'm interested in installing a free standing ground-mounted vertical
>antenna. What's the best way of securing this to the ground? I don't think
>I can sledgehammer some mast deep enough to be secure.
>Are there better techniques? Any suggestions?

>Robert " A F 2 M"

Robert, if it is a single band vertical you can actually ground it as a solid mast to ground and shunt feed it. Quarter wave antennas for 40 and 80 and so on work just fine shunt fed using TV twin lead standoff insulators and plain old antenna wire fed up through the brown plastic insulators to the upstairs tap point.

You use either a decent transmitting variable for the capacitor, or you can use a cut to length chunk of RG-8 as a capacitor and it works forever with no problems.

Solves a lot of the lightning mitigation problems too! Tap point is about 31 feet up or so on 80 meters and about 15 or so on 40 meters fed this way.

--> Sleep well; OS/2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

849. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 04:22:01 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a1r20p$vg9$1@slb7.atl.mindspring.net>
Source record: 150935

Thread:

For low reactance high power rf termination resistors, lossy open wire transmission lines work nicely, they can be shorted or open on the ends, depending upon the situation, they can handle high power and are easy to match.

Make em out of steel wire, not copper, cut em to length "in situ" while monitoring performance...

--Peter K1PO

"Doug Faunt N6TQS +1-510-655-8604" <faunt@panix.com> wrote in message news:mfr1ygvp7wz.fsf@panix1.panix.com...
> Hi,
> I'm trying to locate some 500 ohm non-inductive termination
> resistors. The recipient wants 2 watt or 1 watt units, and I'm having
> no luck locally. He says "film" resistors are a problem, and one
> question is if carbon-film resistors are a problem, or is he conflating
> them with metal film resistors?
>
> Ohmite OY series seem as if they might do, being ceramic composition
> resistors, but they're not listed as being non-inductive.
>
> I need these by the first days of February, and would like to have as
> many as 5. Any suggestions about what will work, and where I can find
> them?
>
> 73, doug
>
>

850. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 04:32:58 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C410DFA.8764FE8E@IEEE.org>
Source record: 150936

K4IA wrote:
>
> No I disagree. But then I am no expert. I know I had a terrible time tuning a
> 160 mtr dipole on 80 but I have no problem tuning 102 feet on 80.
>
> Help me understand this because I sure don't and I know you do. Isn't it more
> accurate to say, "The moral is don't worry about using the antenna on even
> harmonics IF you can be sure your feed line is a multiple of 1/4 wavelength."

This is a confusing subject. It is the SWR that you have to worry about, not
the length of the dipole. Whatever the SWR is when it is not 1:1, will transform
the impedance up and down the feedline. All the following impedances will result
in an SWR of 9:1 on 450 ohm ladder-line: 50+j0, 4050+j0, 2000+j2000, 2000-j2000
In fact, there are an infinite number of points on an SWR=9:1 circle and any
of those points could conceivably be the antenna feedpoint impedance and/or
the impedance seen by the transmitter. The point is that all possible points
on an SWR circle can look identical at the transmitter. Therefore, all possible
antenna feedpoint impedances that cause an SWR of 9:1 result in the same
conditions at the transmitter depending on the length of the 450 ohm feedline.

Moral: An antenna with a feedpoint impedance of 4050 ohms is just as good
and just as bad as an antenna with a feedpoint impedance of 50 ohms when
one is using 450 ohm ladder-line to feed it. You can get in exactly as
much trouble with a 50 ohm antenna as you can with a 4050 ohm antenna
because the impedance possibilities at the transmitter are identical
in both cases.

If you feed a 50 ohm antenna with an odd number of 1/4 wavelengths of
450 ohm ladder-line, you will encounter 4050 ohms at the transmitter
which is *exactly* the problem as when you feed a 4050 ohm antenna
with a multiple of 1/2 wavelengths. Avoiding a one wavelength dipole
does NOT avoid the problem. Sticking with non-resonant lengths of
dipole does NOT avoid the problem. Using a 1/2WL dipole does NOT
avoid the problem.
--
cheers, CAM http://www.qsl.net/w5dxp

851. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 04:35:07 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C410E7B.E7C51878@IEEE.org>
Source record: 150937

Harold wrote:
> This might be a dumb question, but so what.

No tuner = no tuner losses. Common mode current is minimized.

> How do you vary the length of the feed line?

With knife switches. Pictures and diagrams are on my web page.
--
cheers, CAM http://www.qsl.net/w5dxp

852. Wanted: Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 04:53:09 UTC
From: K7RZF <k7rzf@att.net>
Message-ID: <Vo808.371767$W8.13392944@bgtnsc04-news.ops.worldnet.att.net>
Source record: 150938

Looking for a crankup 50 foot +/- tower. Tilt over base a plus. Must be in very good condition.
Contact John in Portland with details at (503) 254-3013 or e-mail k7rzf@att.net

853. RE: RJX1011D

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 04:56:20 UTC
From: ME <hrbe@dingoblue.net.au>
Message-ID: <3c4112da$0$15064$afc38c87@news.optusnet.com.au>
Source record: 150939

List,
I have acquired a National RJX 1011D txcvr.

However I have no details with the unit at all, I desperately in need of the microphone pinout details as the unit has no mike, and also a good readable copy of the tuning details, perhaps the full operators manual.
I will pay for a good copy etc

John McLean
VK2KCE

854. Re: Assembling a Wire Mesh Dish for Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 05:56:03 UTC
From: Wayne Watson <mtnviews@earthlink.net>
Message-ID: <3C4121B5.15AD7937@earthlink.net>
Source record: 150940

See <http://home.earthlink.net/~mtnviews/misc.html> for some pix of the dish.
--
Wayne T. Watson (121.015 Deg. W, 39.262 Deg. N, 2,701 feet), Nevada City, CA

"Life is a tragedy for those who feel and a
comedy for those who think." -- Chinese Proverb

Web Page: http://home.earthlink.net/~mtnviews
Imaginarium Museum: http://home.earthlink.net/~mtnviews/imaginarium.html

855. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 06:01:46 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020113010146.08099.00001929@mb-fi.aol.com>
Source record: 150941

Cecil

Thank you for the explanation. I think we just took a trip around the Smith Chart and I understand the issue better now. For every antenna, and every SWR, there is a corresponding length of feed line that will result in a 1:1 SWR at the transmitter. That is the basis for your No Tuner Antenna. So far so good. I may not understand how to use the Smith Chart but I follow the concept.

But the next question is "What is the common denominator?" If one is going to use a fixed length of feedline, what lengths of antenna and feed have the best chance of success on all bands? Instinct tells me to avoid 1/2 wave antennas and 1/4 wave feedlines because at some point (even harmonics) they are going to present very difficult matches. In frustration, I throw up my hands and say, "pick something that is random on all bands." Is there a better answer?

Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

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856. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 08:48:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C4149CD.159CB453@eznec.com>
Source record: 150942

Here are some results using EZNEC/4 with the NEC-4 calculating engine.

There are two factors which affect the field strength from a vertical. One is the loss incurred by the returning ground currents. This is I^2*R loss, and is minimized by adding and/or lengthening the radials. (I'll show that sometimes, lengthening the radials hurts instead of helps.) The fraction of power that's radiated by the antenna rather than being lost in the ground is the antenna's efficiency. Improving the efficiency makes the signal stronger but doesn't affect the pattern shape. An arbitrary number of radials can be put in to make the efficiency approach 100%.

The second factor affecting the field strength is the reflection from the ground. This reflection combines with the direct radiation to form the vertical pattern. Because of loss incurred when a vertically polarized signal strikes the ground, the result is severe attenuation of low angle signals when the reflection takes place from a poor conductor like typical ground. (I'm considering only the far field sky wave here, although the ground wave is also attenuated more or less rapidly depending on the ground characteristics.) The loss that occurs depends on frequency, angle of reflection, and ground characteristics. I'll call this "reflection loss" to distinguish it from the I^2*R loss from returning ground currents. While elevating radials or using a half wave radiator can reduce ground currents and thereby improve efficiency, they don't affect reflection loss except in that the angle of reflection from the ground might be different because of different antenna height or current distribution. Laying out radials does have some effect on the reflection loss, but only for reflections that take place within the radial field. Unless radials are extremely long, this generally means that only higher angles are affected.

For most of the following tests, I report a the total of the two losses. EZNEC 3.0 incorporates a feature of NEC called "average gain". This is a calculation of the total power at all azimuths and elevations at a great distance, compared to the power being fed into the antenna from the source or sources, and is what I based the results on. I did separately compute the efficiency in a couple of cases -- I'll point those out.

For a single radial buried 0.1 meter, ground dielectric constant = 1, frequency 3.75 MHz, vertical and radial each 20 meters long, the maximum loss occurs when the ground conductivity is 0.65 mS/m. This is less conductivity than the poorest soil commonly listed in most tables. If the ground has a dielectric constant of 10, which is more common, the maximum loss occurs with a conductivity of 1.3 mS/m. This is about equivalent to dry, sandy ground or urban industrial areas.

The ground conductivity at which loss is maximum depends on frequency as well as dielectric constant. The antenna and radial lengths and radial depth were scaled for 14 MHz, so they remained the same in terms of wavelength. With a ground dielectric constant of 1, the conductivity giving the most loss was 2.5 mS/m, about the same as dry, sandy ground. With a dielectric constant of 10, the conductivity giving the most loss was 4.4 mS/m, about the same as average ground, heavy clay, or pastoral areas.

To independently check the effect on efficiency without regard to reflection loss, I compared the field strength from an antenna with no I^2*R ground loss (by modeling a plain vertical over EZNEC's "MININEC-type" ground model) to the field strength from the test antenna. For this I had to add a second radial because otherwise the pattern shape changed with ground conductivity. With two radials and broadside measurement, the pattern stayed the same for the test vertical and the reference vertical, enabling a valid comparison. Back to 3.75 MHz, with dielectric constant of 1, the maximum loss (minimum efficiency) occurred with a ground conductivity of 0.55 mS/m. With dielectric constant of 10, maximum loss occurred with conductivity of 1.0 mS/m. This raised the question of whether the conductivity for maximum overall loss was the same for two radials as for one. The answer is that they're nearly the same but not quite. For two radials, the overall loss with dielectric constant of 1 was maximum for a conductivity of 0.45 mS/m (vs 0.65 for one radial), and 1.0 mS/m for dielectric constant of 10 (vs 1.3 for one radial). So over the range of testing, the overall loss was minimum at roughly the same conductivity for one radial as two, and at roughly the same conductivity as the conductivity for minimum efficiency. The minimum efficiency for the two radial case, incidentally, was about 25% -- field strength is 6.0 dB below perfect when the dielectric constant is 1, and 5.1 dB when the dielectric constant is 10.

Now, here's another effect I mentioned in an earlier posting. If the ground is really lossy, the radials effectively "disappear" as you get farther from the antenna, since the current on them drops rapidly as you go outward. When the ground isn't so lossy, though, there's substantial current all along the radial. And it turns out that the efficiency really goes to pot if the radials are allowed to become near an electrical half wavelength long. It's important to realize that this is the case for elevated radials also. At 3.75 MHz with a ground conductivity of 0.1 mS/m and dielectric constant of 10, the velocity factor of a plane wave in the soil is 0.32. With the same conductivity but dielectric constant of 40, the velocity factor drops to 0.16. At 3.75 MHz where the wavelength is just about 80 meters, a free space quarter wavelength is 20 meters. Deep in soil where the velocity factor is 0.16, a quarter wavelength is only 3.2 meters, and a half wavelength is 6.4 meters. Near the surface, a quarter or half wavelength will be a bit longer because some of the field is in the air. However, a radial doesn't have to be buried very deeply to have an electrical length pretty close to these figures.

So I modeled a 20 meter high, two-radial vertical with radials 8 meters long at 3.75 MHz with ground conductivity of 0.1 mS/m. This is lower than most soils, but I chose it to clearly illustrate the effect. This effect can easily be shown for elevated verticals using NEC-2 based programs (but not MININEC based programs). I watched the overall loss as I increased the dielectric constant from 1. At 1 it was 14.6 dB, then dropped monotonically until the dielectric constant reached about 20, where the overall loss was 5.7 dB. Then it rose sharply, to a maximum of 11.9 dB at a dielectric constant of 34. At that point, the velocity factor deep in the soil is 0.17, and somewhat greater when close to the surface. The velocity factor for the radials buried 0.1 meter is apparently about 0.2, making them a half wavelength long. By *shortening* the radials from 8 to 6 meters, the loss was reduced from 11.9 dB to 5.0 dB, a 6.9 dB improvement. This is almost entirely an improvement in efficiency, since the overall reflection loss is affected very little by a change in the length of two radials.

The same effect can be shown by leaving the dielectric constant fixed and varying the conductivity, but the results get muddled by the fact that the radials increasingly "disappear" and the ground reflection improves as the ground becomes more conductive.

In summary, the value of soil conductivity that produces the maximum loss depends on the soil dielectric constant, frequency, number of radials, and radial length. I believe it also varies some with antenna height, although I didn't test that hypothesis. Shortening radials can sometimes improve the efficiency, particularly if the radials are elevated or the soil is a poor conductor.

Ground modeling is one of the things that common programs probably do worst. The main shortcoming is the assumption that the ground is homogeneous to an infinite depth, while real ground can vary a great deal with depth, in both soil composition and moisture content. So it's impossible to say how closely the results from a program will agree with actual measurements in a given location when ground characteristics are an important player. Nevertheless, we can gain valuable insight about what's happening by observing the model's behavior in the sanitized world of the modeling program.

Note: Each time I make a posting mentioning NEC-4 or EZNEC/4 I get a number of queries about where to obtain it. NEC-4 is copyrighted by the University of California. It's distributed by Lawrence Livermore National Laboratory (LLNL), and is restricted to use in the U.S. by U.S. citizens. (I don't make the rules, but I sho' 'nuff abide by them.) The cost for a license is $850, although there's a discount for universities. Anyone wishing to purchase EZNEC/4 (which is $600) must first purchase an NEC-4 license from LLNL, which I verify by contacting LLNL. I'll be glad to pass along the name of the person to contact at LLNL for information or to purchase a license, to anyone seriously interested.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Conductivity at which loss is a maximum may very well be a function of
> frequency. But who cares? Nobody is interested in that. Conductivity is the
> independent variable in this investigation and the frequency is fixed.
>
> Frequency is that at which the vertical is 1/4-wavelength in height. The
> single shallow-buried radial is also 1/4-wavelength in length. What could be
> more simple ?
>
> Suggested values -
> Vertical height = 20 metres.
> Radial length = 20 metres.
> Frequency = 3.75 MHz.
> Soil Permittivity = 1.0
> Vary conductivity from sea water to Sahara desert to find value at which
> efficiency is lowest.
> ----
> Regards, Reg G4FGQ
> ====================================
>
> Roy Lewallen <w7el@eznec.com> wrote in message
> news:3C409093.A01D471@eznec.com...
> > I repeat, what frequency? The conductivity at which loss is maximum is a
> > function of frequency.
> >
> > Roy Lewallen, W7EL
> >
> > Reg Edwards wrote:
> > >
> > > Roy asked -
> > >
> > > > What frequency?
> > > >
> > > =================
> > > Roy, you are being humorous but mostly evasive. In the time taken to
> think
> > > about it and ask your question you could have done the job and provided
> an
> > > estimate of soil conductivity everybody is eagerly waiting for.
> > >
> > > Just enter ground permittivity = unity and set a frequency at which the
> > > vertical is approximately the required 1/4-wavelength.
> > >
> > > Then vary ground conductivity in a few very crude steps between sea
> water
> > > and Sahara sand. Simple!
> > >
> > > If you can't find a conductivity which minimises radiating efficiency
> then
> > > the program's modelling performance is deficient.

> > > ---
> > > Regards, Reg, G4FGQ

857. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 08:59:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C414C6F.11C4036F@eznec.com>
Source record: 150943

K4IA wrote:
>
> Cecil
>
> Thank you for the explanation. I think we just took a trip around the Smith
> Chart and I understand the issue better now. For every antenna, and every SWR,
> there is a corresponding length of feed line that will result in a 1:1 SWR at
> the transmitter. That is the basis for your No Tuner Antenna. So far so good.
> I may not understand how to use the Smith Chart but I follow the concept.
>. . .

No, that isn't so. You can verify this on the Smith chart. If you normalize the chart to the transmission line impedance, then 50 + j0 ohms, generally what you're trying to match to, is a specific point on the real axis. For example, if you're using 450 ohm line and normalize the chart to 450 ohms, then the point 0.111 + j0 on the chart represents 50 ohms. With the chart normalized to the transmission line impedance, you'll see that changing the line length takes you in a circle around the center of the chart. Wherever you start from, all you can do is traverse a circle. So you see that from any given point on the chart, you can hit the real axis at only two points if all you can do is change the line length. You might get lucky and have one of these be close to 0.111, or you might not. You can't guarantee it.

To get a perfect match to an arbitrary impedance you always have to be able to adjust TWO things. Think of it as adjusting the R and the X or the magnitude and angle, although the adjustments really never operate that independently.

Roy Lewallen, W7EL

858. Re: Assembling a Wire Mesh Dish for Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 09:05:54 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <dIIRgdBy3UQ8EAZL@ifwtech.com>
Source record: 150946

Your Friend Bill wrote:
>Wayne Watson wrote:
>>
>> I'm finally getting around to reassembling a dish for radio astronomy
>>purposes that I acquired a few
>> years back. It's 10 feet in diameter and has radial spokes with
>>screen-like (mesh) metal sectors
>> between the spokes. The mesh is inserted into slots on either side
>>of the spokes. I'd say so far
>> this is not an easy process. At the moment, the dish is broken into
>>about six sections with 2-3
>> spokes per section. Maybe I need to disassemble every section and
>>treat this as though I'm starting
>> from scratch. Then on the other hand, maybe there's a tool that helps
>>make the inserts of the mesh
>> into the spokes. Maybe it's really a two person effort. Any
>>suggestions? In the mean time, it's back
>> to my giant puzzle.
>>
>> (I called a sat dish store in the area and asked them. The fellow
>>knew of the dish design and
>> politely suggested that I get another dish with a petal design. Maybe
>>he's right.)
>
>The key to easily sliding the screen panels into the grooves on dishes
>like you describe is that everything needs to be in like new condition.
>The tiniest little dings in the edge of the mesh or improper spacing of
>the ribs will make it a nightmare.
I have a very similar dish (Winegard 10ft) and two or three of the mesh panels have slipped out, so I will have the same problem when it goes up next summer. My idea (untested as yet) was to make one or two "grippers" with several protruding nails to engage with the mesh, to help with sliding them back into the slots.

Thanks to Bill's advice, I will also spend a lot of time cleaning out the slots, flattening the edges of the panels, and greasing everything thoroughly!

>I agree with the dish guy...or even buy a good used dish from
>somebody...you can often find them free for the asking.
>
4GHz TVRO hardly happened in Europe, so we're extremely lucky to find one in any condition, at any price!

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

859. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 12:23:06 UTC
From: Bob Cook <captcook@compuserve.com>
Message-ID: <a1ru6qrjg1@suaar1ac.prod.compuserve.com>
Source record: 150945

Multi-band dipoles work!

I have been using multiband dipoles made from multiconductor cables for years. They work very well.

I am a USCG captain and offshore sailing instructor. I go offshore all the time, sailing 40-60 footers all over the Western Atlantic, Caribbean and Caribbean. I take an Icom SSB, manual tuner and a heavy duty, made up, multiband antenna with feed line, with me on all my trips. The set up is a snap. I have developed the design over several years of trials. I hoist it either vertically or as an inverted "V" on a spare halyard. I usually use it vertically to minimize the interferenace with the sails. My most recent antenna, now in use two years, is made of a four conductor, round, Romex type cable. The conductors are 18g, (three insulated, one bare). It therefore enables four independent dipoles. I use a strong nylon center tie-point / insulator. It is fed with about 45 ft of RG-58U. The dipoles are cut by trial and error to present the lowest SWR at the center of the various bands. In my experience the lowest SWR is still higher on most bands than it would be with a single free space dipole. Max SWR is about 5:1. But the manual tuner reduces it to 1:1 on all bands. Signal reports are very good, comparable to any other maritime mobile or base station running a conventional backstay, vertical or single wire antenna. The system is essentially groundless but I am sure the operation over saltwater improves the signal propagation on earth bounces.

NEC does not enable modeling this type of antenna. I would also like to know how to better model and design this antenna using software so as to avoid the trial and error in the cutting process but what I have works! I am wondering if software which is designed for modeling transmission lines would be more applicable to designing this type of antenna than software designed for modeling an antenna.

Bob
K9KKY

www.Ocean-Pro.com
Naples, Florida 34112
941-775-7435, 800-329-4884

860. Re: 160 M antenna grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 13:15:13 UTC
From: Bill -N4DXR- <bill@hovac.com>
Message-ID: <gLf08.65815$2V4.5068002@atlpnn01.usenetserver.com>
Source record: 150947

Hi Reg,

I am also planning on putting up an inverted L. If it does well enough on 80m, 40m, and 17m I will be taking down my inverted Vs for these bands. This is for aesthetic reasons only.

I see the ARRL handbook says to use a variable capacitor of around 500-800 mfd between the earth ground and shield of the coax. The handbooks version also has an overall wire length of 165 to 175 ft. You didn't mention anything about using a variable capacitor. Is it necessary? Or can I just hook the shield directly to the ground rod I have at the base of the pole I will be hanging the L on. It's a 40 ft utility pole with a 4 element tribander on top.

Tnx,
Bill

861. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 13:28:13 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <NXf08.3426$Y_1.664050754@newssvr17.news.prodigy.com>
Source record: 150948

I have a two band dipole 20/12 meters. I put it up and get a 2:1 on the frequencies of interest. I tried to model that on EZNEC. I (just now) finally have a model that comes pretty close to what is in the air. The 20 meter is 180 degrees. The 12 meter is 120 degrees. When I changed the elevation of the 12 meter from 180 degrees to 120 degrees, the program changed the length of that dipole. I don t know what length is in the air. Getting both of them to a respectable(?) SWR was tricky and using my Autek it was just fold over and try(no more cutting). I wonder if the program gives a fairly close figure for what the length of 12 meter dipole should be. Will have to lower it today and find out. (I am using #16 insulated wire and I understand insulation can lower the electrical length of the wire by about 2 %.)
"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20020111221014.12158.00000891@mb-fs.aol.com...
> Hi Group,
>
> I would like to put a 20m, 15m and 10m dipole on one coax line.
> The 20m would form a vee, the 15m would be a hoz dipole and the 10m
> would form an inverted vee.
>
> I used the standard formula for each dipole lenght and put the data into
NEC.
> The VSWR plot(s) for the multiband antenna was no where near what I was
> expecting. I when back and examined each dipole without the others to
verify
> the results were as expected.
>
> I understand that adding extra dipoles to a single line feed will change
the
> resonant of the other dipoles. So, I was looking to find someone who has
done a
> similar concept and what dimensions were used.
>
> How about a 40meter and 20meter dipole(s) at which same feed and using the
> 40meter as a 15meter antenna?
>
> Thanks,
>
> Paul
>
> KJ4UO
>

862. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 14:31:05 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <cJdBPKhh+Q5qySKJ5sy4UEKkjapy@4ax.com>
Source record: 150949

"Charles Johnston" <ctj92@cableone.net> wrote:

>Hello Tom,
> The site tests OK with Netscape 6.2 . Any of the version 4 Netscape
>browsers are not supported directly. My site stats show fewer than 4% of
>my visitors use Netscape of any version thus the impetus to troubleshoot
>this matter and possibly break it for the other 96% of my visitors is
>low.

I believe your counter mentioned 50,000-plus visitors. 4% of that is 2,000
Netscape visitors -- not a small number.
>
> I think you might like Netscape 6.2..

I use an older version of Netscape (it's an older computer with limited memory)
and am not interested in upgrading Netscape on this machine.

After visiting your site last night, I had trouble shutting down my pc; had to
reboot before it would shut down.

>it is a nice looking internet
>suite......thanks for letting me know about this performance issue.....

It would seem, in the future, when you advertise your site in the newsgroups,
you might put in a disclaimer warning users of older versions of Netscape that
your site is incompatible.

Thank you,

Bob
k5qwg

863. Re: Stacked Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 14:31:34 UTC
From: alevand@yahoo.com
Message-ID: <e52e470e.0201130631.646bc5a5@posting.google.com>
Source record: 150950

Mark Hall <vze2mhvc@bellatlantic.net> wrote in message
news:<3C406CE6.C6672AFE@bellatlantic.net>...
> I just read W4RNL's excellent articles about all sorts of antennas. The
> NEC simulations are outstanding, and give lots of insight into the
> Yagi/Quad discussions. From what I read, it would appear that a Stacked
> 2-element Quad has a lot going for it. Here's what I learned:
>
> 1) Run Double #14 wire elements, Spaced 5": Adds to the bandwidth,
> Gain, and F/B ratio.
>
> 2) Use a Spider Quad: Provides more optimum spacing of course.
>
> 3) Feed each band seperately with 1/4 Wave sections, a remote switch
> which opens both sides. This reduces the intercoupling of the "other
> bands" and provides cleaner patterns.
>
> 4) Seperate the Two 2-element Quads by 30', center to center, feed them
> In-Phase (of course). W4RNL studied vertical stacking, but I'm thinking
> horizontal "stacking" would be easier to implement with a single
> rotator, on a typical tower, and provide a balanced height.

>
> W4RNL's analysis was getting an additional 2.1 dBi gain for the second
> Stacked Quad! Overall, on 20M he was showing 12 or more dB of Gain, and
> great bandwidth/FB ratios! Am I dreaming here? The multiband 2 element
> is way easier to tune than a 4 el, and the stacking factors are
> apparently pretty well known. Should I take down my 4el Quad, redo it
> with spaced double wire elements, and add a 30' horizontal boom, and
> convert to dual 2-element configuration? Also I'm thinking I could get
> a 1 Wave Length 40 meter "Vertical" steerable Loop in there somewhere.
> I'm not sure my GEM Quad spreaders are up for double wire duty, but
> there's not much icing here in the Wash. DC area, and with some extra
> cross bracing, it might work,. Currently my boom is only 25 feet, but
> with the GEM quad spider configuration, I could cut that in half for the
> side booms, add a 30' cross boom, and voila! With a crank up/down
> tower, should stay up if brought down when not in use. If what I read
> is true, this might be a Poor Man's solution to those Super Rich Guy
> Stacked Christmas tree Mono-Band Yagi's with 50' booms at 100', with
> tubular towers that turn I see on DX web sights.
>
> Any Thoughts?
>
> '73 KI4Z

Vertical stacking is more effective for DX because of the lower angle of radiation, fewer skips and less multipath. It also has much less inertia, which varies as r squared, so it's easier to turn. The beam pattern is also less sharp, so it doesn't have to be pointed directly.

Tony
AA9CC

864. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 14:45:17 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c419d7e$1@news.bnb-lp.com>
Source record: 150951

Hello Bob,
Thanks for dropping by my site and also for sharing your comments with me. FYI I have added a line of text to the homepage that states the " site is optimized for use with IE 6 " .

The internet and all of cyberspace is an ongoing and evolving scenario and for web designers 100% browser compatibility is at best a " moving target ".I strive for cross-browser compatibility and test my site against IE 5, IE 6, Opera 6, and Netscape 6 since these represent the current offerings from each respective camp.

Each day the older browsers (such as the v 4 series) become less and less compatible because they were written before much of what has now become html standard code was ever produced. Just a fact-of-life on the world wide web....thanks again....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

865. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 14:50:03 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C419E9B.C1B66898@IEEE.org>
Source record: 150952

K4IA wrote:
> Thank you for the explanation. I think we just took a trip around the Smith
> Chart and I understand the issue better now. For every antenna, and every SWR,
> there is a corresponding length of feed line that will result in a 1:1 SWR at
> the transmitter.

Nope, what you say is true only for antennas that have an SWR = 9:1 on the 450 ohm ladder-line. Real world antennas can have virtually any SWR on the 450 ohm ladder-line. If the 450 ohm SWR is 4.5:1, the lowest impedance point along the feedline will be 450/4.5=100 ohms giving a 50 ohm SWR of 2:1. If the 450 ohm SWR is 18:1, the lowest impedance point along the feedline will be 450/18=25 ohms giving a 50 ohm SWR of 2:1. My method of matching relies upon the 450 ohm SWR being between 4.5:1 and 18:1 yielding a 50 ohm SWR less than (or equal to) 2:1. Fortunately, for dipoles that are 1/2WL at the lowest frequency of operation, the 450 ohm SWR does indeed usually lie between 4.5:1 and 18:1 which are two SWR circles on the Smith Chart. These two SWR circles form a doughnut on the Smith Chart. Any feedpoint impedance within that doughnut is acceptable to me. I will upload that particular chart to my web page. For frequencies above the resonant frequency of a 1/2WL dipole, the feedpoint impedances tend to be within that doughnut. For frequencies below the resonant frequency of a 1/2WL dipole, the feedpoint impedances tend to be outside of that doughnut. Moral: If possible, avoid short dipoles.

> But the next question is "What is the common denominator?" If one is going to
> use a fixed length of feedline, what lengths of antenna and feed have the best
> chance of success on all bands? Instinct tells me to avoid 1/2 wave antennas
> and 1/4 wave feedlines because at some point (even harmonics) they are going to
> present very difficult matches. In frustration, I throw up my hands and say,
> "pick something that is random on all bands." Is there a better answer?

Picking something at random will guarantee failure on some bands unless one is extremely lucky. And let me say this one more time:

For dipoles that are 1/2WL at the lowest frequency of operation, there are NO DIFFICULT MATCHES using 450 ohm ladder-line or open-wire line. There are difficult matches for short dipoles but not for long dipoles. With extremely short dipoles, there may be NO length of ladder-line that will make the tuner/transmitter happy.

The better answer is to install a way of varying the length of the ladder-line. On my web page, I describe how to do it with relays or knife switches. There may be a better way than mine but I haven't thought of it yet.

The other thing to note is that the feedline length doesn't need to be exact if you are using a tuner. For instance, with a 130ft dipole, a

450 ohm feedline length of 94 feet will get you close on 40m, 15m, and 12m. A length of 102 feet will get you close on 30m, 17m, and 10m. And a length of 110 feet is good for 80m and 20m. If one goes this route, only two 4PDT relays or switches are needed. This approach will usually work with internal antenna tuners. And, as a bonus, feeding a transmission line at a current maximum point (impedance minimum point) tends to minimize common-mode currents based on my measurements.

Most everything I've said can be observed using the free demo version of EZNEC available from www.eznec.com.
--
cheers, CAM http://www.qsl.net/w5dxp

866. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 14:52:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C419F39.B837C5B0@IEEE.org>
Source record: 150953

Bob Cook wrote:
> I am
> wondering if software which is designed for modeling transmission lines
> would be more applicable to designing this type of antenna than software
> designed for modeling an antenna.

EZNEC models transmission lines pretty well.
--
cheers, CAM http://www.qsl.net/w5dxp

867. Re: 160 meter antenna recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 15:02:05 UTC
From: JTMac <Privat1@subtlenergy.com>
Message-ID: <Jjh08.810$_D2.107297@news20.bellglobal.com>
Source record: 150954

A LOT more money than copper wire, but the GAP antennas work very well. The 160 model also handles 80, 40, & 20. It uses three decoupling "radials" of some 56 feet, as I recall, and can be mounted on the ground or elevated (three guys). Remember, most man-made QRN is vertically polarized. Slopers can also work very well, but may initially require extensive adjustments of length and slope angle to work really well. My first DX on a quarter-wave 160 sloper was W6 to Lu, on SSB, well before sunset! (A few years ago.) Of course, it worked so well because I put it up at night in the rain.

Jimmy
W6MSN and others

"AB2HR" <ab2hr@arrl.net> wrote in message
news:lda14ugfoip0fa453kc0mn3fof96tj2q01@4ax.com...
> Hey folks, live in a suburban area, and am interested in
> working 160 meters. I don't have any covenants or restrictions to
> work around, but the size of my lot is typically suburban. I have
> access to my lot and the lot next door to me. I'm interesting in
> hearing what might work as far as a 160 meter antenna. I've been
> playing with the idea of mounting a 45 foot vertical (with capacitance
> hat to complete the 1/4 wave vertical) on my garage roof (about 8-10
> feet high). From there, I'm looking at four relatively heavy ground
> wires forming a ground plane from the roof and attaching to a ground
> "web" (would run as many and as long smaller gage copper wires as
> needed) to the ground.
> Obviously, a 45 foot vertical mast would need guying, and
> that's just one of the downsides. I live in an older 2-story house,
> the length of which is possibly 70-80 feet long... Would it be out of
> line to think that a bent dipole along the roof of the house might
> work? We're talking older (100+ years) woodframe construction here,
> the only detuning factors I can think of are the rain gutters and the
> 45 foot mast holding up my Windom at one end of the house.
> Ideas folks? Would really like to play on 160, but right now,
> don't have the antenna for it. Would like some ideas on something to
> homebrew...
>
> Thanks in advance!
>
>
> Raymond Sirois AB2HR
> SysOp: The Lost Chord BBS
> 607-733-5745
> telnet:\\thelostchord.dns2go.com:6000

868. Re: 160 M antenna grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 15:09:10 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1sgun$svvdp$1@ID-124126.news.dfncis.de>
Source record: 150968

Hello Bill,

The inverted-L I have in mind does not have any coax. The antenna wire comes right into the shack to the tuner. The domestic plumbing system can then be included in the grounding system. The only coax is a short length between tuner and transceiver. But I appreciate there are circumstances when the inverted-L feedpoint may be some distance from the house and there is then some need for tuning or matching at the junction of antenna and coax. Keep the coax as short as possible or they may be tuner problems at the higher frequencies.

When there's a longish length of coax between antenna and shack I can see no reason for connecting a variable capacitor between coax braid and ground. In any case the coax braid is always directly grounded at the transmitter end which tends to short-circuit the capacitor.

But there is a VERY good reason on 160 meters for connecting a 500pF or more, variable capacitor between the antenna wire and coax inner conductor, with the coax braid being directly grounded via some radials at the antenna end.

When the inverted-L is 30 or 40 feet longer than 1/4-wavelength on 160 meters the antenna input impedance is an inductive reactance of several hundred ohms in series with a resistance between 50 and 100 ohms. A 500pF variable will tune out the inductive reactance to leave a nice pure resistance with a value in the right ball-park.

In fact, if you are interested only in 160 meters you won't need a tuner, the 500+ pF capacitor will be sufficient. If you like, prune overall antenna length to make the input resistance EXACTLY 50 ohms. Increase the length to increase feedpoint resistance.

By far the weakest link in your arrangement is the solitary ground rod. Even 3 or 4 spaced ground rods will give poor performance unless the soil is very fertile and moist. So I suggest you do your best to lay down some radials. Even only two, 25-feet long, 10 or 12-gauge, shallow-buried radials will be noticeably better than one rod.

Download program ENDFEED in a few seconds from website below and run immediately. It covers the points mentioned above and a lot more besides. It will predict antenna length to give Rin = 50 ohms and the capacitor pF needed to tune out the inductive reactance. The usual SWR meter indications are all that's necessary to set it up.
--
****
Regards, Reg G4FGQ

Free Radio Modelling Programs
Http://www.g4fgq.com
****

Bill -N4DXR wrote
> Hi Reg,
>
> I am also planning on putting up an inverted L. If it does well enough on
> 80m, 40m, and 17m I will be taking down my inverted Vs for these bands.
> This is for aesthetic reasons only.
>
> I see the ARRL handbook says to use a variable capacitor of around 500-800
> mfd between the earth ground and shield of the coax. The handbooks version
> also has an overall wire length of 165 to 175 ft. You didn't mention
> anything about using a variable capacitor. Is it necessary? Or can I just
> hook the shield directly to the ground rod I have at the base of the pole
I
> will be hanging the L on. It's a 40 ft utility pole with a 4 element
> tribander on top.
>
> Tnx,
> Bill
>
>
>
>

869. Re: AM Antenna (Justice or Super Select-A-Tenna)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 15:11:37 UTC
From: Steve Fleckenstein <spfleck@citlinkdot.net>
Message-ID: <u438tf1b4g6c2e@corp.supernews.com>
Source record: 150955
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.broadcasti

If select-a-tenna is just a loop with a tuner why couldn't I just roll my
own from the junk box under the work bench ?

--

Fruitcakes, if well-wrapped and stored in airtight tins, are reputed to
remain enjoyable for as long as 25 years..
"Daniel Simpson" <dzan@qwest.net> wrote in message
news:u40o87k86h877@corp.supernews.com...
| I have a Mckay Dymek AM7 with a Terk antenna plug into it I would like
| better reception then what i am getting and have been looking at the
| Justice or Super Select-A-Tenna Does anybody have opinions on these
| models or other sugestions.
|
| Thank You
| Dan
|
|

870. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 15:50:39 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <oqtBPMPPayHvVY+2kSVbc9MbnRPP@4ax.com>
Source record: 150956

"Charles Johnston" <ctj92@cableone.net> wrote:

>Hello Bob,
> Thanks for dropping by my site and also for sharing your comments with
>me. FYI I have added a line of text to the homepage that states the "
>site is optimized for use with IE 6 " .

You might also consider putting that in your usenet ads, and mention incompatibility with older versions of Netscape. Getting that notification when I arrive at your homepage, and having to reboot my computer to shut down, is a little late.

Thank you,

Bob
k5qwg

871. Re: 160 meter antenna recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 16:09:23 UTC
From: AB2HR <ab2hr@arrl.net>
Message-ID: <vac34uk0ehdktov8j1a6059qb5203kmbdg@4ax.com>
Source record: 150957

On Sat, 12 Jan 2002 15:44:46 -0600, CAM <Cecil.A.Moore@IEEE.org>
wrote:

>AB2HR wrote:
>> Hey folks, live in a suburban area, and am interested in
>> working 160 meters. I don't have any covenants or restrictions to
>> work around, but the size of my lot is typically suburban. I have
>> access to my lot and the lot next door to me.
>
>Given your circumstances, it's hard to beat an inverted-L.

Definitely an option I have considered... For purposes of providing a
decent counterpose for the antenna, however, there are very few decent
locations in which I can install the antenna... A treetop in the back
portion of my lot DOES present itself as a possibility...

Thanks for the vote for inverted-L, have a good friend who's using
one, can always get him to help me build mine..

Raymond Sirois AB2HR
SysOp: The Lost Chord BBS
607-733-5745
telnet:\\thelostchord.dns2go.com:6000

872. Re: 160 meter antenna recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 16:09:55 UTC
From: AB2HR <ab2hr@arrl.net>
Message-ID: <lec34u42todmc65b5vfkuccti5adbqigbd@4ax.com>
Source record: 150958

On Sun, 13 Jan 2002 01:07:20 GMT, "W4WNT" <w4wnt@carolina.rr.com>
wrote:

>Find ON4UN's excellent book on Low Band DXing. John spends quite a bit of
>time discussing elevated radials, which sound like what you can use here.
>
>Good Luck,
>
>Bill, W4WNT
>

Can you tell me the title of this book?

Raymond Sirois AB2HR
SysOp: The Lost Chord BBS
607-733-5745
telnet:\\thelostchord.dns2go.com:6000

873. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 16:14:04 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c41b24c$1@news.bnb-lp.com>
Source record: 150959

Hello Bob,
I do not want to seem insensitive but the issue here is that you
continue to use an older non-standards compliant browser. A simple
upgrade to a modern browser such as Netscape 6, IE 6, or Opera 6 would
solve your dilemma and would " fix " my web site.
BTW there is nothing inherent in the web page to affect your system
from completing a proper shut down.
--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

874. Re: 160 meter antenna recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 16:14:53 UTC
From: AB2HR <ab2hr@arrl.net>
Message-ID: <bkc34u0r76tb3251kesi35ar314kvri1fn@4ax.com>
Source record: 150960

On Sun, 13 Jan 2002 03:18:13 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>AB2HR wrote -
>> Hey folks, live in a suburban area, and am interested in
>> working 160 meters. I don't have any covenants or restrictions to
>> work around, but the size of my lot is typically suburban. I have
>> access to my lot and the lot next door to me. I'm interesting in
>> hearing what might work as far as a 160 meter antenna.
>============================
>Hello Ray,
>
>I agree entirely with CAM. Cecil is not so talkative as he usually is. A
>simple end-fed inverted-L is the best all-round, all-band HF antenna there
>is, even when there's much more real-estate available than you have.
>
SNIP!

Reg,
Thanks for the post. Printed out the details, will share them
with my own Elmeer (yes, even Extras have Elmers!). Two votes for the
inverted L. We live in the Northeast, soil here, I would assume is
relatively moist and should be fairly conductive. Perhaps the
requirement of an assymetrical grounding array won't be TOO much of an
impediment to working an omnidirectional pattern. Hell, maybe my
neighbors would actually LET me bury some ground radials under their
yards!

Raymond Sirois AB2HR
SysOp: The Lost Chord BBS
607-733-5745
telnet:\\thelostchord.dns2go.com:6000

875. 1.2 GHZ/23 CM Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 16:52:14 UTC
From: Robert Fulton <robfult@carolina.rr.com>
Message-ID: <2Xi08.28556$6L1.4285818@typhoon.southeast.rr.com>
Source record: 150962

Looking for information sources and/or antenna recommendations for the 23cm band. Yagi's and large antennas are out of the question due to space restrictions (inside attic). I've seen Jpoles for 1.2, but was looking for other options as well. Thx in advance!

-Rob
KG4RAG

876. Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 16:52:33 UTC
From: wa2elz <wa2elz@nospamworldnet.att.net>
Message-ID: <IXi08.268179$WW.13468569@bgtnsc05-news.ops.worldnet.att.net>
Source record: 150961

Any one have a good estimate for a yagi antenna noise temperature, in
degrees Kelvin, pointed at the horizon at a receiving frequency of 600mhz ?
My guess is between 100 to 300 degrees Kelvin, any better guesses ?

877. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 17:09:24 UTC
From: Robert Haviland <bobh@iag.net>
Message-ID: <8bj08.27893$zw3.2719699@newsread1.prod.itd.earthlink.net>
Source record: 150963

The main problem with conjugate matching is the mis-interpretation of the definition.

Consider a generator with characteristics Zg=Rg+jXg. To it is tied a load, described by Zl=Rl+jXl. The conjugate match theorem states that maximum AVAILABLE power is delivered when Xl=-Xg. Note the word "available", which means available to the resistance Rl.

There is a lot of confusion caused by neglecting the word "available". This leads to assuming that the condition is for maximum power transfer. This requires two independent settings:
-matched load resistance, Rl=Rg
-Conjugate reactance, Xl=-Xg

Actually in RF power generation we don't want maximum power transfer. The reason is that half the total power is burned up in the generator, and half is delivered to the load. In a good Class C amplifier, only 30 percent of the total power is burned in the generator, and 70 percent is delivered to the load. Look at the difference for a KW of output:
30-70 design- 428 watts in generator, 1000 watts in load, 1428 watts to pay for (=1000/0.7)
50-50 design- 1000 watts in generator, 1000 watts in load, 2000 watts to pay for, plus bigger and more expensive tube, power supply, etc.

The operation of "tuning up" an amplifier involves getting a conjugate match.
"Tune to the dip" of plate current by adjusting the "tune" control automatically creates a
conjugate match. It may not be the right one, so changing the "load" control is used to bring Rl to the right value, usually down, which also usually involves touch-up of the "tune" knob. The process is so easy and automatic that we don't need to think about it.

If you have a problem with this, draw a generator and load and calculate a few examples. Or see my article in the December 1997 issue of QEX, published by the ARRL.
Have fun
bob w4mb

878. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 17:14:32 UTC
From: n7ws@yahoo.com
Message-ID: <3c41bb68.92275380@news.triconet.org>
Source record: 150964

On Sun, 13 Jan 2002 15:50:39 GMT, Bob Miller <bamiller@texas.net> wrote:

|"Charles Johnston" <ctj92@cableone.net> wrote:
|
|>Hello Bob,
|> Thanks for dropping by my site and also for sharing your comments with
|>me. FYI I have added a line of text to the homepage that states the "
|>site is optimized for use with IE 6 " .
|
|You might also consider putting that in your usenet ads, and mention
|incompatibility with older versions of Netscape. Getting that notification when
|I arrive at your homepage, and having to reboot my computer to shut down, is a
|little late.

Or better still quit "advertising" in usenet, period. But I know better than that so...

I too use an older version of Netscape and I'm damned tired of cybergeek web page designers that assume everyone has the latest software, a 1 GHz processor with 1 Gbyte RAM, a 35" monitor, a dedicated T1 line and wants to look at their product via streaming video.

If these folks want me as a consumer, they are making a big mistake.

There are few nice things to say about the nation's telephone companies anymore but one of them is that they understand backward compatibility. You don't have to buy a new telephone every six months to keep making phone calls. In fact your old 1950 rotary dial handset should work just fine.

Telephone companies are run by business people who realize that they need to keep *all* of their customers, not just the ones with the latest whiz-band super-duper handset with a 1 GHz processor, 3-D video and your choice of "designer" color.

Wes N7WS

879. Re: 160 M antenna grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 17:26:09 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201130926.26f958cf@posting.google.com>
Source record: 150965

"Bill -N4DXR-" <bill@hovac.com> wrote in message
news:<gLf08.65815$2V4.5068002@atlpnn01.usenetserver.com>...
> Hi Reg,
>
> I am also planning on putting up an inverted L. If it does well enough on
> 80m, 40m, and 17m I will be taking down my inverted Vs for these bands.
> This is for aesthetic reasons only.
>
> I see the ARRL handbook says to use a variable capacitor of around 500-800
> mfd between the earth ground and shield of the coax. The handbooks version
> also has an overall wire length of 165 to 175 ft. You didn't mention
> anything about using a variable capacitor. Is it necessary? Or can I just
> hook the shield directly to the ground rod I have at the base of the pole I
> will be hanging the L on. It's a 40 ft utility pole with a 4 element
> tribander on top.
>
> Tnx,
> Bill

That 165-175 ft is for a longer L. Usually when this is done, it's to
raise the point of maximum current off the ground to lower ground
losses. It usually increases efficiency a bit, but it adds more
horizontal componant to the pattern. For regional work this is ok. For
hard core dx, you'd probably want to stick with a 1/4 wave. When you
use an extended L, you need the series cap to tune out the reactance.
A 1/4 wave L doesn't need this cap. Yes, on most the shield is
grounded at the base to the radials or whatever. Also, if you want a
real clean vertical pattern will a low amount of horizontal, add
another top wire and turn the antenna into a T. At this time, I have
both a 1/4 L about 45 ft tall, and I also have a T which is 42 ft tall
and a 1/4 wave top wire. Actually the way I have it set up, when
shorted together it has 4- 1/8 wave spokes as a hat. Max current on
that antenna is near the top of the vertical section. It seems to
usually outplay the L most of the time. I don't have many radials at
all yet. About 4 under the L, and 4 short ones under the T, with the
grounds connected to the water pipes also. Our pipes are all metal
where it counts. I want to add a bunch of short radials later as a
test. MK

880. Re: Hy-Gain TH7 Pick up only near Chicago

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 17:40:14 UTC
From: David Ornee <daveornee@mindspring.com>
Message-ID: <a1sgrq$v5k$1@slb6.atl.mindspring.net>
Source record: 150967

TH-7DX, 7 element, broadband Tri-Band Beam for 10, 15, and 20 Meters. This amazing tri-bander, using a dual driven 7 - element system maintains a VSWR of less than 2:1 across all bands, including ALL of 10 Meters. No compromise on gain performance was needed to achieve this efficiency. A unique combination of trapped and monoband parasitic elements produces a front-to-back ratio of 27 dB. The antenna includes exclusive diecast aluminum, rugged boom-to-mast clamp, and heavy gauge element-to-boom brackets.
The current new cost is $819.
TH-7DX tri-band antenna has a wind load of 9.4 Square Feet, Boom length of 24', Turning radius of 20 Feet, Longest element 31 feet, weighs 75 pounds, and will take a mast from 1.5 to 2.5 in.
This model is still in the Hy-Gain line. I used this antenna to work 335 countries on phone & CW.

"David Ornee" <daveornee@mindspring.com> wrote in message news:a1ppbe$6b7$1@slb6.atl.mindspring.net...
> For Sale: 13 year old Hy-Gain TH7 just taken down yesterday. For Pick up
> only in Chicago area. $300.
> KQ9W, David Ornee, Western Springs, IL
>
>

881. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 17:40:21 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c41c689$1@news.bnb-lp.com>
Source record: 150966

I agree completely.....

Wes said....
>If these folks want me as a consumer, they are making a big mistake.

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

882. MW LW SW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 17:48:11 UTC
From: MSC <MSC@jestbyte.com>
Message-ID: <a1sh7l$58m$1@newsg1.svr.pol.co.uk>
Source record: 150869

Hi,
not strictly amateur radio but, how can I have a long wire aerial for MW LW SW away up the garden and bring it to the house through COAX and then have it again be hi impedance for the aerial/earth socket? My area has a weak signal for most stations and the house is very high on interference.

Thanks

Spencer

883. Re: AM Antenna (Justice or Super Select-A-Tenna)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 18:15:29 UTC
From: Bob <balbert@cnmnetwork.com>
Message-ID: <59k08.469189$C8.34091936@bin4.nnrp.aus1.giganews.com>
Source record: 150870
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.broadcasti

You certainly can. Fancy (and expensive) antennas aren't very good and don't have any secrets in them, regardless of advertising hype.

A good antenna has to be large and installed in a clear, high place. No shortcuts work.

884. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 18:23:14 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C41D092.B6576A79@IEEE.org>
Source record: 150871

Robert Haviland wrote:
> Actually in RF power generation we don't want maximum power transfer.

We are usually more concerned with efficiency than with maximum power
transfer. If we were using a class-A amplifier, would we want to tune
for maximum power transfer?
--
cheers, CAM http://www.qsl.net/w5dxp

885. Re: 160 M antenna grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 18:38:19 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C41D421.111ADCCB@icok.net>
Source record: 150872

Reg,
Just as a bit of grounding information, I've found that using
the 'plumbing' can also cause problems, depending on where you
live. Since the ground becomes part of the radiating system, and
if you live in a multi-family dwelling, you've put your 'antenna'
in everyones home. Not exactly the thing to do to keep RFI down.
Same goes for using common fences around your/their property.
Does
this hold 'true' in every case? Of course not, but it is one of
'those' things to remember...
'Doc

886. Re: Balun recommendation?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 18:45:38 UTC
From: Tom Brown <tab@signalgrp.com>
Message-ID: <3C41D5D2.256459C1@signalgrp.com>
Source record: 150895

Roy,

I have a couple of current baluns in service for my own equipment and a goodly number of the local ARES folks use the same type: # 823 from http://www.thewireman.com/baluns.html .

Tom N4TAB
Wake Forest, NC

~~~~~~~~~~~~~~~~~~~

Roy Lewallen wrote:
>
> Can someone recommend a rugged and weatherproof commercial current
> balun? Low wind loading is desirable. This is for permanent installation
> at a local amateur emergency communications center. Operation will be 40
> and 75 meters.
>
> Thanks!
>
> Roy Lewallen, W7EL
~~~~~~~~~~~~~~~~~~~

887. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 19:02:20 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C41D8FE.60B3A4E0@gte.net>
Source record: 150873

Doug Faunt N6TQS +1-510-655-8604 wrote:

> Hi,
> I'm trying to locate some 500 ohm non-inductive termination
> resistors. The recipient wants 2 watt or 1 watt units, and I'm having
> no luck locally. He says "film" resistors are a problem, and one
> question is if carbon-film resistors are a problem, or is he conflating
> them with metal film resistors?
>
> Ohmite OY series seem as if they might do, being ceramic composition
> resistors, but they're not listed as being non-inductive.
>
> I need these by the first days of February, and would like to have as
> many as 5. Any suggestions about what will work, and where I can find
> them?
>
> 73, doug

Try Surplus Sales of Nebraska and Fair Radio- both have a WEB presence.

Dale W4OP

888. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 19:07:57 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <3pk34uogvm7iokimj5k4efjgqou1mn4gng@4ax.com>
Source record: 150874

On Sun, 13 Jan 2002 00:48:13 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>
>In summary, the value of soil conductivity that produces the maximum
>loss depends on the soil dielectric constant, frequency, number of
>radials, and radial length. I believe it also varies some with antenna
>height, although I didn't test that hypothesis. Shortening radials can
>sometimes improve the efficiency, particularly if the radials are
>elevated or the soil is a poor conductor.
>
>Ground modeling is one of the things that common programs probably do
>worst. The main shortcoming is the assumption that the ground is
>homogeneous to an infinite depth, while real ground can vary a great
>deal with depth, in both soil composition and moisture content. So it's
>impossible to say how closely the results from a program will agree with
>actual measurements in a given location when ground characteristics are
>an important player. Nevertheless, we can gain valuable insight about
>what's happening by observing the model's behavior in the sanitized
>world of the modeling program.
>
snip
>
>Roy Lewallen, W7EL
>
>
>Reg Edwards wrote:
>>
>> Conductivity at which loss is a maximum may very well be a function of
>> frequency. But who cares? Nobody is interested in that. Conductivity is the
>> independent variable in this investigation and the frequency is fixed.
>>
>> Frequency is that at which the vertical is 1/4-wavelength in height. The
>> single shallow-buried radial is also 1/4-wavelength in length. What could be
>> more simple ?
>>

Hi All,

Which just goes to show how useful this arcana of measuring mud in the
kitchen really proves to be - not very much at all given the poor
projections and off-hand dismissal of important factors by our
Punchinello. One might as well ask a gypsy.

Roy's work points out how modeling, even with its limitations, exceeds the promises of slavish devotion to superstitions. Thanx Roy, you've offered technical substance in the face of platitudes, and homilies of wheezing sentimentality.

73's
Richard Clark, KB7QHC

889. Balun recommendation?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 19:32:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C41E0CB.819703BA@eznec.com>
Source record: 150875

Can someone recommend a rugged and weatherproof commercial current balun? Low wind loading is desirable. This is for permanent installation at a local amateur emergency communications center. Operation will be 40 and 75 meters.

Thanks!

Roy Lewallen, W7EL

890. Re: 1.2 GHZ/23 CM Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 19:38:17 UTC
From: la8ak.xnd@online.no
Message-ID: <3c41e0b2.266861583@news.online.no>
Source record: 150876

On Sun, 13 Jan 2002 16:52:14 GMT, "Robert Fulton"
<robfult@carolina.rr.com> wrote:

>Looking for information sources and/or antenna recommendations for the 23cm
>band. Yagi's and large antennas are out of the question due to space
>restrictions (inside attic). I've seen Jpoles for 1.2, but was looking for
>other options as well. Thx in advance!
>
>-Rob
>KG4RAG
>
>
>
2 el biquads and dishes are small if you wish to avoid vertical
polarization

--
remove ,xnd to reply

891. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 19:46:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C41E422.F00E9AF7@eznec.com>
Source record: 150877

The transmission line models in EZNEC and NEC are only good for representing non-radiating transmission lines, not something like an antenna. The program will do a good job of modeling close spaced parallel conductors, whether used as a transmission line or antenna, with some cautions and limitations. The conductors must be spaced at least several wire diameters apart, and the segment junctions must be aligned to be directly across from each other. These are explained in the EZNEC manual in the topic found by looking up "Closely Spaced Wires" in the index. EZNEC isn't able to account for the dielectric between conductors in something like the original poster described. So although EZNEC or NEC-2 can model a multiple conductor dipole, the wire lengths won't be the same as for a real dipole made from multiple conductor insulated cable. I'd also expect the real one to be somewhat more narrow banded than an air-dielectric EZNEC model with greater wire spacing.

Programs intended for modeling transmission lines invariably assume, as EZNEC does with its transmission line models, that the line doesn't radiate. That makes these programs unsuitable for modeling any kind of antenna.

Roy Lewallen, W7EL

CAM wrote:
>
> Bob Cook wrote:
> > I am
> > wondering if software which is designed for modeling transmission lines
> > would be more applicable to designing this type of antenna than software
> > designed for modeling an antenna.
>
> EZNEC models transmission lines pretty well.
> --
> cheers, CAM http://www.qsl.net/w5dxp

892. Re: ANTENNA IDEA!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 19:54:23 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201131154.7cd09cdd@posting.google.com>
Source record: 150878

"marvin rosen" <raghead@worldnet.att.net> wrote in message
news:<n0%%7.254680$WW.13364529@bgtnsc05-news.ops.worldnet.att.net>...
> Would it be practical to have a sloped 65' piece of wire, attached to a
> vertical 80 mtr loading coil mounted on a piece of pvc pipe on a chimney?
> This coil would also have a top hat. The bottom end of the wire would go to
> a tuner & appropriate radials.

I assume you want a vertical for dx reasons? If you used a hat, it's not going to do much good down at the coil. You would want the hat spokes at the top of the 65 ft wire, and sloping downwards or whatever. But then you have the problem of unhooking them from the system for 80m. Seems to me it would be easier and more effective to just put up a normal 80m dipole some way, even if the elements are in a horizontal V. Use a feedline that is the appx length to make a 1/4 wave on 160m counting the antenna legs. IE: If you used an 80m dipole which is 60 ft a leg, and used a 60-70 ft long coax, and then shorted the center pin to shield at the shack, you could feed it like a T vertical on 160m. You can use the tuner to get a good match if needed. You would have normal dipole performance for 80m, which is really better than most verticals unless you work only dx, and it will work fairly well on 160m as a T. Being no coils are used, it's fairly efficient. The only downside is you are feeding the 160m direct from the shack. But I've found it really doesn't hurt you too much on that band. I've got an inv L fed normally from a ground point in the backyard, and I use my 80 turnstile as a crossed T vertical fed direct from the shack. It is the best usually. But that could change if I added a bunch of radials to the L. If I added radials for the T, I'd want to add them from the shack out I guess. I'm lucky here in that the ground cdx are pretty good. I could feed it from ground also if I really wanted to. Actually , I made a relay setup a few months ago to be able to switch at the base of the mast, but the dang relay contacts caused me extra AM-BC qrm, and I had to junk that idea. The downside was worse than the plus...:/ So I went back to feeding direct from the tuner. I'm still having a problem of very strong AM-BC energy near my mast and around the house. This seems to have slowly cropped up over the past few months. I've been thinking external rectification, but I haven't been able to find anything so far. I'm now starting to think it may be related to all the rain we have had this year, which was near record breaking, and the improved ground cdx and increased AM signal strength which I bet I have. Dunno...About to drive me nuts. It doesn't bother my 830 much, but it does my 706. And the 706 was pretty clean a year ago so it's gotten a lot worse in the past year. Either or the radio is broke. I thought maybe the 706 had a problem with the BPF's, but I can't find any problems so far. Seems to be an increased

local RF level and the radio just can't handle it. I know my mast, all the above ground electrical conduit, and even my water heater is HOT with AM-BC RF. Really weird...MK

893. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 19:58:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C41E6C8.86BEFF5F@eznec.com>
Source record: 150879

This really must be a reactionary group. Two people have said they use an older version of Netscape, and I'm a third. I read so many tales about ugly problems in Netscape 6, I've never upgraded from the version 4 I've been using for years. I almost never encounter a site that doesn't function properly with version 4. Besides a general dislike for Microsoft's attitude and way of doing business, I like Netscape because a lot of hackers share Charles' attitude and don't bother spending much time figuring out how to exploit Netscape's vulnerabilities.

Roy Lewallen, W7EL

Wes Stewart wrote:
>
> I too use an older version of Netscape . . .

894. Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 20:02:07 UTC
From: rasw <atdot.dotat@at.at>
Message-ID: <a1sp48$37ci6$1@rn.area.com>
Source record: 150880

I've been out of ham radio for about 20 years.

Does anyone still make "Grid Dip Meters" (or are they called something else, now that there are no more "grids?") A search on google just turned up a lot of old surplus equipment and ancient photos.

I would have expected there to be nice digital ones these days.

--
Robert "AF2M"

email: "A F 2 M (@) r o b e r t . t o"

895. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 20:10:34 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3C41E9BA.5318399A@hiwaay.net>
Source record: 150881

Charles-
Your arrogance continues to astound me- for your information-
I have the older version (4.7) and at least two of the 6.x versions on my machine, and have done A/B tests. in all cases, the older version is better, in my opinion. The newer version takes MUCH longer to load, and is no more problem free. Everything it does takes longer on the same machine.

It is interesting that Netscape did NOT abandon the 4.x versions when 6.x was found to have so many problems, even after the "fix" publication.

I no longer visit your site, and consider myself wise. My earlier visits were irritating, because of the music. The later visits were no better.
Bill-W4BSG

Charles Johnston wrote:
>
> Hello Bob,
> I do not want to seem insensitive but the issue here is that you
> continue to use an older non-standards compliant browser. A simple
> upgrade to a modern browser such as Netscape 6, IE 6, or Opera 6 would
> solve your dilemma and would " fix " my web site.
> BTW there is nothing inherent in the web page to affect your system
> from completing a proper shut down.
> --
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com

896. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 20:23:36 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c41ecc9$1@news.bnb-lp.com>
Source record: 150882

Hello Bill,
Thanks for sharing your thoughts and comments with the rest of us....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

897. Re: 160 meter antenna recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 20:41:46 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a1sr95$38v$1@bob.news.rcn.net>
Source record: 150883

"AB2HR" <ab2hr@arrl.net> wrote:
> "W4WNT" <w4wnt@carolina.rr.com> wrote:

> > Find ON4UN's excellent book on Low Band DXing.
> > John spends quite a bit of time discussing elevated radials,
> > which sound like what you can use here.

I'll second that!

> Can you tell me the title of this book?

The book is "ON4UN's Low Band DXing." See:

http://www.arrl.org/catalog/?category=&words=ON4UN&SearchWords.x=9&SearchWords.y
=8

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

898. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 20:53:37 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <afFBPF1nYJtJcTQUtWOHkajlfWGV@4ax.com>
Source record: 150884

"rasw" <atdot.dotat@at.at> wrote:

>I've been out of ham radio for about 20 years.
>
>Does anyone still make "Grid Dip Meters" (or are they called something else,
>now that there are no more "grids?") A search on google just turned up a lot
>of old surplus equipment and ancient photos.
>
>I would have expected there to be nice digital ones these days.

MFJ still makes one, a model 201 dip meter for 1.5 to 250 mhz. Try the MFJ web site...

Otherwise, I have one I built back in the 80s, a Heathkit solid state "dip meter." You can find them occasionally on ebay. There's generally a few vacuum tube models for auction, too -- they're getting to be quite teh collector items, especially the Millen models.

Bob
k5qwg

899. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 20:59:37 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C41F539.9B868EA3@IEEE.org>
Source record: 150885

rasw wrote:
> Does anyone still make "Grid Dip Meters" (or are they called something else,
> now that there are no more "grids?") A search on google just turned up a lot
> of old surplus equipment and ancient photos.
>
> I would have expected there to be nice digital ones these days.

Digital ones don't have grids. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

900. Re: 160 M antenna grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 21:13:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1t20j$sllem$1@ID-124126.news.dfncis.de>
Source record: 150892

Doc,

You are quite correct to advise readers of the possibility of RFI sneaking in to neighboring flats via common water, gas and electricity services. It gets around as easy as from one room to another in an ordinary house. Sometimes precautions may be needed and this is often dealt with more conveniently and efficiently at the equipments being interfered with.

It is much less likely to sneak into a separate house next door because of high attenuation when the services run underground. As is well known the loss in buried radials is high.

But in any case, the transmitter ground terminal is always connected to the electric power ground which in turn is bonded to domestic water pipes and any other services in metal conduits, for reasons of safety.

Most people run no more than 100 watts of RF. I wouldn't recommend using the domestic plumbing system as the sole ground for a 1 KW transmitter. But I would always connect an external RF radial system or RF earth-plate to the incoming water supply pipe near to where the pipe enters the premises.

RFI between separate houses and gardens in suburban districts, specially when the antenna is not sharply directive, is almost always caused by direct radiation from the antenna. The far smaller amount of power which might sometimes be radiated from a feedline is negligible in comparison and rarely a problem with neighbours.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
'Doc <w5lz@icok.net> wrote in message news:3C41D421.111ADCCB@icok.net...
> Reg,
> Just as a bit of grounding information, I've found that using
> the 'plumbing' can also cause problems, depending on where you
> live. Since the ground becomes part of the radiating system, and
> if you live in a multi-family dwelling, you've put your 'antenna'
> in everyones home. Not exactly the thing to do to keep RFI down.
> Same goes for using common fences around your/their property.
> Does
> this hold 'true' in every case? Of course not, but it is one of
> 'those' things to remember...
> 'Doc

901. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 21:14:14 UTC
From: rasw <atdot.dotat@at.at>
Message-ID: <a1stbf$37m26$1@rn.area.com>
Source record: 150886

"Bob Miller" <bamiller@texas.net> wrote in message
news:afFBPF1nYJtJcTQUtWOHkajlfWGV@4ax.com...
> "rasw" <atdot.dotat@at.at> wrote:

> Otherwise, I have one I built back in the 80s, a Heathkit solid state "dip
> meter." You can find them occasionally on ebay. There's generally a few
vacuum
> tube models for auction, too -- they're getting to be quite teh collector
items,
> especially the Millen models.
>

Well, how do these modern hams tune their inductors and coils these days? Or
has building and maintaing equipment gone out the window with CW?

--
robert

902. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 21:37:04 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C41FE00.929A90F8@coqui.net>
Source record: 150887

rasw wrote:
>
> "Bob Miller" <bamiller@texas.net> wrote in message
> news:afFBPF1nYJtJcTQUtWOHkajlfWGV@4ax.com...
> > "rasw" <atdot.dotat@at.at> wrote:
>
> > Otherwise, I have one I built back in the 80s, a Heathkit solid state "dip
> > meter." You can find them occasionally on ebay. There's generally a few
> vacuum
> > tube models for auction, too -- they're getting to be quite teh collector
> items,
> > especially the Millen models.
> >
>
> Well, how do these modern hams tune their inductors and coils these days? Or
> has building and maintaing equipment gone out the window with CW?
>
> --
> robert

Old GDOs still work.
-Bill

903. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 21:41:11 UTC
From: graywolf15222@yahoo.com
Message-ID: <a53b928c.0201131341.20d7201e@posting.google.com>
Source record: 150888

Hi Jerry,

No Iï¿½m not a teacher. I'm an electrical engineer.

No you don't need to cut your dipole to an exact 1:1 VSWR. However, if you are planning on using the dipole for one band. Then its worth while to adjust the antenna for minimum vswr.

You don't need to place the transmatch at the antenna. As you stated, the antenna tuner will re-reflected the reflected power back to the antenna minus any losses. However, there are two important things to remember. You need to use low loss transmission line and it has to have a high break down voltage rating. This is especially important when using coax. Coax is not as forgiving as balance line. Coax with a high VSWR will have higher losses and with high power, there is a danger of exceeding the breakdown voltage rating of dielectric. So if you're planning on running 1500 watts and using coax. I would recommend keeping the VSWR to reasonable level and use RG-213 or better. The Rg-213 dielectric has breakdown voltage of 5000 volts and by they way becareful of the pl-259s too they have breakdown voltage of only 300 volts. I like N connectors myself. The breakdown voltage is 1500 volts.

You mention that you want to use a single wire dipole for multiband. You are on the right track. Just cut your 40-meter dipole and feed it with ladder line. A good flexible tuner you should be able to match the antenna anywhere between 40 ï¿½ 10 meters. Just make sure you use a good current type balun with it. A lot of these antenna tuners have voltage baluns built into them. A current balun will keep the currents in each leg of the ladder line equal. If they are not equal the line will radiate. I've experience rfi trouble in the shack because of this. I have my balun mount outside and I use rg-8 to the antenna tuner.

As several of the others guys said in this thread, the dipole is going have multiple lobes. Some of lobes will be in the desired direction and some will not. You will also have nulls too. The whole thing is a trade off. You're trading one thing for something else.

I also used a butternut it worked great from 17 ï¿½ 80. 10 meters was ok but 12 meters sucked. I think the radiation pattern was shooting straight up. I had trouble with the 15-meter stub too. It was constantly losing up. I wish butternut would put a little more effort into mechanical construction of that antenna.

73's

GW

"Jerry" <jerryaa@prodigy.net> wrote in message
news:<TYW%7.6405$kt2.1166335139@newssvr15.news.prodigy.com>...
> GW, thanks for the example. Are you a teacher? I had understood conjungate
> matching, (to a point). Other writers didn t call it conjugate matching.
> There are some other writers out there who say you have to cut your dipole
> to get an exact 1:1 SWR; that you have to have your transmatch at the
> antenna; and that all power reflected back to the line is lost. From
> Maxwell's statement, it would seem one could use a "random length" dipole
> cut to a length for the lowest frequency in use and use a near lossless line
> like ladder line or open wire line, and an antenna tuner and you would have
> an "all" band antenna.
>
> It would be nice to have just one dipole out there instead of the four that
> I have for 12,17,20, and 40.(and 15 using the 40 meter dipole) If I
> understand Maxwell, I could use a 40 meter dipole and use it on
> 40,30,20,17,15 and 12 meters if I have a near lossless line and, proper
> matching. Since SWR really doesn t matter since power is eventually
> reflected back to the load anyway, minus any attenuation on the line. (?)
>
> It would seem like there would be practical limitations, if that were true.
> I did however, get out on my Butternut HV6X on 17 meter with my tuner
> getting SWR down to 1.4:1. 12 meter was another story. But in this solar
> cycle anything is possible and even an inefficient antenna can get out.
> "graywolf" <graywolf15222@yahoo.com> wrote in message
> news:a53b928c.0201101258.1aa767fe@posting.google.com...
> > Jerry,
> >
> > Conjugate matching is what happens, when you are coupling the 50-ohm
> > output of your transmitter or amplifier to a load that is not 50 ohm.
> > You need some type of matching network such as a gamma or beta match
> > or an antenna tuner.
> >
> > For example when you adjust your antenna tuner so as to obtain a VSWR
> > of 1:1 you are matching the 50-ohm transmitter to the complex
> > impedance of your antenna system and by system I mean the antenna and
> > transmission line.
> >
> > Let's say that the complex impedance looking into the coax from the
> > antenna is 60 - j100 ohms. When you adjust your antenna tuner to a
> > VSWR of 1:1 the transmitter is seeing 50 +/- j 0 ohms and the antenna
> > tuner's output is still seeing 60 - j 100 but if your were to
> > measuring the complex impedance looking into the tuner's output
> > connector you would measure 60 +j100. The tuner's output impedance is
> > the opposite of the impedance looking into the coax. Since the antenna
> > tuner's output is tuned to 60 + j100 and the complex impedance from
> > the antenna system is 60 - j100. The reactance values cancel out. This
> > is conjugate matching. Picture it as if you were looking at yourself
> > in a mirror. Raise your right arm and in the mirror it's appears to be
> > you're left arm that was raised.

> >
> >
> > I hope this helps you. I tried to make it simple but it is a complex
> > subject. However you are reading the right book.
> >
> > Best of luck,
> >
> >
> > GW
> >
> >
> >
> >
> >
> >
> > "Jerry" <jerryaa@prodigy.net> wrote in message
> news:<XZ6%7.4574$B7.608063667@newssvr16.news.prodigy.com>...
> > > I have read parts of Walter Maxwell's book Reflections II. He mentions
> the
> > > conjugate matching theorum. I still don t really understand it. In
> simple
> > > terms can somebody describe it and how it affects transmission lines,
> > > matching, antennas, tuners and getting the antenna system to operate
> > > efficiently?
> > >
> > > Also why doesn't ARRL Antenna Book or Joseph J. Carr mention it in his
> book?
> > > (Why) or is it controversial?

904. Free IOTA List download - UPDATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 21:42:39 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c41ff4f@news.bnb-lp.com>
Source record: 150889

The FREE IOTA List download has been updated as of 13-Jan-2002 and is
located on the IOTA List Page of the web site listed below.

- available as text file -or- MS Word document

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

905. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 22:06:09 UTC
From: graywolf15222@yahoo.com
Message-ID: <a53b928c.0201131406.259519dd@posting.google.com>
Source record: 150890

Reg,

Why do I get a feeling that you are setting this Yankee up?

Ok, I can't resist here's my answer to your question.

I don't think it matters. The principle is the same. You are matching
the generator to the load.

GW

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<a1m18e$ro4ns$2@ID-124126.news.dfncis.de>...
> > Jerry,
> >
> > Conjugate matching is what happens, when you are coupling the 50-ohm
> > output of your transmitter or amplifier to a load that is not 50 ohm.
> > You need some type of matching network such as a gamma or beta match
> > or an antenna tuner.
> >
> > For example when you adjust your antenna tuner so as to obtain a VSWR
> > of 1:1 you are matching the 50-ohm transmitter to the complex
> > impedance of your antenna system and by system I mean the antenna and
> > transmission line.
> >
> > Let's say that the complex impedance looking into the coax from the
> > antenna is 60 - j100 ohms. When you adjust your antenna tuner to a
> > VSWR of 1:1 the transmitter is seeing 50 +/- j 0 ohms and the antenna
> > tuner's output is still seeing 60 - j 100 but if your were to
> > measuring the complex impedance looking into the tuner's output
> > connector you would measure 60 +j100. The tuner's output impedance is
> > the opposite of the impedance looking into the coax. Since the antenna
> > tuner's output is tuned to 60 + j100 and the complex impedance from
> > the antenna system is 60 - j100. The reactance values cancel out. This
> > is conjugate matching. Picture it as if you were looking at yourself
> > in a mirror. Raise your right arm and in the mirror it's appears to be
> > you're left arm that was raised.
> >
> >
> > I hope this helps you. I tried to make it simple but it is a complex
> > subject. However you are reading the right book.
> ================================
>
> What do you do when the output impedance of the transmitter is not 50-ohms ?
> ---
> Reg.

906. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 22:29:35 UTC
From: n7ws@yahoo.com
Message-ID: <3c4209f1.112383436@news.triconet.org>
Source record: 150891

On Sun, 13 Jan 2002 00:48:13 -0800, Roy Lewallen <w7el@eznec.com> wrote:

A great post. Makes following this group worthwhile.

|Here are some results using EZNEC/4 with the NEC-4 calculating engine.

73,

Wes N7WS

907. Re: grounding question -- ideas needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 22:38:16 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C420C71.170C4E76@bellatlantic.net>
Source record: 150893

You'll need to bond your "made electrodes" (ground rods)
to the house wiring grounding electrode system, per the
National Electrical Code. It was not clear if the first ground
("on the other side of the house") you mentioned is already
part of that system or not. You might want to take a look at
the PolyPhaser web site to read about lightning protection.

Dave Johnson wrote:

> I have the following setup:
>
> 1 2m/440 roof mounted ground plane antenna
> 1 backyard dipole
>
> Both feed to the shack at the same house entry point
>
> The roof ground plane is grounded with #6 to a ground on other side
> of house
>
> I have 2 soon to be installed coax lightning arrestors for each of
> the antennas. Another #6 will go from outside the house entry point to
> a ground rod below.
>
> Should the single point ground (inside the house) which goes outside
> to connect directly to the ground these lightning arrestors are
> connected to right outside the house(so all of them run over the same
> #6 wire to the ground rod), or run a separate #6 run below to the same
> ground rod?
>
> The problem I see with connecting them all together is any power on
> the coax outside will go right in the house if I get a strike
> (although the center conductor will be protected). However if I keep
> them separate it must go to ground first.
>
> thanks for assistance

908. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 23:27:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1t5d5$t319n$1@ID-124126.news.dfncis.de>
Source record: 150894

> Reg,
>
> Why do I get a feeling that you are
> setting this Yankee up? Ok, I can't resist
> here's my answer to your question.
>
> I don't think it matters. The principle is the same.
> You are matching the generator to the load.
==========

GW, I'm really quite harmless. ;o)

You are right - it doesn't matter - because you are NOT matching the generator to the load.

All you are doing is setting the load to some particular value such as 50-ohms. That occurs when the SWR meter indicates 1:1 and you can feel happy.

You cannot match the load to the generator because you don't know what the generator internal resistance is. Not even the manufacturer will tell you. It is not included in the specification. Even the transmitter designer has no interest in what it might be.

50-ohms (or whatever) is the load resistance into which the PA will deliver rated output power without exceeding its internal voltage and current ratings or the maximum permitted internal dissipation. There may also be a specified level of signal distortion, and a specified level of harmonic generation.

Rated power output is NOT the maximum available power.

To draw the maximum available output power is likely to wreck the output transistors due to excessive collector current, volts, or power dissipation.

Reg.

909. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 23:49:19 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1t7n3$sun2l$1@ID-124126.news.dfncis.de>
Source record: 150898

Connect a 1", 2" or 3" diameter loop of wire from coax inner to outer on your Autek or 259B antenna analyser.

Slide the loop over one end of the coil or tuned circuit to be tested. Slowly vary analyser frequency looking for a sharp increase in impedance from zero ohms to several 100 ohms depending on coil Q.

Adjust closeness of coupling to the coil as necessary. Finish with loose coupling.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

910. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-13 23:50:44 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C421D42.6199DC83@shaw.ca>
Source record: 150896

Wes Stewart wrote:
>
> On Sun, 13 Jan 2002 15:50:39 GMT, Bob Miller <bamiller@texas.net> wrote:
>
> |"Charles Johnston" <ctj92@cableone.net> wrote:
> |
> |>Hello Bob,
> |> Thanks for dropping by my site and also for sharing your comments with
> |>me. FYI I have added a line of text to the homepage that states the "
> |>site is optimized for use with IE 6 " .
> |
> |You might also consider putting that in your usenet ads, and mention
> |incompatibility with older versions of Netscape. Getting that notification when
> |I arrive at your homepage, and having to reboot my computer to shut down, is a
> |little late.
>
> Or better still quit "advertising" in usenet, period. But I know better than
> that so...
>
> I too use an older version of Netscape and I'm damned tired of cybergeek web
> page designers that assume everyone has the latest software, a 1 GHz processor
> with 1 Gbyte RAM, a 35" monitor, a dedicated T1 line and wants to look at their
> product via streaming video.
>
> If these folks want me as a consumer, they are making a big mistake.
>
> There are few nice things to say about the nation's telephone companies anymore
> but one of them is that they understand backward compatibility. You don't have
> to buy a new telephone every six months to keep making phone calls. In fact your
> old 1950 rotary dial handset should work just fine.
>
> Telephone companies are run by business people who realize that they need to
> keep *all* of their customers, not just the ones with the latest whiz-band
> super-duper handset with a 1 GHz processor, 3-D video and your choice of
> "designer" color.
>
> Wes N7WS

Ditto! Twice I've put in the new Netscape 6.x and twice
went back to my
4.78 versions. They were produced before AOL could do too
much damage!
--
Diagnosed Type II Diabetes March 5 2001

Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

911. Re: to 'Doc

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 00:04:16 UTC
From: "Stef@no" <NOSPAMvisenta9@inwind.it>
Message-ID: <4gp08.22758$aD.850705@twister2.libero.it>
Source record: 150897

You can make any very short antenna 'work' with a 'large'
> enough matching network. The performance of a very short antenna
> isn't always worth the time and effort, though...
> 'Doc

Dear 'Doc,
no space, no big antennas!!!
my only hope is that 7 meter old CB antenna without coils (only the vertical pipe) should be a little bit better than a 10 - 80 meter vertical trap antenna...
thue or not??

Ciao
from Venice Island...

912. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 00:15:52 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C42233E.20859B62@icok.net>
Source record: 150899

CAM,
And ~if~ my aunt had been born with wheels, she ~might~
have been a 'tea trolly'...
'Doc

913. Re: LDG AT-11 MP Automatic Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 00:24:46 UTC
From: "No One"
Message-ID: <Xns9195BB4FECF4Dhjcarmichaelhotmailc@209.155.56.95>
Source record: 150900

My AT-11MP does something similiar every now and then. I discovered a fix....

1.Turn the AT-11 off via the power switch on front panel.
2. Transmit a low power tuning signal with your rig (around 20-30 watts).
3. While the rig is transmitting, turn the AT-11 power switch back on (Auto/Semi switch in Auto position).
4. Mine then finds a match.

No idea why this is sometimes necessary...

73

"Diablo" <diablo_42@hotmail.com> wrote in news:u37berk80nct82@corp.supernews.com:

> Does anybody have any experience with the LDG AT-11 MP Auto Antenna
> Tuner? I just got one, and after the first attempt at tuning the
> antenna, it fails to give the proper power up indication. When I press
> the tune button, it seems to find a match, but when I go back to
> receive, both needles continuously bounce to full scale and back to
> zero. I'm not sure if it's something I did or if it has a problem from
> the factory. I can load and tune the antenna using a manual tuner.
>
> Thanks,
>
> Bob WA7VKF
>
>
>

914. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 02:27:37 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c4246ed_1@news1.prserv.net>
Source record: 150903

You'll find no "dip meter" in any modern electronics lab. First, you design the circuit using one of the computer software design tools (Spice or the like), and finalize the design using a network analyzer. Much more accurate information. As for how do hams do it? I'm not sure that there are any tuned circuits in most modern ham rigs. All synthesized and digitally filtered. How else could you get a 100 watt transmitter and a receiver in a box the size of a IC-706 or TS-50?
--
Crazy George
Remove NO and SPAM from return address

rasw <atdot.dotat@at.at> wrote in message news:a1sp48$37ci6$1@rn.area.com...
> I've been out of ham radio for about 20 years.
>
> Does anyone still make "Grid Dip Meters" (or are they called something
else,
> now that there are no more "grids?") A search on google just turned up a
lot
> of old surplus equipment and ancient photos.
>
> I would have expected there to be nice digital ones these days.
>
> --
> Robert "AF2M"
>
> email: "A F 2 M (@) r o b e r t . t o"
>
>

915. Re: Broadband Tank Circuit Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 02:34:03 UTC
From: n2ey@aol.com
Message-ID: <20020113213403.05154.00001070@mb-fm.aol.com>
Source record: 150902

I know this is a bit old, but I finally found the info to answer the questions.
Some of them, anyway.

In article <9tprogcrq0@208.206.142.84>, Dick Carroll <dixie@townsqr.com>
writes:

>N2EY wrote:
>>
>> In article <3832adca.0111231751.e7047f1@posting.google.com>,
>> tom_bruhns@agilent.com (Tom Bruhns) writes:
>>
>> >BTW, the old Central Electronics
>> >rigs used cathode-follower outputs, as I recall, for broadband output.
>>
>> No, that's not correct.
>>
>> The old CE rigs (100V, 200V, 600L) achieved no-tune 50 ohm output with
>> conventional-looking tube circuits. The trick was the use of special
>patented
>> tuned circuits. The patent should still be available from the Patent Office
>> website. Home construction of one would be legal because the patent ran out
>> long ago.

> Any idea how they did that? I once came onto a set of those tank
>circuits from a salvaged 600L at a hamfest, and was tempted to buy them,
>but wasn't sure about their function and couldn't tell anything about
>them from viewing them. They were potted. I always wondered how they'd
>broadband them without resistive loading and dropping the efficiency
>and/or the Q too much. Looks like another compromise, or maybe too much
>of a tradeoff.

No compromise and no tradeoff.

Electric Radio #77 (September, 1995) has an in-depth article on the 600L and
the broadband couplers. They are a unique and ingenious design of four windings
that uses both mutual inductance and stray capacitance to do the job. The
amplifier delivers efficiencies of 60-65% on 160 thru 20 meters using a single
Class AB2 813. Efficiency on 15 and 10 is a little lower. Harmonic rejection is
greater than current FCC requirements. The couplers would work efficently into
an SWR of up to 2:1

Some QSTs of the 1960-61 era have ads for the CE products that briefly explain
the couplers, but not in much detail.

I won't try to describe how the couplers work here, because I simply can't do
the subject justice without a lot of diagrams. See US Patent #2.864,060

issued to Joe Batchelor in December, 1958 (application filed August 1955). Joe is the "father" of most of the CE designs.

Why did the idea not catch on beyond the 100V, 200V and 600L? Four reasons:

1) Because it was patented, other manufacturers would have had to pay royalties. The patent ran out in 1975, about when solid state finals began to be the focus of attention.

2) The design method is not described in the patent. It appears that the designs may have evolved by cut-and-try, and most homebrewers would not have the test equipment necessary to develop a set of couplers.

3) CE was bought out by Zenith in the very early 1960s, and the amateur line discontinued. The fabled 100R receiver never got beyond the prototype stage (the prototype still exists). Zenith simply abandoned the amateur radio products - kinda sad, considering where the Zenith name came from.

4) The pi-network had become the standard output circuit for amateur HF/MF transmitters. It was easier to design and bandswitch, and could be designed to have a wider matching range.

But the fact remains that more than 46 years ago Joe Batchelor had worked out all the problems of how to build a no-tune amateur radio transmitter using tubes, capable of hundreds of watts output.

73 de Jim, N2EY

916. Re: Free IOTA List download - UPDATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 02:54:33 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c424870$1@news.bnb-lp.com>
Source record: 150904

Hello KC8SSG,
IOTA stands for "Islands On The Air " and is an awards program
administered by the Radio Society of Great Britain. The IOTA List
contains the island names and official IOTA reference number for all the
900+ islands recognized in the awards program.

The downloadable IOTA List is on the IOTA List Download page of the
following web site

http://www.ab7sl.com the same one listed below in my signature
lines.....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

917. Re: Butternut HF5V-III wont tune on 20 Meters pse help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 02:57:49 UTC
From: Eric Bourlet <ebourlet@gte.net>
Message-ID: <NOr08.1214$ud6.410570@dfiatx1-snr1.gtei.net>
Source record: 150905

Thanks but the HF5V-III does not have a 30 meter coil it only has a 40 and 80 meter coil. This is an older Butternut. When I contacted Butternut tech support they said it sounded like a problem with the 40 Meter capacitor . I checked it for being shorted with an Ohm meter and it looks good that way but I do not own a cap checker. Any other ideas?

918. Re: 160 M antenna grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 03:06:11 UTC
From: Bill -N4DXR- <bill@hovac.com>
Message-ID: <DWr08.6783$k87.779232@atlpnn01.usenetserver.com>
Source record: 150906

Hi Reg,

You are correct. I misread the schematic in the handbook. The variable capacitor is between the center condutor of the coax and the wire of the antenna.

BTW, my coax feed line to the L will be about 120 feet long.

73
Bill

919. Re: Free IOTA List download - UPDATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 03:06:40 UTC
From: KC8SSG <kc8ssg@qsl.net>
Message-ID: <4Xr08.189$903.2262@news>
Source record: 150901

Forgive my idiocy but what is IOTA? and where is the website?
"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c41ff4f@news.bnb-lp.com...
> The FREE IOTA List download has been updated as of 13-Jan-2002 and is
> located on the IOTA List Page of the web site listed below.
>
> - available as text file -or- MS Word document
>
>
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

920. Re: MW LW SW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 03:28:35 UTC
From: RS <KA8OZO@cinci.rr.com>
Message-ID: <Dfs08.7199$yy3.794726@typhoon.neo.rr.com>
Source record: 150907

Hi Spencer,

you might try a faraday shield.

tie the center conductor of the coax to your long wire and the shield to
nothing (be sure solder the connection and to seal the end of the coax with
silicone or some such against the weather). run the other end to the radio.
ground the inside end of the shield to your radio ground. you might want to
run it though a tuner for better matching (a little higher rx sig).
grounding
the outside of the coax causes any electrical noise from inside the house to
go directly to ground. should work well for receive.

another option is a t2fd (terminated tilted folded dipole) fed with coax.
see
http://www.radiohc.org/Distributions/Dxers/ttfd2.html
for directions on building this dipole antenna. i am currently building a
60
meter long version for transceive operation. i am using a transformer and
load
from b&w (commercial manufacturer). if you want to use this for receive
only
then the one on the web site will be sufficient.

if you decide to try one of these options drop me a line and let me know how
it
works for you.

73,
Raleigh AB8KG

MSC <MSC@jestbyte.com> wrote in message
news:a1sh7l$58m$1@newsg1.svr.pol.co.uk...
> Hi,
> not strictly amateur radio but, how can I have a long wire aerial for MW
LW
> SW away up the garden and bring it to the house through COAX and then have
> it again be hi impedance for the aerial/earth socket? My area has a weak
> signal for most stations and the house is very high on interference.
>
> Thanks
>
> Spencer
>
>
>

921. portable HF antenna needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 03:31:09 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C4250AD.A77E918D@tampabay.rr.com>
Source record: 150908

hello
i am going to be traveling to atlanta GA. in feb and staying in a hotel
for 4-5 days while my wife is in a seminar so i am planning to take the
Icom 706 with me but i have no idea what will be functional inside the
hotel room with no outside access
i currently use hustler resinators for the mobile dont know if they
would work on a mag mohjnt inside the room or not
any ideas please let me know
thanks

922. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 03:42:19 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C42539B.A92737AD@coqui.net>
Source record: 150910

"Phil B." wrote:
>
> Hello all.
> I am now living in a typical South Fla home, stucco exterior with
> those lovely awning-type crank-open windows, so replacing a pane with
> plexiglass isn't possible, as in previous dwellings. Before I drill a
> hole through the wall, as the cable guy did, does anyone have a neater
> way of passing the coax through the wall? I am thinking of putting
> some kind of plate on the outside, running RG8x through a hole, then
> another plate with a connector on the interior wall. Anyone have pics
> or description of a good entry through concrete block wall?
> Thanks es 73
> Phil N4COD

As an ex-cable installer, I second your idea. I have done that
before...one particular installation was where the guy wanted outlets
OUTSIDE for temporary connections out on his deck, patio, etc. The
trick was doing it with no wires showing which meant poking thru the
back of his interior outlets.
You can get blank wall plates for this purpose and for outside you might
want to consider mounting a regular weatherproof receptacle box. That
will allow you to enter the box from the bottom (neater) and whatever
connection is inside will remain closed to the weather.
Drill from inside out so that plaster chipping can be covered by the box
:-)
-Bill WX4A

923. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 03:44:22 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C4253C5.F8997531@tampabay.rr.com>
Source record: 150911

hey phl
i have the same problem except that i dont mind a big gapping hole in the wall....grin
what you can do is if you can get into the attic is fish the cable thru the overhang into the attic then down the inside of the wallmy problem here is i have no access to the attic some idiot installed an attic fan in the only hole to the attic
good luck

"Phil B." wrote:

> Hello all.
> I am now living in a typical South Fla home, stucco exterior with
> those lovely awning-type crank-open windows, so replacing a pane with
> plexiglass isn't possible, as in previous dwellings. Before I drill a
> hole through the wall, as the cable guy did, does anyone have a neater
> way of passing the coax through the wall? I am thinking of putting
> some kind of plate on the outside, running RG8x through a hole, then
> another plate with a connector on the interior wall. Anyone have pics
> or description of a good entry through concrete block wall?
> Thanks es 73
> Phil N4COD

924. Re: 160 meter antenna recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 04:01:42 UTC
From: me@here.com
Message-ID: <3c425688.14208656@news.mindspring.com>
Source record: 150914

Hello Raymond,
I had an inv-L up for 4 years before I had to move. It was 170 ft
overall length. In which abt 1000 Pf worth of cap across the leads
brought it to resonance. also closer to 50 Ohms. With a coil of
about 30 ft on a 2 in form, simply tap the shield and prune for best
SWR. This antenna had 12 radial under it @ 65 feet long. Quite
a goofy setup but it worked great. Best contact was VK. The height
of the antenna was only 60 feet. I can assume that any higher to near-
eqal height to top length would be even better. anyway gud luck and
73 from GA
de KR4TG
Mike

On Sat, 12 Jan 2002 21:30:38 GMT, AB2HR <ab2hr@arrl.net> wrote:

> Hey folks, live in a suburban area, and am interested in
>working 160 meters. I don't have any covenants or restrictions to
>work around, but the size of my lot is typically suburban. I have
>access to my lot and the lot next door to me. I'm interesting in
>hearing what might work as far as a 160 meter antenna. I've been
>playing with the idea of mounting a 45 foot vertical (with capacitance
>hat to complete the 1/4 wave vertical) on my garage roof (about 8-10
>feet high). From there, I'm looking at four relatively heavy ground
>wires forming a ground plane from the roof and attaching to a ground
>"web" (would run as many and as long smaller gage copper wires as
>needed) to the ground.
> Obviously, a 45 foot vertical mast would need guying, and
>that's just one of the downsides. I live in an older 2-story house,
>the length of which is possibly 70-80 feet long... Would it be out of
>line to think that a bent dipole along the roof of the house might
>work? We're talking older (100+ years) woodframe construction here,
>the only detuning factors I can think of are the rain gutters and the
>45 foot mast holding up my Windom at one end of the house.
> Ideas folks? Would really like to play on 160, but right now,
>don't have the antenna for it. Would like some ideas on something to
>homebrew...
>
>Thanks in advance!
>
>
>Raymond Sirois AB2HR
>SysOp: The Lost Chord BBS
>607-733-5745
>telnet:\\thelostchord.dns2go.com:6000

925. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 04:16:54 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C425BBA.CA297136@icok.net>
Source record: 150916

Phil,
You can still do the 'through the window' thing with
the 'jalousy'(?) type windows, just takes a little more
effort. Some of those type windows have only a small
metal tab holding the glass in. Bend the tab out of the
way and replace the glass with plexiglas, or what ever.
'Doc

926. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 04:17:01 UTC
From: Grant Prescott <coast@prosperity.org>
Message-ID: <u44n595tvecaec@corp.supernews.com>
Source record: 150917

"Phil B." <n4codnospam@arrl.net> wrote in message
news:3c425e61.32000090@news.mia.bellsouth.net...
> Hello all.
> I am now living in a typical South Fla home, stucco exterior with
> those lovely awning-type crank-open windows, so replacing a pane with
> plexiglass isn't possible, as in previous dwellings. Before I drill a
> hole through the wall, as the cable guy did, does anyone have a neater
> way of passing the coax through the wall?
SNIP
> Thanks es 73
> Phil N4COD

You might have attic vents on the part of the attic roof facing downwards
towards the ground (I think it is called soffit).

If so, bring your cables under the roof line, up into the soffit, either
drill
holes in the wood soffitt or the attic vent. Then bring the cables down
inside from the attic ceiling into your interior room.

If your interior walls are wood, you can come down from the attic,
inside the wooden wall, and come out into the room through the
interior wall.

Good luck.

Grant
N7GAP

927. Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 04:28:21 UTC
From: n4codnospam@arrl.net
Message-ID: <3c425e61.32000090@news.mia.bellsouth.net>
Source record: 150909

Hello all.
I am now living in a typical South Fla home, stucco exterior with those lovely awning-type crank-open windows, so replacing a pane with plexiglass isn't possible, as in previous dwellings. Before I drill a hole through the wall, as the cable guy did, does anyone have a neater way of passing the coax through the wall? I am thinking of putting some kind of plate on the outside, running RG8x through a hole, then another plate with a connector on the interior wall. Anyone have pics or description of a good entry through concrete block wall?
Thanks es 73
Phil N4COD

928. Re: Tripod Mast Manufacturer - Ultimate

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 04:30:25 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C425E92.904701F@tampabay.rr.com>
Source record: 150918

hey there
i seen the very same setup listed on WWW.FAIRRADIO.COM
its listed in the antenna section i think its a military setup

N4IXT wrote:

> I recently picked up a portable antenna mast system at a swap meet. The
> bottom section has a tripod base that folds out. On top there is a mast
> section with slides out of the base and locks in place with a thumbscrew
> locking mechanism. It comes with two more five foot sections of mast that
> sit on top, putting the whole thing about 20 feet in the air.
>
> The entire assembly collapses down and is stored in it's own travel bag,
> about 5 feet long. On the outside of the bag, and on a sticker on the
> antenna is the word "Ultimate", which I presume is the company. The only
> other wording is some instructions for locking the antenna in place.
>
> I've tried a few search engines, looking for the website of either the maker
> or someone who sells them, but so far no luck. Was wondering if anyone had
> one that could point me in the right direction.
>
> Thanks,
>
> Robert / N4IXT

929. Re: Free IOTA List download - UPDATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 04:40:32 UTC
From: KC8SSG <kc8ssg@qsl.net>
Message-ID: <4jt08.190$903.2350@news>
Source record: 150913

OK Thanks for explaining it to me.
--
KC8SSG

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c424870$1@news.bnb-lp.com...
> Hello KC8SSG,
> IOTA stands for "Islands On The Air " and is an awards program
> administered by the Radio Society of Great Britain. The IOTA List
> contains the island names and official IOTA reference number for all the
> 900+ islands recognized in the awards program.
>
> The downloadable IOTA List is on the IOTA List Download page of the
> following web site
>
> http://www.ab7sl.com the same one listed below in my signature
> lines.....
>
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

930. Re: Broadband Tank Circuit Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 05:16:45 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C4269B8.40BF092F@att.net>
Source record: 150819

Another interesting development back in those days was the multi-band tuner
circuit that was manufactured by National and perhaps others. It was first
described in QST, if I recall correctly, as the final tank in a
bandswitching rig - sometime in the late 40's.

Actually, the notion of a series LC circuit in parallel with a C or L or a
parallel combination of both is pretty old as a means of obtaining multiple
resonances in a two-terminal network. The various C's can be ganged, etc.
to facilitate tuning. Makes a really neat tank circuit for up to 100 watts
or so. Again, if I recall correctly, link coupling from the various coils
was used to obtain output power, similar to the Z-match which came along
about the same time.

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

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N2EY wrote:
>
> I know this is a bit old, but I finally found the info to answer the questions.
> Some of them, anyway.
>
> In article <9tprogcrq0@208.206.142.84>, Dick Carroll <dixie@townsqr.com>
> writes:
>
> >N2EY wrote:
> >>
> >> In article <3832adca.0111231751.e7047f1@posting.google.com>,
> >> tom_bruhns@agilent.com (Tom Bruhns) writes:
> >>
> >> >BTW, the old Central Electronics
> >> >rigs used cathode-follower outputs, as I recall, for broadband output.
> >>
> >> No, that's not correct.
> >>
> >> The old CE rigs (100V, 200V, 600L) achieved no-tune 50 ohm output with
> >> conventional-looking tube circuits. The trick was the use of special
> >patented
> >> tuned circuits. The patent should still be available from the Patent Office
> >> website. Home construction of one would be legal because the patent ran out
> >> long ago.

>
> > Any idea how they did that? I once came onto a set of those tank
> >circuits from a salvaged 600L at a hamfest, and was tempted to buy them,
> >but wasn't sure about their function and couldn't tell anything about
> >them from viewing them. They were potted. I always wondered how they'd
> >broadband them without resistive loading and dropping the efficiency
> >and/or the Q too much. Looks like another compromise, or maybe too much
> >of a tradeoff.
>
> No compromise and no tradeoff.
>
> Electric Radio #77 (September, 1995) has an in-depth article on the 600L and
> the broadband couplers. They are a unique and ingenious design of four windings
> that uses both mutual inductance and stray capacitance to do the job. The
> amplifier delivers efficiencies of 60-65% on 160 thru 20 meters using a single
> Class AB2 813. Efficiency on 15 and 10 is a little lower. Harmonic rejection is
> greater than current FCC requirements. The couplers would work efficently into
> an SWR of up to 2:1
>
> Some QSTs of the 1960-61 era have ads for the CE products that briefly explain
> the couplers, but not in much detail.
>
> I won't try to describe how the couplers work here, because I simply can't do
> the subject justice without a lot of diagrams. See US Patent #2.864,060
> issued to Joe Batchelor in December, 1958 (application filed August 1955). Joe
> is the "father" of most of the CE designs.
>
> Why did the idea not catch on beyond the 100V, 200V and 600L? Four reasons:
>
> 1) Because it was patented, other manufacturers would have had to pay
> royalties. The patent ran out in 1975, about when solid state finals began to
> be the focus of attention.
>
> 2) The design method is not described in the patent. It appears that the
> designs may have evolved by cut-and-try, and most homebrewers would not have
> the test equipment necessary to develop a set of couplers.
>
> 3) CE was bought out by Zenith in the very early 1960s, and the amateur line
> discontinued. The fabled 100R receiver never got beyond the prototype stage
> (the prototype still exists). Zenith simply abandoned the amateur radio
> products - kinda sad, considering where the Zenith name came from.
>
> 4) The pi-network had become the standard output circuit for amateur HF/MF
> transmitters. It was easier to design and bandswitch, and could be designed to
> have a wider matching range.
>
> But the fact remains that more than 46 years ago Joe Batchelor had worked out
> all the problems of how to build a no-tune amateur radio transmitter using
> tubes, capable of hundreds of watts output.
>

> 73 de Jim, N2EY

931. Re: Broadband Tank Circuit Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 05:18:20 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C425DAB.5F0903B9@worldnet.att.net>
Source record: 150820

Thanks, Jim. Good info, as usual.

Dick

N2EY wrote:

> I know this is a bit old, but I finally found the info to answer the questions.
> Some of them, anyway.
>
> In article <9tprogcrq0@208.206.142.84>, Dick Carroll <dixie@townsqr.com>
> writes:
>
> >N2EY wrote:
> >>
> >> In article <3832adca.0111231751.e7047f1@posting.google.com>,
> >> tom_bruhns@agilent.com (Tom Bruhns) writes:
> >>
> >> >BTW, the old Central Electronics
> >> >rigs used cathode-follower outputs, as I recall, for broadband output.
> >>
> >> No, that's not correct.
> >>
> >> The old CE rigs (100V, 200V, 600L) achieved no-tune 50 ohm output with
> >> conventional-looking tube circuits. The trick was the use of special
> >patented
> >> tuned circuits.

932. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 05:20:07 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C426A83.1B22D27@att.net>
Source record: 150821

Don't overlook that most walls will have a firestop between the studs about
half-way up that will have to be drilled through to get a cable down from
the attic.

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

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Dennis Kaylor wrote:
>
> hey phl
> i have the same problem except that i dont mind a big gapping hole in the
> wall....grin
> what you can do is if you can get into the attic is fish the cable thru
> the overhang into the attic then down the inside of the wallmy problem
> here is i have no access to the attic some idiot installed an attic fan in
> the only hole to the attic
>

933. Re: portable HF antenna needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 05:59:05 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <a1tl37$ss9fi$1@ID-105647.news.dfncis.de>
Source record: 150912

A friend of mine, K4KR, travels away from home and uses a Slinky antenna.
Check out his website http://www.k4kr.com/pics/portable.jpg.

You might also consider a loop from MFJ, if you have time to order one.

One last idea, most hotels have an outdoor area, such as an outdoor pool or
patio. You might consider working portable out on the patio area. Could put
up a small dipole, or vertical with a counterpoise.

Robert / N4IXT

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:3C4250AD.A77E918D@tampabay.rr.com...
> hello
> i am going to be traveling to atlanta GA. in feb and staying in a hotel
> for 4-5 days while my wife is in a seminar so i am planning to take the
> Icom 706 with me but i have no idea what will be functional inside the
> hotel room with no outside access
> i currently use hustler resinators for the mobile dont know if they
> would work on a mag mohjnt inside the room or not
> any ideas please let me know
> thanks
>

934. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 06:01:32 UTC
From: n7ws@yahoo.com
Message-ID: <3c426adc.17094353@news.triconet.org>
Source record: 150822

On Sun, 13 Jan 2002 20:27:37 -0600, "Crazy George" <munschNO@attglobal.net.SPAM> wrote:

|You'll find no "dip meter" in any modern electronics lab. First, you design
|the circuit using one of the computer software design tools (Spice or the
|like), and finalize the design using a network analyzer. Much more accurate
|information.

[snip]

This is a little off-topic and it goes way back but perhaps shows why even "modern" labs should still have a GDO around.

About 30 years ago I was still a senior lab tech and was assisting a really fine rf engineer with a problem on a Phoenix missile i-f amplifier.

Phoenix is a monopulse radar bird and had (before we learned how to multiple the delta channel) a three-channel receiver. Each channel was gain and phase matched and had to maintain tracking with agc applied.

Each channel was on a separate board and each board was in a separate compartment in a dip-brazed chassis with a cover outfitted with knitted wire gaskets. The AGC line went from compartment to compartment via coaxial feed-thru capacitors. Power and blanking signals entered from a (fourth) separate compartment. The isolation between amps should have been very high but if fact there was crosstalk.

A couple of newly minted EEs had been working the problem without success. The old guy, (gads that's me now) Jim, was asked for advice. Jim studied the situation for awhile and then asked, "Wes, you gotta a grid dip meter around here?" Even thirty years ago, the new guys asked, "Huh? What's a grid dip meter?"

I said, "Sure", and produced a Measurements Corp GDO. (These are still these best there are and I have two of them at home).

Jim sticks the appropriate coil into the chassis and swished the frequency around and lo and behold, a nice dip quite close to the i-f. The combination of the capacitance of the feedthrus and the inductance of the connecting wires was resonant at the i-f. A change in the value of the capacitors fixed the problem.

When I retired, "my" lab had a megabuck worth of computer controlled equipment including a $200,000 H-P 8510C network analyzer, but I still had the GDO, despite the best efforts of the Metrology department (sorry Richard) to red tag it and call it "Inactive Equipment."

Wes N7WS

ps. Grid dip meters gotta have grids.

935. Tripod Mast Manufacturer - Ultimate

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 06:06:27 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <a1tllb$rqrju$1@ID-105647.news.dfncis.de>
Source record: 150915

I recently picked up a portable antenna mast system at a swap meet. The bottom section has a tripod base that folds out. On top there is a mast section with slides out of the base and locks in place with a thumbscrew locking mechanism. It comes with two more five foot sections of mast that sit on top, putting the whole thing about 20 feet in the air.

The entire assembly collapses down and is stored in it's own travel bag, about 5 feet long. On the outside of the bag, and on a sticker on the antenna is the word "Ultimate", which I presume is the company. The only other wording is some instructions for locking the antenna in place.

I've tried a few search engines, looking for the website of either the maker or someone who sells them, but so far no luck. Was wondering if anyone had one that could point me in the right direction.

Thanks,

Robert / N4IXT

936. Re: Which Came First?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 06:08:54 UTC
From: Charles Fregeau <n5hsr@sprynet.com>
Message-ID: <3C4275F6.AB1F62CB@sprynet.com>
Source record: 150823
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Coming at it from both the Ham perspective and Broadcasting perspective:

KDKA was assigned 360 meters in 1920. As the number of stations grew, the band was expanded to 550-1500 kc. The hams, which were theoretically licensed to 200 meters (1500 kc) and theoretically only 200 meters, had some special licenses which went down to nearly 1350 kcs before the broadcast explosion, but at about the time broadcasting started needing a lot more space, i.e. 1923, the hams discovered short-wave, and ceased to need the longer frequencies. This was all somewhat suggestive, as the Department of Commerce had no real power to regulate frequencies until the Communications Act of 1927 placed such power in the hands of the Federal Radio Commission, the predecessor of the FCC. 1510-1600 was not added until the '30's, after the hams had vacated the frequencies, through an international shift in allocations by a treaty signed in 1927. 540 kc was not added until, I think, the 1947 Atlantic Conference. This would have been about the same time FM was shifted to 88-108 Mcs in the Americas.

So the hams had 1500 and up from 1912 until 1923, when a voluntary band plan gave them several bands, the first of which ran from 1500 to 2000 kcs until 1927, when it changed to 1715 to 2000 kcs. The AM band could not pass 1500 prior to 1927, as the 1912 law assigned 200 meters to Amateur Radio, and law outranks mere regulation. After the 1927 law was passed, the FRC had somewhat more latitude to assign frequencies, and the 200 meter restriction for hams was removed from the law at that time. Between the FRC's reorganization of the radio stations, now that it had the authority to do so, and the Depression, 550 to 1500 was sufficient for a good while. The original purpose of stations in the 1500's was to provide high fidelity sound, and were originally spaced 20 kcs apart. You must remember FM was only a laboratory experiment at the time this was going on.

I've studied this issue from both sides, having read both the League's 50th anniversary publication and 200 Meters and Down (reprint) and having a father who was in broadcasting for a good number of years. I also took broadcasting in college, hoping to follow in my father's footsteps.

In short, the answer was, serendipity. As the broadcasting band needed to expand, the technology became available to move hams into a different area of the spectrum, and to allow the broadcast stations to also broadcast closer together as well, as well as better receivers for those who listened to either group. Hams stumbled onto short-wave purely by accident. The engineers of that day said that anything above 1500 kcs

was totally useless, so no one had experimented much with it until about 1922.

Charles N5HSR/9

Al Lorona wrote:
>
> I'm just curious: is it correct to assume that the current AM broadcast
> band is really the best choice of frequency for the desired
> characteristics for that service? In other words, was 540-1600 kHz
> (before expansion to 'AM wide' a few years ago) chosen first, and then
> the stations placed there? Or did the stations begin operation in that
> frequency band and just happened to choose a good ground wave frequency
> band for local broadcasting?
>
> I've been reading some of the history of KDKA, which of course was the
> first commercial broadcast station in Pittsburgh in 1920 (on 360 meters,
> according to the original FCC license), and it seems that the
> Westinghouse engineers knew that starting around 1500 kHz ground losses
> increased, making those frequencies less useful for local reception.
> (They apparently didn't know about sky wave propagation). But aside from
> that, is there anything magical about the current broadcast band that
> makes it the best choice?
>
> Thanks,
>
> Al W6LX

937. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 06:18:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C42784E.371BCB49@eznec.com>
Source record: 150824

I'd be interested in seeing a digital circuit to filter the output from a 100 watt transmitter or the input to an HF receiver. And also a synthesizer that's so clean it doesn't need any analog filtering.

By the way, my VX-5 is pretty new and about half the size of a pack of cigarettes. A glance at the schematic shows over 50 inductors, most of them in tuned circuits or filters. The answer to your question is that they do it by using really, really small components. But I admit you'd be hard pressed to measure them with a dip meter.

Roy Lewallen, W7EL

Crazy George wrote:
>
> You'll find no "dip meter" in any modern electronics lab. First, you design
> the circuit using one of the computer software design tools (Spice or the
> like), and finalize the design using a network analyzer. Much more accurate
> information. As for how do hams do it? I'm not sure that there are any
> tuned circuits in most modern ham rigs. All synthesized and digitally
> filtered. How else could you get a 100 watt transmitter and a receiver in a
> box the size of a IC-706 or TS-50?
> --
> Crazy George
> Remove NO and SPAM from return address

938. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 06:24:47 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a1ttjfqtn4@quark.scn.rain.com>
Source record: 150825

Charles Johnston <ctj92@cableone.net> wrote:

> I do not want to seem insensitive but the issue here is that you
> continue to use an older non-standards compliant browser. A simple
> upgrade to a modern browser such as Netscape 6, IE 6, or Opera 6 would
> solve your dilemma and would " fix " my web site.

Add me to the list of those that will not upgrade until absolutely forced
to do so. All the recent browser versions seem to be riddled with bugs.

> BTW there is nothing inherent in the web page to affect your system
> from completing a proper shut down.

I have had mine lock up on occasion. But since it is a Windows NT machine,
I can use NT Security to kill Netscape. All other functions then operate
properly.

I am pretty sure it is the Java apps imbedded in many web pages that are
the problem, but cannot prove it.

--
Bill Nelson (billn@peak.org)

939. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 07:03:55 UTC
From: Owen Duffy <owen@oda.com.au>
Message-ID: <3C4282DB.54DA1217@oda.com.au>
Source record: 150826

Here is an implementation that brings 2 x LDF4-50 and 2 x RG-312 to a
patch panel which is based on a standard electical outlet.

The patch panel from the inside:

http://www.owenduffy.com.au/electronics/post08.jpg

The cable entry ducting on the outside:

http://www.owenduffy.com.au/electronics/post05.jpg

The duct was later painted to match the wall.

"Phil B." wrote:
>
> Hello all.
> I am now living in a typical South Fla home, stucco exterior with
> those lovely awning-type crank-open windows, so replacing a pane with
> plexiglass isn't possible, as in previous dwellings. Before I drill a
> hole through the wall, as the cable guy did, does anyone have a neater
> way of passing the coax through the wall? I am thinking of putting
> some kind of plate on the outside, running RG8x through a hole, then
> another plate with a connector on the interior wall. Anyone have pics
> or description of a good entry through concrete block wall?
> Thanks es 73
> Phil N4COD

--
==========
Owen Duffy (owen@oda.com.au)
Phone: +61 2 6257 3872 (02) 6257 3872
Mobile: +61 417 408 424 0417 408 424
==========

940. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 07:06:19 UTC
From: Owen Duffy <owen@oda.com.au>
Message-ID: <3C42836B.7DA98CB3@oda.com.au>
Source record: 150827

Here is an implementation that brings 2 x LDF4-50 and 2 x RG-312 to a
patch panel which is based on a standard electical outlet.

The patch panel from the inside:

http://www.owenduffy.com.au/electronics/post08.jpg

The cable entry ducting on the outside:

http://www.owenduffy.com.au/electronics/post05.jpg

The duct was later painted to match the wall.

It is not unobtrusive, but there ain't an elegant way to get LDF4-50
into a wall mounted panel.

"Phil B." wrote:
>
> Hello all.
> I am now living in a typical South Fla home, stucco exterior with
> those lovely awning-type crank-open windows, so replacing a pane with
> plexiglass isn't possible, as in previous dwellings. Before I drill a
> hole through the wall, as the cable guy did, does anyone have a neater
> way of passing the coax through the wall? I am thinking of putting
> some kind of plate on the outside, running RG8x through a hole, then
> another plate with a connector on the interior wall. Anyone have pics
> or description of a good entry through concrete block wall?
> Thanks es 73
> Phil N4COD

941. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 07:37:04 UTC
From: Louis Bybee <louisb@datacomm.com>
Message-ID: <3C428AA0.481F5298@datacomm.com>
Source record: 150828

It would appear that you've fabricated much of the installation
yourself. Looks rather impressive!

I do have one suggestion. From a safety standpoint it's best if you bond
all your Grounding Electrodes (Ground Rods, etc.), including those
serving the electrical service, together with at least a #6ga copper
conductor.

Too bad you live in Australia. I would like to have you as a neighbor.

Louis

Owen Duffy wrote:
>
> Here is an implementation that brings 2 x LDF4-50 and 2 x RG-312 to a
> patch panel which is based on a standard electical outlet.
>
> The patch panel from the inside:
>
> http://www.owenduffy.com.au/electronics/post08.jpg
>
> The cable entry ducting on the outside:
>
> http://www.owenduffy.com.au/electronics/post05.jpg
>
> The duct was later painted to match the wall.
>
> It is not unobtrusive, but there ain't an elegant way to get LDF4-50
> into a wall mounted panel.
>
> "Phil B." wrote:
> >
> > Hello all.
> > I am now living in a typical South Fla home, stucco exterior with
> > those lovely awning-type crank-open windows, so replacing a pane with
> > plexiglass isn't possible, as in previous dwellings. Before I drill a
> > hole through the wall, as the cable guy did, does anyone have a neater
> > way of passing the coax through the wall? I am thinking of putting
> > some kind of plate on the outside, running RG8x through a hole, then
> > another plate with a connector on the interior wall. Anyone have pics
> > or description of a good entry through concrete block wall?
> > Thanks es 73
> > Phil N4COD

942. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 07:55:12 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201132355.53df221e@posting.google.com>
Source record: 150829

Mark Hall <vze2mhvc@bellatlantic.net> wrote in message
news:<3C408934.75F84A2B@bellatlantic.net>...
> That TV twin lead crap is marginal in any configuration, I'd go for the heavier
> duty, wider spaced, 450 ohm vinyl "ladder line" at a minimum. It will last maybe 2
> or 3 years and then need replacement.

The biggest problem with the TV line is the extra loss when wet. Dry,
it's really not bad at all. But I agree, if I had my choice, I'd
rather have the 450 ladder line anyday. And at least #14 wire. Thats
another problem with the TV line. The wire is so thin. Some brands are
worse than others. A plus to the TV line is it's cheap, and you can
get it nearly anywhere. It's ok in a pinch, or for attic use etc. For
my short 15-20 ft indoor run to my attic antenna, changing to 450 line
from the 300 ohm would hardly be noticable. Outdoors, the 450 line is
much better. MK

943. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 08:05:17 UTC
From: Val <val_a20@hotmail.com>
Message-ID: <3C42913D.18580AF8@hotmail.com>
Source record: 150830

J M Noeding wrote:
>
> On Fri, 11 Jan 2002 16:04:37 +0100, Val <val_a20@hotmail.com> wrote:
>
> >
> >(Leben Sie mï¿½glichen innerhalb Deutshlands? Ich glaube
> >dass es auch in den "Antennehandbuch" von Karl Rothammel
> >behandelt ist.. Publiziert auf der Militï¿½rverlags DDR,
> >aber trotzdem sehr gut!)
> >
> Vielleicht hat du die Rothammel nicht gesehen. Ich habe zeit 1962 drei
> verschiedener Bï¿½cher dieser Serie und habe leider nicht solche
> Schaltungen dar gesehen, DJ9HO UHF Unterlage I-V ist vielleicht besser

'Hab dir Rothammel nicht fuer etwa 15 Jahren gelest. Ich erinnere mich
dann vahrscheinlig Falch! Leider habe ich nicht eine eigene Exemplar.

Og, hvorfaar snakker vi Tysk/Engelsk??? ;-)))))

English: Haven't read the Rothammel book for 15 Years, so I must
remeber it wrong

Pa gjenhoer!
V.

>
> English: I don't think this is the book you need in this respect
>
> 73 und tschï¿½ss
> LA8AK
> --
> remove ,xnd to reply

944. Re: portable HF antenna needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 09:53:41 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201140153.368ab16b@posting.google.com>
Source record: 150831

Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
news:<3C4250AD.A77E918D@tampabay.rr.com>...
> hello
> i am going to be traveling to atlanta GA. in feb and staying in a hotel
> for 4-5 days while my wife is in a seminar so i am planning to take the
> Icom 706 with me but i have no idea what will be functional inside the
> hotel room with no outside access
> i currently use hustler resinators for the mobile dont know if they
> would work on a mag mohjnt inside the room or not
> any ideas please let me know
> thanks

I'd find a room on the ground floor, with the parking lot in front of
the door and sneak a coax out to the car. I've done this many times
camping when I used the mobile antenna but had the rig on a table or
in a tent. MK

945. Re: to 'Doc

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 10:14:01 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201140214.356928ee@posting.google.com>
Source record: 150832

"Stef@no" <NOSPAMvisenta9@inwind.it> wrote in message
news:<4gp08.22758$aD.850705@twister2.libero.it>...
> You can make any very short antenna 'work' with a 'large'
> > enough matching network. The performance of a very short antenna
> > isn't always worth the time and effort, though...
> > 'Doc
>
> Dear 'Doc,
> no space, no big antennas!!!
> my only hope is that 7 meter old CB antenna without coils (only the vertical
> pipe) should be a little bit better than a 10 - 80 meter vertical trap
> antenna...
> thue or not??

I doubt it. The high bands should be ok, but the low band performance
will probably be fairly lame. I bet those autotuner inductors are kind
of lossy compared to a hi-Q loading coil. MK

946. Re: portable HF antenna needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 12:37:15 UTC
From: Bob Cook <captcook@compuserve.com>
Message-ID: <a1ujd9$i49$1@suaar1ac.prod.compuserve.com>
Source record: 150833

There is an easy solution here.

You have a Hustler antenna on the car? You have the car. That gives you a good HF antenna system. If you want to set up in the hotel room, all you need to do is park the car near the room, and run some coax.

Bob

www.Ocean-Pro.com
Naples, Florida 34112
941-775-7435, 800-329-4884

947. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 13:48:08 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C42E198.EC908654@coqui.net>
Source record: 150834

Owen Duffy wrote:
>
> Here is an implementation that brings 2 x LDF4-50 and 2 x RG-312 to a
> patch panel which is based on a standard electical outlet.
>
> The patch panel from the inside:
>
> http://www.owenduffy.com.au/electronics/post08.jpg
>
> The cable entry ducting on the outside:
>
> http://www.owenduffy.com.au/electronics/post05.jpg
>
> The duct was later painted to match the wall.
>
> It is not unobtrusive, but there ain't an elegant way to get LDF4-50
> into a wall mounted panel.

Well done!

-Bill

948. Re: Tripod Mast Manufacturer - Ultimate

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 14:09:38 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <a1up0p$t63sr$1@ID-105647.news.dfncis.de>
Source record: 150835

Didn't see one quite like mine. Here's a photo of it, if that helps.

http://www.mindspring.com/~robert.cain/ultimate.jpg

The black portion is what came with the mast system. The white thing is the middle insulator for a 20m dipole. The silver mast above that is a piece of aluminum antenna mast, attached to the top of it is a luggage mount SO239 and screwed on to that is a Hamstick (75 meters).

Thanks though, Fair Radio is a pretty cool site.

Robert / N4IXT

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message news:3C425E92.904701F@tampabay.rr.com...
> hey there
> i seen the very same setup listed on WWW.FAIRRADIO.COM
> its listed in the antenna section i think its a military setup
>
> N4IXT wrote:
>
> > I recently picked up a portable antenna mast system at a swap meet. The
> > bottom section has a tripod base that folds out. On top there is a mast
> > section with slides out of the base and locks in place with a thumbscrew
> > locking mechanism. It comes with two more five foot sections of mast that
> > sit on top, putting the whole thing about 20 feet in the air.
> >
> > The entire assembly collapses down and is stored in it's own travel bag,
> > about 5 feet long. On the outside of the bag, and on a sticker on the
> > antenna is the word "Ultimate", which I presume is the company. The only
> > other wording is some instructions for locking the antenna in place.
> >
> > I've tried a few search engines, looking for the website of either the maker
> > or someone who sells them, but so far no luck. Was wondering if anyone had
> > one that could point me in the right direction.
> >
> > Thanks,
> >
> > Robert / N4IXT
>

949. Re: Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 14:29:40 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201140629.247ddde2@posting.google.com>
Source record: 150836

"wa2elz" <wa2elz@nospamworldnet.att.net> wrote in message
news:<lXi08.268179$WW.13468569@bgtnsc05-news.ops.worldnet.att.net>...
> Any one have a good estimate for a yagi antenna noise temperature, in
> degrees Kelvin, pointed at the horizon at a receiving frequency of 600mhz ?
> My guess is between 100 to 300 degrees Kelvin, any better guesses ?

I would guess closer to 300 K. You would be picking up all kinds of
stuff from the ground. I wouldn't expect to be able to get 100 K when
pointing at the horizon. 100 K would be a good number if you tilted
it up and pointed it at the sky. Don't forget you'll need a good LNA,
too.

(I did my MSEE work at a radio telescope, by the way.)

Jim
N8EE

950. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 14:32:05 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201140632.2f0b0a57@posting.google.com>
Source record: 150837

Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com> wrote in message
news:<mfr1ygvp7wz.fsf@panix1.panix.com>...
> Hi,
> I'm trying to locate some 500 ohm non-inductive termination
> resistors. The recipient wants 2 watt or 1 watt units, and I'm having
> no luck locally. He says "film" resistors are a problem, and one
> question is if carbon-film resistors are a problem, or is he conflating
> them with metal film resistors?
>
> Ohmite OY series seem as if they might do, being ceramic composition
> resistors, but they're not listed as being non-inductive.
>
> I need these by the first days of February, and would like to have as
> many as 5. Any suggestions about what will work, and where I can find
> them?
>
> 73, doug

Last time I saw one, the Mouser Electronics catalog had carbon
compisition resistors. They're on the web, too.

Jim
N8EE

951. Antenna Matching Advice Needed (Homebrew Mobile Tuner)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 14:46:41 UTC
From: littlejohn42@mailcity.com
Message-ID: <97169496.0201140646.10bab690@posting.google.com>
Source record: 150838
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In my mobile I am currently running a 102" whip antenna on 10m which works fine. However, I would like to be able to use it on 12m as well. What I would like to do is to homebrew a fixed L/C tuner (pre-tuned for the middle of the 12m band) that I can just switch in when I want to work 12m, and out when I want to work 10m with no knobs to fiddle with. It also needs to handle around 400 watts. I would like to wind my own inductor etc. for it so I would need the coil dimensions, value of C, a schematic to see how this would all go together would also be extremely helpful (this is my first project of this sort). Any assistance anyone can offer is greatly appreciated.

73.
JW

952. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 14:59:10 UTC
From: n7ws@yahoo.com
Message-ID: <3c42f20c.51707750@news.triconet.org>
Source record: 150839

On Mon, 14 Jan 2002 18:03:55 +1100, Owen Duffy <owen@oda.com.au> wrote:

|
|Here is an implementation that brings 2 x LDF4-50 and 2 x RG-312 to a
|patch panel which is based on a standard electical outlet.
|
|The patch panel from the inside:
|
|http://www.owenduffy.com.au/electronics/post08.jpg
|
|The cable entry ducting on the outside:
|
|http://www.owenduffy.com.au/electronics/post05.jpg
|
|The duct was later painted to match the wall.

I would like to take a look. Unfortunately: Unable to request URL from host
www.owenduffy.com.au:80: Operation timed out

953. Re: Antenna Matching Advice Needed (Homebrew Mobile Tuner)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 15:04:30 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C42F37E.DB47559C@IEEE.org>
Source record: 150840
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

John Wallace wrote:
> In my mobile I am currently running a 102" whip antenna on 10m which works fine.
> However, I would like to be able to use it on 12m as well. What I would like to
> do is to homebrew a fixed L/C tuner (pre-tuned for the middle of the 12m band)
> that I can just switch in when I want to work 12m, and out when I want to work
> 10m with no knobs to fiddle with. It also needs to handle around 400 watts. I
> would like to wind my own inductor etc. for it so I would need the coil
> dimensions, value of C, a schematic to see how this would all go together would
> also be extremely helpful (this is my first project of this sort). Any
> assistance anyone can offer is greatly appreciated.

This is pretty much a nobrainer assuming you have an antenna analyzer
like the MFJ259. All you need is one series coil (no capacitor) between
the center wire of the coax and the whip feedpoint. Wind the coil and
test with the analyzer. If the resonant frequency is too low, take turns
off the coil and if the resonant frequency is too high, put turns on the
coil. About 4-5 turns on a two inch diameter coil form should do it.
--
cheers, CAM http://www.qsl.net/w5dxp

954. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 15:12:52 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1uuv9$tf5da$1@ID-124126.news.dfncis.de>
Source record: 150842

Roy wrote -
>The main shortcoming is the assumption that the ground is
> homogeneous to an infinite depth, while real ground can vary a great
> deal with depth
==========
But that's not a shortcoming of the program and does not detract from the value of the results. It is the understandable ignorance about the antenna's environment on the part of the user.

It causes just as much uncertainty in all other predictions, including radiation patterns.

Thanks very much for your efforts and time expended in obtaining the data.

Can we finally cease worshipping BL&E ?

Reg.

955. Re: Butternut HF5V-III wont tune on 20 Meters pse help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 15:50:55 UTC
From: edvanc@mediaone.net
Message-ID: <z7D08.22568$yC.2634404@typhoon.mn.mediaone.net>
Source record: 150841

Sorry about the Eric, I didn't pay attention to the model number. Went to the Bencher website and downloaded the manual for your model. If the matching section is functional, then as the Butternut tech suggested, it may be the 40M capacitor. Some multimeters have the capability of testing capacitors. Just because there is no short, the capacitor may be open, in which case you have a problem. If your VOM shows infinite resistance immediately without a resistance buildup over time, the capacitor is probably open. Amother option is to substitute a 40M capacitor from another Butternut to see if that helps.

Good luck.

Ed, W0VC

In article <NOr08.1214$ud6.410570@dfiatx1-snr1.gtei.net>, ebourlet@gte.net says...
>
>Thanks but the HF5V-III does not have a 30 meter coil it only has a 40 and
>80 meter coil. This is an older Butternut. When I contacted Butternut tech
>support they said it sounded like a problem with the 40 Meter capacitor . I
>checked it for being shorted with an Ohm meter and it looks good that way
>but I do not own a cap checker. Any other ideas?
>
>

956. Re: Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 16:58:10 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <IBcUp0Ai4wQ8EA5r@ifwtech.com>
Source record: 150843

JLB wrote:
>"wa2elz" <wa2elz@nospamworldnet.att.net> wrote in message
>news:<lXi08.268179$WW.13468569@bgtnsc05-news.ops.worldnet.att.net>...
>> Any one have a good estimate for a yagi antenna noise temperature, in
>> degrees Kelvin, pointed at the horizon at a receiving frequency of 600mhz ?
>> My guess is between 100 to 300 degrees Kelvin, any better guesses ?
>
>I would guess closer to 300 K. You would be picking up all kinds of
>stuff from the ground. I wouldn't expect to be able to get 100 K when
>pointing at the horizon. 100 K would be a good number if you tilted
>it up and pointed it at the sky. Don't forget you'll need a good LNA,
>too.
>

On the basis that your antenna sees about half warm ground at say 300K,
and half cold sky, I 'd go for about 150K as the minimum you'd be likely
to see in real life.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

957. Re: Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 17:12:29 UTC
From: mikea@mikea.ath.cx
Message-ID: <1kE08.3067$W54.495109186@newssvr16.news.prodigy.com>
Source record: 150844

Ian White, G3SEK <G3SEK@ifwtech.com> wrote:
: JLB wrote:
:>"wa2elz" <wa2elz@nospamworldnet.att.net> wrote in message
:>news:<lXi08.268179$WW.13468569@bgtnsc05-news.ops.worldnet.att.net>...
:>> Any one have a good estimate for a yagi antenna noise temperature, in
:>> degrees Kelvin, pointed at the horizon at a receiving frequency of 600mhz ?
:>> My guess is between 100 to 300 degrees Kelvin, any better guesses ?
:>
:>I would guess closer to 300 K. You would be picking up all kinds of
:>stuff from the ground. I wouldn't expect to be able to get 100 K when
:>pointing at the horizon. 100 K would be a good number if you tilted
:>it up and pointed it at the sky. Don't forget you'll need a good LNA,
:>too.

: On the basis that your antenna sees about half warm ground at say 300K,
: and half cold sky, I 'd go for about 150K as the minimum you'd be likely
: to see in real life.

Assuming, of course, that the sun isn't in the beam. If it is,
all bets are off. How "bright" is the sun at 600 MHz, anyway?

--
Telstra is the cesspool of the South Pacific.
@Home is the cesspool of the Americas.
Get it straight. There is more than one cesspool.
-- Steve Sobol, in nanae

958. Re: Antenna Matching Advice Needed (Homebrew Mobile Tuner)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 17:38:36 UTC
From: pete owen <nutmeg@w-link.net>
Message-ID: <3C43179C.E5136EA1@w-link.net>
Source record: 150845
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Have a look at Arnie Coro's great page. You'll find it at:

http://www.radiohc.org/dxers/

He's got lots of ideas for home brew stuff.

Good Luck,

Pete

959. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 17:45:15 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <va664ug1ni21419lhljfpg12plj27d86a0@4ax.com>
Source record: 150846

On Mon, 14 Jan 2002 15:12:52 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>Can we finally cease worshipping BL&E ?
>---
>Reg.
>
>

:-)

960. Re: 1.2 GHZ/23 CM Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 17:55:10 UTC
From: Sylvan Butler <Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna466sh.5ks.Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 150847

On Sun, 13 Jan 2002 16:52:14 GMT, Robert Fulton <robfult@carolina.rr.com> wrote:
> Looking for information sources and/or antenna recommendations for the 23cm
> band. Yagi's and large antennas are out of the question due to space

Yagi's for 1.2ghz are fairly small.

Helical are managable.

Did you want directional or omni ?

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

961. Re: Antenna Matching Advice Needed (Homebrew Mobile Tuner)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 18:00:51 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1v6kh$tdgk5$1@ID-124126.news.dfncis.de>
Source record: 150848
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

John,

All you may need is a base loading coil for the 12 meter band which should
give you a good enough match to 50 ohm coax.

Download program BOTLOAD from website below in a few seconds.

Program will tell you coil inductance, number of turns of what wire
diameter, to wind on your choice of size and shape of coil former.

If you want an even better match, download program ENDFEED which will tell
you values of coil and capacitor for an L-match. Or a T-match.

To design coils for a given inductance download program SOLNOID2.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
John Wallace <littlejohn42@mailcity.com> wrote in message
news:97169496.0201140646.10bab690@posting.google.com...
> In my mobile I am currently running a 102" whip antenna on 10m which works
fine.
> However, I would like to be able to use it on 12m as well. What I would
like to
> do is to homebrew a fixed L/C tuner (pre-tuned for the middle of the 12m
band)
> that I can just switch in when I want to work 12m, and out when I want to
work
> 10m with no knobs to fiddle with. It also needs to handle around 400
watts. I
> would like to wind my own inductor etc. for it so I would need the coil
> dimensions, value of C, a schematic to see how this would all go together
would
> also be extremely helpful (this is my first project of this sort). Any
> assistance anyone can offer is greatly appreciated.
>

> 73.
> JW

962. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 18:25:32 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <1s664uotkpt28kajoa8khqp471bk0rj9n5@4ax.com>
Source record: 150849

On Sun, 13 Jan 2002 07:45:17 -0700, "Charles Johnston"
<ctj92@cableone.net> wrote:

>Hello Bob,
> Thanks for dropping by my site and also for sharing your comments with
>me. FYI I have added a line of text to the homepage that states the "
>site is optimized for use with IE 6 " .
>
> The internet and all of cyberspace is an ongoing and evolving
>scenario and for web designers 100% browser compatibility is at best a "
>moving target ".I strive for cross-browser compatibility and test my
>site against IE 5, IE 6, Opera 6, and Netscape 6 since these represent
>the current offerings from each respective camp.
>
> Each day the older browsers (such as the v 4 series) become less and
>less compatible because they were written before much of what has now
>become html standard code was ever produced. Just a fact-of-life on the
>world wide web....thanks again....

Hi Charles,

> FYI I have added a line of text to the homepage that states the "
>site is optimized for use with IE 6 " .
This serves only to enlarge the hegemony of Microsoft and is not in
and of itself really necessary to the interchange of HARD information.

As for compliance to HTML, that has hardly changed in years, and for
good reason: it did well what it purported to do for "hyper-text."
What you ascribe to it are the multitude of variant "Plug-ins."

None of this is inevitable, none of this is the shrug your shoulders
with the arrival of new standards. I have done several thousand pages
and all work with Netscape 3 (if not 1 or 2 and IE too). The
stumbling blocks are with "features" not data.

I would add, however, that Netscape has certainly shot itself in the
foot with the introduction of version 6. That was an absolute loser
from the click of the icon. Version 6.2 is vastly better, but still
exhibits puzzling behavior about 10% of the time; but for me, a rather
abusive and demanding user. Internet Explorer has its own similar
puzzling behaviors, and I always get a kick out of it crashing at
Microsoft sites where Netscape sails through.

Like VHS vs. Beta, IE has no technical superiority. It has climbed to
the top out of simple inertia of being installed in Windows. For
issues of compliance I would suggest if the site cannot be viewed with

Netscape 4.7 (still available I believe, and their best version), then that site designer has added a feature that is single sourced, a true indicator of future extinction. Do you write VRML? If you did, you don't now. Once the bright-eyed promise of the Internet, and I doubt one in a thousand readers here know the acronym or even heard it.

One of the 4%
Richard Clark, KB7QHC

963. e-mail address.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 18:29:11 UTC
From: tigga1 <tigga1@freemail.absa.co.za>
Message-ID: <3c43afef_3@batman.vip-za.com>
Source record: 150850

Hi all,

Can someone please let me have the e-mail address for TELEX, manufacturers
of "hi-gain" antennae.
I need, if possible, dimensions to make the beta-match for their TH3JR-S
(the shaped wire one, on offset insulators,)for use without the balun.
Thanks,
Peter Smith.

964. Re: Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 18:37:06 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <mzF08.374120$W8.13576301@bgtnsc04-news.ops.worldnet.att.net>
Source record: 150851

"wa2elz" <wa2elz@nospamworldnet.att.net> wrote in message
news:lXi08.268179$WW.13468569@bgtnsc05-news.ops.worldnet.att.net...
> Any one have a good estimate for a yagi antenna noise temperature, in
> degrees Kelvin, pointed at the horizon at a receiving frequency of 600mhz
?
> My guess is between 100 to 300 degrees Kelvin, any better guesses ?
>
>

Without actual pattern and efficiency information, a guess is the best
anyone can provide. I'd guess about 180 - 220K would be a reasonable
estimate.

Steve VE9SRB

965. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 18:41:21 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <hq864uomn0d3avjqtrdmecmjhetqn2oi5n@4ax.com>
Source record: 150852

On Mon, 14 Jan 2002 06:24:47 +0000 (UTC), Bill Nelson
<billn@spock.peak.org> wrote:

>
>I am pretty sure it is the Java apps imbedded in many web pages that are
>the problem, but cannot prove it.
>
>
>--
>Bill Nelson (billn@peak.org)

Hi Bill,

Well that was my hot button (Java) that got pushed.

Java apps are rare and few on the net. I seriously doubt you have
ever run one -but this is more semantics than experience.

Java comes in two variants: Applets and Applications. Apps is
shorthand for Applications in my world, thus the immediate response.
Applets constitute the greater part of Java exposure to all here.

Then there is java script, an abomination of both Netscape and
Internet Explorer and the origin of the statement about being
"Optimized for IE/Netscape," and what Charles mistakes for being an
issue of standards (the oldest joke on the net starting with IE1).

Java Applets and Applications cannot break your machine, nor can they
snoop nor reveal your machine's data - unless you grant them express
permission. This is, of course, 180ï¿½ around from the Microsoft
security model. For Microsoft products, you have to explicitly demand
such activity not be allowed.

73's
Richard Clark, KB7QHC

966. Re: Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 18:51:57 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <hNF08.374128$W8.13577325@bgtnsc04-news.ops.worldnet.att.net>
Source record: 150853

"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:1kE08.3067$W54.495109186@newssvr16.news.prodigy.com...
>
> Assuming, of course, that the sun isn't in the beam. If it is,
> all bets are off.

This is really a function of the antenna beamwidth. The relative noise contribution of any noise source is a function of how much of the antenna beam "sees" the noise source.

For a relatively broad beam antenna, like a horizontal dipole for instance, the sun occupies a small portion of the antenna's total beamwidth, so it is not that significant. For broad beam antennas, ground noise contributions are generally more significant.

For narrow beam antennas, like satellite dishes, the sun being in the main beam is a real problem and "all bets are off".

Steve VE9SRB

967. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 19:00:52 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <5oa64u0q92vhhl7hjal20j8ivlcp06fh98@4ax.com>
Source record: 150854

On Mon, 14 Jan 2002 06:01:32 GMT, n7ws@yahoo.com (Wes Stewart) wrote:

>
>When I retired, "my" lab had a megabuck worth of computer controlled equipment
>including a $200,000 H-P 8510C network analyzer, but I still had the GDO,
>despite the best efforts of the Metrology department (sorry Richard) to red tag
>it and call it "Inactive Equipment."
>
>Wes N7WS
>
>ps. Grid dip meters gotta have grids.

:-)

968. Re: e-mail address.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 19:06:57 UTC
From: N9ZEF <paulb@powerweb.net>
Message-ID: <u46b2j15ag55a2@corp.supernews.com>
Source record: 150855

telex no longer makes hy-gain.
they are under the mfj umbrella.
http://www.hy-gain.com/hy-gain/index.php

"tigga1" <tigga1@freemail.absa.co.za> wrote in message
news:3c43afef_3@batman.vip-za.com...
> Hi all,
>
> Can someone please let me have the e-mail address for TELEX, manufacturers
> of "hi-gain" antennae.
> I need, if possible, dimensions to make the beta-match for their TH3JR-S
> (the shaped wire one, on offset insulators,)for use without the balun.
> Thanks,
> Peter Smith.
>
>

969. Re: Antenna Matching Advice Needed (Homebrew Mobile Tuner)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 19:20:53 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C432F83.7DFE61DE@shaw.ca>
Source record: 150856
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

John Wallace wrote:
>
> In my mobile I am currently running a 102" whip antenna on 10m which works fine.
> However, I would like to be able to use it on 12m as well. What I would like to
> do is to homebrew a fixed L/C tuner (pre-tuned for the middle of the 12m band)
> that I can just switch in when I want to work 12m, and out when I want to work
> 10m with no knobs to fiddle with. It also needs to handle around 400 watts. I
> would like to wind my own inductor etc. for it so I would need the coil
> dimensions, value of C, a schematic to see how this would all go together would
> also be extremely helpful (this is my first project of this sort). Any
> assistance anyone can offer is greatly appreciated.
>
> 73.
> JW

Jusy clip a 'stinger' -- a couple feet of stiff wire onto
the end of the
hustler whip and trim it down to resonance.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

970. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 19:52:24 UTC
From: Owen Duffy <owen@oda.com.au>
Message-ID: <3C4336F8.549D821@oda.com.au>
Source record: 150857

Owen Duffy wrote:
>
> Here is an implementation that brings 2 x LDF4-50 and 2 x RG-312 to a
> patch panel which is based on a standard electical outlet.
>
> The patch panel from the inside:
>
> http://www.owenduffy.com.au/electronics/post08.jpg
>
> The cable entry ducting on the outside:
>
> http://www.owenduffy.com.au/electronics/post05.jpg
>
> The duct was later painted to match the wall.
>
> It is not unobtrusive, but there ain't an elegant way to get LDF4-50
> into a wall mounted panel.
>

Some have guessed that there may be other pics and found them. If you are interested, they are linked of a page that pulls it all together:

http://www.owenduffy.com.au/electronics/post.htm

The notes provide more detail of the earthing treadment.

Re the comments about equipotential bonding, the earths are bonded in accordance with AS3000 (standard for electrical installations) and AS1768 (standard for lightning protection).

Conductors that might take a significant portion of a lighting down-current are 25 sqmm or 35 sqmm, and equipotential bonding conductors are 6 sqmm. Conductors here are rated on their cross sectional (conductor) area, so 35 sqmm is a little over a quarter inch diameter copper.

971. Re: UKW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 20:29:00 UTC
From: la8ak.xnd@online.no
Message-ID: <3c433561.9373311@news.online.no>
Source record: 150858

On Mon, 14 Jan 2002 09:05:17 +0100, Val <val_a20@hotmail.com> wrote:

>
>
>'Hab dir Rothammel nicht fuer etwa 15 Jahren gelest. Ich erinnere mich
>dann vahrscheinlig Falch! Leider habe ich nicht eine eigene Exemplar.
>
>Og, hvorfaar snakker vi Tysk/Engelsk??? ;-)))))
>
>English: Haven't read the Rothammel book for 15 Years, so I must
>remeber it wrong
>
>Pa gjenhoer!
>V.
regnte med at det var flere som forsto tysk enn norsk, det finnes vel
andre b�ker, ellers har jeg laget filtre av heliaxkabel som er meget
skarpe, men egentlig tror jeg at hvis man skal svare direkte p� alle
sp�rsm�l ville nybegynnere bestemme l�sningene for de som vet bedre

Eng: Problem is that if you reply direct to the newcomers's questions
we may have to let them decide what to use even how stupid it may be

73
Jan-Martin
--
remove ,xnd to reply

972. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 20:29:01 UTC
From: la8ak.xnd@online.no
Message-ID: <3c43376e.9898490@news.online.no>
Source record: 150859

On Sun, 13 Jan 2002 13:23:36 -0700, "Charles Johnston"
<ctj92@cableone.net> wrote:

>Hello Bill,
> Thanks for sharing your thoughts and comments with the rest of us....
>
it is interesting, but not odd to learn that somebody else agrees that
older programs and equipment may operate just as good or better than
the latest. I am planning to avoid most Microsoft internet programs
which are sensitive for virii. If it is relatively few official users
of Netscape nobody would care to spread virii for such

73
LA8AK
--
remove ,xnd to reply

973. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 20:29:01 UTC
From: la8ak.xnd@online.no
Message-ID: <3c433a35.10610025@news.online.no>
Source record: 150860

On Mon, 14 Jan 2002 06:01:32 GMT, n7ws@yahoo.com (Wes Stewart) wrote:

>
>Jim sticks the appropriate coil into the chassis and swished the frequency
>around and lo and behold, a nice dip quite close to the i-f. The combination of
>the capacitance of the feedthrus and the inductance of the connecting wires was
>resonant at the i-f. A change in the value of the capacitors fixed the problem.
>

GDM's were very useful before amateurs thought about selectivity, when
you didn't calculate accurate coils and were pleased with a tuning
capacitor between 50-300pf for the desired band

But, I must admit, I have two models, one is Tradipper and the other
is an old Philips (with two grids - 12AT7 - and neon indicator)

73
LA8AK
--
remove ,xnd to reply

974. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 20:43:39 UTC
From: Dan McKenzie <dan.mckenzie@centurytel.com>
Message-ID: <3C4342FB.289F25C2@centurytel.com>
Source record: 150861

Should work great for a multiband antenna. I use the same thing
pretty much, 140 foot dipole at about 30 feet, fed with plain old
TV-twin-lead. Seems like a beam! I work DX effortlessly. Sure, there
theoretically could be a little more loss when it's wet, but I've
never noticed it. If it's raining hard enough to be a problem,
you don't want to be on the air anyway since there must be
a hurricane outside!

I run QRP most of the time. Someone said it only lasts 2-3 years?
Why? Mine has been up more than 5 years, no problems. The twin-lead
I'm using is thick stuff, made for UHF. It's more rugged looking than
the real thin stuff, but still, it's just Radio Shack stuff.

Works fine.

Dan, W9FCC

975. R: portable HF antenna needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 21:33:18 UTC
From: STARPOINT <starpoint@arnoelettronica.com>
Message-ID: <a1vivf$d68$1@pegasus.tiscalinet.it>
Source record: 150862

EH ANTENNA?
www.eh-antenna.com
73'
Marco

Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
3C4250AD.A77E918D@tampabay.rr.com...
> hello
> i am going to be traveling to atlanta GA. in feb and staying in a hotel
> for 4-5 days while my wife is in a seminar so i am planning to take the
> Icom 706 with me but i have no idea what will be functional inside the
> hotel room with no outside access
> i currently use hustler resinators for the mobile dont know if they
> would work on a mag mohjnt inside the room or not
> any ideas please let me know
> thanks
>

976. Tower Wound Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 21:57:30 UTC
From: Jason Ingram <jason.ingram@ntlworld.com>
Message-ID: <B86904CA.5C53%jason.ingram@ntlworld.com>
Source record: 150863

Has anybody had any experience of using their tower as a loaded vertical for 80/40m.

I am interested in giving it a go but not sure where or how to start.

Any help is appreciated.

Jason
G7BSK

977. Re: e-mail address.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 22:17:42 UTC
From: dbagley@mindspring.com
Message-ID: <a1vous$3nl$1@nntp9.atl.mindspring.net>
Source record: 150865

If i'm not mistaken hi gain is now owned by mfj
Dwayne

"tigga1" <tigga1@freemail.absa.co.za> wrote in message
news:3c43afef_3@batman.vip-za.com...
> Hi all,
>
> Can someone please let me have the e-mail address for TELEX, manufacturers
> of "hi-gain" antennae.
> I need, if possible, dimensions to make the beta-match for their TH3JR-S
> (the shaped wire one, on offset insulators,)for use without the balun.
> Thanks,
> Peter Smith.
>
>

978. Re: Tripod Mast Manufacturer - Ultimate - Found it

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 22:31:48 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <a1vmjg$tgvap$1@ID-105647.news.dfncis.de>
Source record: 150864

I finally tracked it down, and no wonder I couldn't find it at first. You'll never believe it, but the thing is not even made to be an antenna mast, it's a speaker stand!

Check out:
http://www.ultimatesupport.com/mainframe.htm

And click on Speaker Stands. I guess the TS-99B is about the closest thing to what I have. Not a bad idea, really, using it for a portable antenna mast.

73's,

Robert / N4IXT

"N4IXT" <n4ixt@arrl.net> wrote in message
news:a1tllb$rqrju$1@ID-105647.news.dfncis.de...
> I recently picked up a portable antenna mast system at a swap meet. The
> bottom section has a tripod base that folds out. On top there is a mast
> section with slides out of the base and locks in place with a thumbscrew
> locking mechanism. It comes with two more five foot sections of mast that
> sit on top, putting the whole thing about 20 feet in the air.
>
> The entire assembly collapses down and is stored in it's own travel bag,
> about 5 feet long. On the outside of the bag, and on a sticker on the
> antenna is the word "Ultimate", which I presume is the company. The only
> other wording is some instructions for locking the antenna in place.
>
> I've tried a few search engines, looking for the website of either the
maker
> or someone who sells them, but so far no luck. Was wondering if anyone had
> one that could point me in the right direction.
>
> Thanks,
>
> Robert / N4IXT
>
>

979. x-50 vs AR270

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 23:23:07 UTC
From: haywire4 <haywire4@earthlink.net>
Message-ID: <vLJ08.31223$Vz3.3115835@newsread2.prod.itd.earthlink.net>
Source record: 150866

Hello all
I'm looking for a small VHF,UHF antenna that I can
put up and take down easily.
I'm thinking about making a mast out of some PVC pipe
15' to 20' high that I can mount it on.
Been thinking about the Diamond X-50@ 5.6' or
the Cuschcraft AR-270@ 3.75'.
Any one know how the two of these compare?
Thanks
73,KB9VHL

980. BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-14 23:42:14 UTC
From: N0SA <n0sa@earthlink.net>
Message-ID: <q1K08.31579$zw3.3043345@newsread1.prod.itd.earthlink.net>
Source record: 150867

I am planning to do some backpacking this year and will be taking a K1 with autotuner. I plan to use a 102 foot flat top fed with about 30 to 40 feet of TV twinlead. The aspect of weight and size is important. I am trying to decide if a balun is worth the effort and what type I will use. I have a copy Jerry Sevicks, "Building And Using Baluns". If I were to use a balun I am leaning towards a voltage balun.
My main question --- is a balun in this situation really worth the effort versus just feeding the twinlead directly to my autotuner? What will be gained with the balun?
Larry N0SA

981. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 00:39:29 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1vusf$u1cbm$1@ID-124126.news.dfncis.de>
Source record: 150770

You can use a length of twisted-pair between the antenna analyser and the "grid-dip" loop. Operation is exactly the same. But operating convenience is even better than the old fashioned genuine grid-dip oscillator. Frequency accuracy, of course, is 50 times better.

PS. It's time the selling price on these gadgets was halved. There's nothing very special inside them.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:a1t7n3$sun2l$1@ID-124126.news.dfncis.de...
> Connect a 1", 2" or 3" diameter loop of wire from coax inner to outer on
> your Autek or 259B antenna analyser.
>
> Slide the loop over one end of the coil or tuned circuit to be tested.
> Slowly vary analyser frequency looking for a sharp increase in impedance
> from zero ohms to several 100 ohms depending on coil Q.
>
> Adjust closeness of coupling to the coil as necessary. Finish with loose
> coupling.

982. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 00:41:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C437AA2.9A172E7D@eznec.com>
Source record: 150769

It'll be difficult to make a balun that will work well over the whole range of impedances you'll encounter on the various bands. Working without a balun means that you'll get some feedline radiation. But with low power and away from an urban environment, and considering that the pattern from the antenna will change with band anyway, the added vertically polarized radiation is as likely to help as to hurt. So I'd try it without the balun. You might find that the tuning changes as you grab or move the rig or feedline around. That's because the feedline and rig are part of the radiating antenna. If it's particularly bad on one or two bands, you might be able to moderate it by fiddling with the feedline length. It's this kind of thing that a balun prevents, but again, it would be hard to make a balun that really works well for that antenna. Keep the feedline well away from anything wet or lossy.

I don't know of any situation involved with feeding an antenna where a voltage balun is desirable. Why were you considering using one?

Roy Lewallen, W7EL

N0SA wrote:
>
> I am planning to do some backpacking this year and will be taking a K1 with
> autotuner. I plan to use a 102 foot flat top fed with about 30 to 40 feet of
> TV twinlead. The aspect of weight and size is important. I am trying to
> decide if a balun is worth the effort and what type I will use. I have a
> copy Jerry Sevicks, "Building And Using Baluns". If I were to use a balun I
> am leaning towards a voltage balun.
> My main question --- is a balun in this situation really worth the effort
> versus just feeding the twinlead directly to my autotuner? What will be
> gained with the balun?
> Larry N0SA

983. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 00:54:18 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a1vusj$u1cbm$4@ID-124126.news.dfncis.de>
Source record: 150771

> I don't know of any situation involved with feeding an antenna where a
> voltage balun is desirable. Why were you considering using one?
==========

Probably saw it in an ARRL publication.

984. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 01:01:25 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C437F52.60D68A5C@shaw.ca>
Source record: 150772

Dan McKenzie wrote:
>
> Should work great for a multiband antenna. I use the same thing
> pretty much, 140 foot dipole at about 30 feet, fed with plain old
> TV-twin-lead. Seems like a beam! I work DX effortlessly. Sure, there
> theoretically could be a little more loss when it's wet, but I've
> never noticed it. If it's raining hard enough to be a problem,
> you don't want to be on the air anyway since there must be
> a hurricane outside!
>
> I run QRP most of the time. Someone said it only lasts 2-3 years?
> Why? Mine has been up more than 5 years, no problems. The twin-lead
> I'm using is thick stuff, made for UHF. It's more rugged looking than
> the real thin stuff, but still, it's just Radio Shack stuff.
>
> Works fine.
>
> Dan, W9FCC

Ditto. My antenna was fed with the cheapest Radio Shack
twinlead money could buy -- we set it up just to try it, and
it stayed there for 13 years!!! I took it down when I went
to a vertical system, and used the twinlead to make a folded
marconi which a chum has been using on 75 meters for the
past 6 years. I never noted any deterioration of the
twinlead, and if there were any losses when it got wet I
never noticed. I had nothing but success with that antenna,
and got consistently good signal reports.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

985. Re: Modern "Grid Dip Meters"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 01:03:19 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C437FC3.C72B6507@shaw.ca>
Source record: 150773

Richard Clark wrote:
>
> On Mon, 14 Jan 2002 06:01:32 GMT, n7ws@yahoo.com (Wes Stewart) wrote:
>
> >
> >When I retired, "my" lab had a megabuck worth of computer controlled equipment
> >including a $200,000 H-P 8510C network analyzer, but I still had the GDO,
> >despite the best efforts of the Metrology department (sorry Richard) to red tag
> >it and call it "Inactive Equipment."
> >
> >Wes N7WS
> >
> >ps. Grid dip meters gotta have grids.
>
> :-)

Grid! What means grid, Daddy? :-) :-)
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

986. Coil Losses vs effects of whip swaying in the breeze

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 01:08:49 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <SdL08.26030$V55.2317497@e3500-atl1.usenetserver.com>
Source record: 150774

Here's something for the experts to comment on. All of us know that there are a certain amount
of coil losses in any loaded whip. To minimize that, we can try to run as long a whip as physi-cally possible. Yet, the longer the whip, the more it tends to flop around in the breeze--some-
times causing SWR to fluctuate wildly. So, which would be worse overall: the extra coil losses
with a "stiff" upper whip (with apologies to our British friends), or the SWR created in a Hi Q
coil by a whip thrashing around in the wind?

Doc? CAM? (I tend to think the constant coil losses would be less of a problem than the floppy whip).

73
Jerry
K4KWH

987. Re: to 'Doc

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 01:13:30 UTC
From: "Stef@no" <NOSPAMvisenta9@inwind.it>
Message-ID: <_mL08.28141$aD.1030162@twister2.libero.it>
Source record: 150775

> I doubt it. The high bands should be ok, but the low band performance
> will probably be fairly lame. I bet those autotuner inductors are kind
> of lossy compared to a hi-Q loading coil. MK

thank you, I agree with you. I've never thought about this.

988. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 01:31:33 UTC
From: N0SA <n0sa@earthlink.net>
Message-ID: <VDL08.31859$zw3.3065105@newsread1.prod.itd.earthlink.net>
Source record: 150776

"> I don't know of any situation involved with feeding an antenna where a
> voltage balun is desirable. Why were you considering using one?
>
> Roy Lewallen, W7EL

Well, in Jerry Sevick's book on baluns he mentions using one for such an antenna. That is the only reason I bring it up. I was leaning towards no balun and moving the feedline and rig as little as possible.
Thanks for the input.
Larry N0SA

989. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 01:55:55 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C438C2C.8182578F@icok.net>
Source record: 150777

Larry,
With the weight of the required power supply, ATU, and
the rest, a few more ounces shouldn't make any difference.
If your worried about performance, stop worrying. No one
will be able to tell the difference...
'Doc

990. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 02:05:25 UTC
From: M Kolber <mkolber@bellatlanictNS.net>
Message-ID: <F7M08.16826$Ep1.2561@nwrddc02.gnilink.net>
Source record: 150778

+AD4-The velocity factor for the radials buried 0.1 meter is
+AD4-apparently about 0.2, making them a half wavelength long. By
+AD4AKg-shortening+ACo- the radials from 8 to 6 meters, the loss was reduced from
+AD4-11.9 dB to 5.0 dB, a 6.9 dB improvement.

Gee, then it seems like we should +ACI-tune+ACI- the radials to be electrically 1/4 wavelength in the particular VF they are in. Maybe by tuning the length of the radials to get the maximum current in the radials.

Mark
WB2WHC

991. Re: Balun recommendation?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 02:27:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C43939D.4324FC0E@eznec.com>
Source record: 150779

Thanks for the recommendation. I think very highly of Press Jones and
his products, so I'm glad to pass the recommendation along.

Roy Lewallen, W7EL

Tom Brown wrote:
>
> Roy,
>
> I have a couple of current baluns in service for my own equipment and a
> goodly number of the local ARES folks use the same type: # 823 from
> http://www.thewireman.com/baluns.html .
>
> Tom N4TAB
> Wake Forest, NC
>
> ~~~~~~~~~~~~~~~~~~~
>
> Roy Lewallen wrote:
> >
> > Can someone recommend a rugged and weatherproof commercial current
> > balun? Low wind loading is desirable. This is for permanent installation
> > at a local amateur emergency communications center. Operation will be 40
> > and 75 meters.
> >
> > Thanks!
> >
> > Roy Lewallen, W7EL

992. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 02:43:37 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a20506$5cp$1@nntp9.atl.mindspring.net>
Source record: 150780

Thread:

Carborundum Corporation used to manufacture various high power non-inductive
resistors. Does anybody know if they are still in business?

--Peter K1PO

"JLB" <jim.bolinger@lintek.aeroflex.com> wrote in message
news:8d5ec8a2.0201140632.2f0b0a57@posting.google.com...
> Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com> wrote in message
news:<mfr1ygvp7wz.fsf@panix1.panix.com>...
> > Hi,
> > I'm trying to locate some 500 ohm non-inductive termination
> > resistors. The recipient wants 2 watt or 1 watt units, and I'm having
> > no luck locally. He says "film" resistors are a problem, and one
> > question is if carbon-film resistors are a problem, or is he conflating
> > them with metal film resistors?
> >
> > Ohmite OY series seem as if they might do, being ceramic composition
> > resistors, but they're not listed as being non-inductive.
> >
> > I need these by the first days of February, and would like to have as
> > many as 5. Any suggestions about what will work, and where I can find
> > them?
> >
> > 73, doug
>
> Last time I saw one, the Mouser Electronics catalog had carbon
> compisition resistors. They're on the web, too.
>
> Jim
> N8EE

993. Re: Tower Wound Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 02:55:02 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C4399C9.60533D4A@tampabay.rr.com>
Source record: 150781

jason
the hard part is getting the tower isolated from ground its not to hard on a new install but if the tower is up its a lot tougher

Jason Ingram wrote:

> Has anybody had any experience of using their tower as a loaded vertical for
> 80/40m.
>
> I am interested in giving it a go but not sure where or how to start.
>
> Any help is appreciated.
>
> Jason
> G7BSK

994. Re: x-50 vs AR270

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 02:55:19 UTC
From: codemaan <codeman@gj.net>
Message-ID: <a205cg01ror@enews3.newsguy.com>
Source record: 150783

I believe I have both. I use the VHF side of the diamond x-50 and am very satisfied. I have the cushcraft yagi(ar-270 I believe or is the dual band yagi called something else?) dual band and hate it. You could have it (figure of speech) if you would climb the tower and take it down. Now I have had the Cushcraft Ringo Ranger and have been satisfied with it so I am not really against Cushcraft in general.

"haywire4" <haywire4@earthlink.net> wrote in message news:vLJ08.31223$Vz3.3115835@newsread2.prod.itd.earthlink.net...
> Hello all
> I'm looking for a small VHF,UHF antenna that I can
> put up and take down easily.
> I'm thinking about making a mast out of some PVC pipe
> 15' to 20' high that I can mount it on.
> Been thinking about the Diamond X-50@ 5.6' or
> the Cuschcraft AR-270@ 3.75'.
> Any one know how the two of these compare?
> Thanks
> 73,KB9VHL
>
>
>

995. Re: 1.2 GHZ/23 CM Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 03:01:50 UTC
From: Robert Fulton <robfult@carolina.rr.com>
Message-ID: <yYM08.36723$6L1.6067238@typhoon.southeast.rr.com>
Source record: 150787

I'm thinking omni to start with.

"Sylvan Butler" <Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid> wrote in
message
news:slrna466sh.5ks.Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid...
> On Sun, 13 Jan 2002 16:52:14 GMT, Robert Fulton <robfult@carolina.rr.com>
wrote:
> > Looking for information sources and/or antenna recommendations for the
23cm
> > band. Yagi's and large antennas are out of the question due to space
>
> Yagi's for 1.2ghz are fairly small.
>
> Helical are managable.
>
> Did you want directional or omni ?
>
> sdb
>
> --
> | Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
> | Watch out for my e-mail address. Thank UCE. #### change ^ to @ #### |
> They that can give up essential liberty to obtain a little temporary
> safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
> Fight terrorism, arm the population!

996. For Sale: Hustler 5-BTV and B&W 10-40m Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 03:08:29 UTC
From: Robert Fulton <robfult@carolina.rr.com>
Message-ID: <N2N08.36771$6L1.6079324@typhoon.southeast.rr.com>
Source record: 150788
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Please contact me via email: robfult@carolina.rr.com

Selling a Hustler 5-BTV Vertical (80-10m) in the box w/ hardware and instructions. I got this from AES with the assumption that it would work well in the attic horizontally. After assembling, it didn't fit well so I moved to Isotron antennas. This is a BRAND NEW antenna -- receipt will be included from AES, purchased 12/31/01. Paid 149.99 -- will let it go for 110.00 OBO.

I also considered a B&W AS-40 which is a 40-10m trapped Dipole Antenna. Paid 154.99 -- will also let it go for 110.00 OBO. The wires have been cut and permanently attached to ONE SIDE ONLY. Wires are cut with AT LEAST 12 inches of "play" for tuning. I attached one of the sides as instructed and decided to go the Isotron route after evaluating the size of the attic.

Both antennas are brand new with receipts -- never transmitted. Original packing, receipt, instructions, hardware, etc is included. Thx!

Lesson learned :)...

thx.

997. Re: Coil Losses vs effects of whip swaying in the breeze

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 03:16:53 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C439F26.D357205F@icok.net>
Source record: 150782

Jerry,
The 'coil' losses are constant. The rate and amount
of change due to antenna swaying is a variable which can
be controled to a large extent. If you have the choice,
longer whips are 'better' than shorter whips.
'Doc

Ps - Where do you get this 'expert' stuff?

998. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $400.00

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 03:26:14 UTC
From: Webster Williams <Doncha@WishuKnew.com>
Message-ID: <MPG.16ad6bd7b44ba824989825@news-server.sc.rr.com>
Source record: 150784

Then there is the HamTrans e-mail list- too bad folks
didn't participate enough and it died. I tried to
resurrect it, and it died a second time.

hamtrans@qth.net was a great idea- traveling hams
would post their itenerary, buyers would post their
transportation needs, and if two folks got together,
it worked great!

Last week, I could have carried goods from South Carolina
to Atlanta, GA on a flat-bed for any ham who would have
been interested. I even had a little room on the way
back. But- with the hamtrans list gone, who would have
known?

If anyone wants to start the list back up, go ahead.
I tried and it didn't work.

73, -Web Williams in Myrtle Beach, SC KR4WM
E-mail address available on www.qrz.com

999. Re: Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 04:12:37 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u47b29njrv6rec@corp.supernews.com>
Source record: 150785

My calculation using standard assumptions is 234.74 +/- 1.22 K.

"wa2elz" <wa2elz@nospamworldnet.att.net> wrote in message
news:lXi08.268179$WW.13468569@bgtnsc05-news.ops.worldnet.att.net...
> Any one have a good estimate for a yagi antenna noise temperature, in
> degrees Kelvin, pointed at the horizon at a receiving frequency of 600mhz
?
> My guess is between 100 to 300 degrees Kelvin, any better guesses ?
>
>

1000. Re: Broadband Tank Circuit Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 05:10:08 UTC
From: n2ey@aol.com
Message-ID: <20020115001008.20370.00000544@mb-mb.aol.com>
Source record: 150786

In article <3C4269B8.40BF092F@att.net>, "George, W5YR" <w5yr@att.net> writes:

>Another interesting development back in those days was the multi-band tuner
>circuit that was manufactured by National and perhaps others. It was first
>described in QST, if I recall correctly, as the final tank in a
>bandswitching rig - sometime in the late 40's.
>
The multiband tuner was an interesting development. They covered all of the then-ham-bands from 80 thru 10 without bandswitching. As I recall there were two models: MB-40 and MB-150 (the number indicates maximum watts)

I think National held a patent on them.

They had a couple of problems, though. They took up almost as much room as a conventional pi-network. You had to be careful that you didn't tune up on a harmonic. You couldn't de-tune to reduce drive without risking all sorts of harmonics. And when used with a heterodyning rig, there was always the chance that a mixing product would hit one of the unused resonances.

I don't recall any manufactured ham gear that used them.

73 de Jim, N2EY

1001. ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 07:12:50 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C43D672.4050904@europa.com>
Source record: 150789

I don't have the room to run a 160 wire antenna where I live so I've been looking at the Isotron 160 meter antenna so I can get on 160. I know that with an antenna of this type it's going to have a narrow bandwidth, but I have the automatic antenna tuner with my ICOM 745 and turning across the band shouldn't be a problem. But what I was wondering was how the antenna worked other wise? I've done some searches on the internet and I've found some messages of this and the Isotron's for the other bands, but mostly what was said was that they worked.

My main interest is to be able to talk on 160 in the range of about 250 miles between myself and my dad over in Walla Walla, WA. If I can get out further that's even better. Has anyone used or is using this antenna and if so, how did it work? How high did you have it and did you need to ground it to quiet it down (I saw one message that someone had to do this)?

Cost wise it seems to beat buying a vertical that has a 160 meter option and with it's light weight I should be able to get it up higher than I would with a vertical anyway.

Any information would be appreciated.

Thanks

Mike

--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1002. Re: Coil Losses vs effects of whip swaying in the breeze

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 07:19:06 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201142319.df5fcfd@posting.google.com>
Source record: 150790

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message news:<SdL08.26030
So, which would be worse overall:
> the extra coil losses
> with a "stiff" upper whip (with apologies to our British friends), or the
> SWR created in a Hi Q
> coil by a whip thrashing around in the wind?

I'd rather have the longer whip and lower losses anyday. I can deal with the SWR. Actually, this has never really been a problem for me. Sure, I see changes, but it's nothing I can't tune out easily on the fly. I use a tuner for impedance matching. If I tune up in the driveway near my tree, it causes changes, so I'll have to retweak it as I get moving. Once I get out in the open, and tune it in the "flopping backwards" position, I don't have to touch it again. And my SWR stays low. The only time I seem to have problems is around overhanging stuff like trees, etc. But I'm not sure by what you mean as a long whip. My present one is about 7 ft above the coil. The top 5 ft of that 7 is thin springy whip. There is one exception to this though if you think about the whole whip. It's better to have mast below the coil than above it, up to a certain extent where the coil losses start eating you up. So if you take this train of thought, a short whip would be fine if you had a long mast under the coil. If you had two antennas with a total mast of 8 ft plus a foot for the coil with ground losses of 6 ohms, and one had a 2 ft mast + 3 inch coil + a 6 ft whip, it would have an efficiency of about 7.5 %. If you used a 6 ft mast + coil+ 2 ft whip, you would have about 12 %. "this according to Reg's vertload program". So really it's better to have the short stinger and a long mast, but of course if you are like me, you get the long mast going but get greedy and decide to use a long stinger also so you can really get with the program. :) I just deal with the SWR changes using the tuner. I'm in the process of cooking up a 160m mobile antenna. It won't be a barn burner being so small, but should be usable at times I hope. That will give me all bands 160m-70 cm mobile. "Cep't for 220 mhz."..I still can't see why icom left that band off the 706..Seems to me it would be fairly simple to have included it, but maybe I'm missing something. With the ft-100, I hear 220 works as far as rcve but it won't transmit..MK

1003. Re: Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 07:30:52 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <Cs$GSUBsq9Q8EAr1@ifwtech.com>
Source record: 150794

AstroMan wrote:
>My calculation using standard assumptions is 234.74 +/- 1.22 K.
>
>
>"wa2elz" <wa2elz@nospamworldnet.att.net> wrote in message
>news:lXi08.268179$WW.13468569@bgtnsc05-news.ops.worldnet.att.net...
>> Any one have a good estimate for a yagi antenna noise temperature, in
>> degrees Kelvin, pointed at the horizon at a receiving frequency of 600mhz
>?
>> My guess is between 100 to 300 degrees Kelvin, any better guesses ?

I'd be interested in the method used to obtain such precision. What
happens on a warm day?

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1004. FS/FT: 432 MHz Transverter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 07:51:52 UTC
From: HAL <mattanme@hotmail.com>
Message-ID: <scR08.30669$e4.7227187@news0.telusplanet.net>
Source record: 150791

Have for sale or trade:
Microwave Modules MMT 432-28 Transverter, good condition. 28 Mhz IF. with cables. Looking for ham related items to trade preferably . Offers???

1005. Re: Tower Wound Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 08:10:24 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a20o5f$g8a$4@quark.scn.rain.com>
Source record: 150792

Jason Ingram <jason.ingram@ntlworld.com> wrote:
> Has anybody had any experience of using their tower as a loaded vertical for
> 80/40m.

> I am interested in giving it a go but not sure where or how to start.

I believe there is information on such systems in the Antenna Compendium
books. They should be listed on the ARRL site.

--
Bill Nelson (billn@peak.org)

1006. Re: Multi-Band Dipole and 300 Ohm Feedline ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 08:54:10 UTC
From: John Hague <John.Hague@philips.com>
Message-ID: <3C43EE32.870A925B@philips.com>
Source record: 150793

Irv Finkleman wrote:

> Dan McKenzie wrote:
> >
> > Should work great for a multiband antenna. I use the same thing
> > pretty much, 140 foot dipole at about 30 feet, fed with plain old
> > TV-twin-lead. Seems like a beam! I work DX effortlessly. Sure, there
> > theoretically could be a little more loss when it's wet, but I've
> > never noticed it. If it's raining hard enough to be a problem,
> > you don't want to be on the air anyway since there must be
> > a hurricane outside!
> >
> > I run QRP most of the time. Someone said it only lasts 2-3 years?
> > Why? Mine has been up more than 5 years, no problems. The twin-lead
> > I'm using is thick stuff, made for UHF. It's more rugged looking than
> > the real thin stuff, but still, it's just Radio Shack stuff.
> >
> > Works fine.
> >
> > Dan, W9FCC
>
> Ditto. My antenna was fed with the cheapest Radio Shack
> twinlead money could buy -- we set it up just to try it, and
> it stayed there for 13 years!!! I took it down when I went
> to a vertical system, and used the twinlead to make a folded
> marconi which a chum has been using on 75 meters for the
> past 6 years. I never noted any deterioration of the
> twinlead, and if there were any losses when it got wet I
> never noticed. I had nothing but success with that antenna,
> and got consistently good signal reports.
> --
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> --------------------
> Visit my website at http://members.home.net/finkirv/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

I use cheap 300 ohm ribbon to feed a 66 foot dipole, half of which is supported under the eaves of the house. The rest of the dipole is supported by trees. I usually get good signal reports on all bands

from 40m to 10m using just 100W from a FT102 into a MFJ tuner.
Working DX also seems to be no problem. I have also not noticed
any problems with operating whilst the feeder is wet.

Regards

John, G4GOY

1007. Re: Antenna Matching Advice Needed (Homebrew Mobile Tuner)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 10:30:51 UTC
From: Bob Cook <captcook@compuserve.com>
Message-ID: <a210c9$o6e$1@suaar1aa.prod.compuserve.com>
Source record: 150795
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Reg, G4FGQ,

My compliments on your straight forward, multi-faceted, software based
suggestions here.
It helps us all.

Bob K9KKY

www.Ocean-Pro.com
Naples, Florida 34112
941-775-7435, 800-329-4884

1008. Re: Antenna Matching Advice Needed (Homebrew Mobile Tuner)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 12:46:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a21imc$tr7lp$1@ID-124126.news.dfncis.de>
Source record: 150811
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Irv, why didn't *I* think of that ? Sometimes it's so easy to overlook the glaringly obvious.

Reg.

==========
> Jusy clip a 'stinger' -- a couple feet of stiff wire onto
> the end of the
> hustler whip and trim it down to resonance.

1009. Re : Optimizing an AM broadcast band low power Xmitter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 12:48:05 UTC
From: Jerome HALPHEN <jhalphen@dial.oleane.com>
Message-ID: <3C442505.4D47A0B3@dial.oleane.com>
Source record: 150796

Hello,

I am hoping that the great wealth of antenna expertise in this NG can help me with this problem :

I have built the Ramsey Electronics AM-25 synthesized AM radio transmitter. The power is 100 mW at 1350 KHz.
Following the manucfacturer's recommendations, i use (indoors) a vertical length of 6ft of insulated wire as the antenna, loaded at the bottom by a 350 micro Henry coil. The coil is 190 turns of enamel magnet wire randomly wound on a 1.5" diameter PVC tube 5" long. There is no variable capacitor either in series or in parallel to "peak" the antenna. The transmitter output has a double Pi filter output filter (3 inductors/6 fixed caps). The inductors and caps are selected in a table given by Ramsey according to output frequency.

The transmitter works well BUT :

I get only about 150 ft range which i think is not much considering the 100 mW power. The transmitter is in a non-metal building appartment on the 5th floor and i went in the street below with various AM receivers. I loose the signal about 50 ft away from the building/

Receivers near the transmitter exhibit hum, even when the transmitter is powered by batteries !
The hum is dependent on position in the room and sometimes cancels out. Do i need a ground ?

I tried measuring antenna resonance by approaching a transistorized grid-dip meter, but can find no resonance. When used in the field strength mode, the meter shows radiation a few inches away from the loading coil but not along the antenna.

My conclusions so far :

- The antenna is poorly matched because the loading coil is either too high or too low in value, but how can i measure resonance if the grid-dip shows nothing ? should i insert a variable cap in series with the antenna at the transmitter output ?

- I probably need a ground (difficult in an appartment with out of spec wiring).

What is your advice ?

Thank you very much in advance for your recommendations,

Best Regards

jhalphen@dial.oleane.com
Paris/France

1010. FA: hr2510 President Lincoln 10 meter mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 13:19:53 UTC
From: Kamatu <admin@ahww.net>
Message-ID: <a21agb0119f@enews1.newsguy.com>
Source record: 150798

Only 1 day left for auction!
Starts at $1 minimum bid.
Lot's of MODS available for this much sought after radio.

http://s1.amazon.com/exec/varzea/ts/exchange-glance/Y02X4072837X5222360/102-338300-0710545

1011. Ham Radio University 2002 for Long Island

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 13:23:21 UTC
From: GSBARC <info@gsbarc.org>
Message-ID: <d3W08.29014$Zh1.6337452@news02.optonline.net>
Source record: 150797
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Ham Radio University 2002/ARRL New York City-Long Island Section Convention

Ham Radio University 2002 for Long Island

North Babylon, New York - On Sunday, January 20, 2002 at 8AM, the doors of the Babylon Town Hall Annex on Phelps Lane will open for the third annual Ham Radio University. Ham Radio University 2002 is a day of education about Amateur Radio.

This year the forums have been expanded and new forums have been added. There will be twenty, one-hour presentations with special forums geared to the non-ham as well as the experienced ham radio operator. The focus will be "hands on" with many demonstrations.

Come join us at the Babylon Town Hall Annex, Phelps Lane, North Babylon, Long Island, and learn about everything from satellite communications, low power operating using radios as small as a tuna tin, how to put up an emergency antenna, the latest information on advanced digital communications, finding and fixing radio frequency interference problems to purchasing your first station equipment or handi-talkie and a special "Ask the Experts" forum. There will also be a Special Event Station W2V set up and operational on HF. There will live SSTV pictures uploaded to the NLI WWW during the event.

HRU 2002 is sponsored by the Great South Bay ARC and is a cooperative effort between over twenty clubs and organizations in the New York City- Long Island area. It is also the American Radio Relay League, New York City-Long Island Section Convention. Besides the forums, there will be tables set up with information about the different groups, ham radio classes, exam session schedules, public service and other activities.

Join us for a day of fun and education for the whole family!
Admission is open to all - donation is $2 per person.
(complimentary refreshments available)

For more information contact:
Phil Lewis N2MUN, Chairman, n2mun@arrl.net or call 631-226-0698
George Tranos N2GA, ARRL NLI Section Manager, n2ga@arrl.org or call 631-286-7562

Additional information on the WWW at http://hudson.arrl.org/nli

1012. Re: Tower Wound Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 14:10:39 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C442BF5.707635DC@worldnet.att.net>
Source record: 150799

Dennis Kaylor wrote:

> jason
> the hard part is getting the tower isolated from ground its not to hard on a new
> install but if the tower is up its a lot tougher
>
> Jason Ingram wrote:
>
> > Has anybody had any experience of using their tower as a loaded vertical for
> > 80/40m.
> >
> > I am interested in giving it a go but not sure where or how to start.

It's much easier to shunt feed it leaving it grounded. There is lots of info out there. Many towers are used that way even on 160 meters. If you have a lot ot aluminum in the air above it that adds capacitive loading and helps lower the resonant frequency.
L B Cebik's website should have information.
.
Dick

1013. Re: Antenna Matching Advice Needed (Homebrew Mobile Tuner)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 14:23:38 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C442F00.7223BF1C@worldnet.att.net>
Source record: 150800
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

John Wallace wrote:

> In my mobile I am currently running a 102" whip antenna on 10m which works fine.
> However, I would like to be able to use it on 12m as well. What I would like to
> do is to homebrew a fixed L/C tuner (pre-tuned for the middle of the 12m band)
> that I can just switch in when I want to work 12m, and out when I want to work
> 10m with no knobs to fiddle with. It also needs to handle around 400 watts. I
> would like to wind my own inductor etc. for it so I would need the coil
> dimensions, value of C, a schematic to see how this would all go together would
> also be extremely helpful (this is my first project of this sort). Any
> assistance anyone can offer is greatly appreciated.

You complicate the project considerably by your requirement to switch the netork in and out without leaving the drivers seat (if I understand correctly). For base station use a homemade trap would serve this purpose well, but would be unwieldy on a mobile whip.
You can use a ten meter Pro Am whip and change to a longer "stinger" for 12 meters. Or use a 12 meter whip and change to a shorter stinger for 10. You can use some older CB antennas and rewind them to use on the higher HF ham bands. I once did this for 17 meters and worked all over the world with an Icom 735 running 50 watts mobile.

Dick

1014. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 14:34:59 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C4431AB.5104742D@worldnet.att.net>
Source record: 150801

Mike Jordan wrote:

> I don't have the room to run a 160 wire antenna where I live so I've
> been looking at the Isotron 160 meter antenna so I can get on 160.
> I know that with an antenna of this type it's going to have a narrow
> bandwidth, but I have the automatic antenna tuner with my ICOM 745
> and turning across the band shouldn't be a problem. But what I was
> wondering was how the antenna worked other wise? I've done some
> searches on the internet and I've found some messages of this and
> the Isotron's for the other bands, but mostly what was said was that
> they worked.
>
> My main interest is to be able to talk on 160 in the range of about
> 250 miles between myself and my dad over in Walla Walla, WA. If I
> can get out further that's even better. Has anyone used or is using
> this antenna and if so, how did it work? How high did you have it
> and did you need to ground it to quiet it down (I saw one message
> that someone had to do this)?
>
> Cost wise it seems to beat buying a vertical that has a 160 meter
> option and with it's light weight I should be able to get it up
> higher than I would with a vertical anyway.

Mike, if you use an Isotron on 160 you'll just *think* you're on 160.
You won't work anyone outside the neighborhood. It's almost as bad on
75/80.

1015. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 14:39:55 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c443c39_2@corp.newsgroups.com>
Source record: 150802

"N0SA" <n0sa@earthlink.net> wrote in message
news:VDL08.31859$zw3.3065105@newsread1.prod.itd.earthlink.net...
>
> "> I don't know of any situation involved with feeding an antenna where a
> > voltage balun is desirable. Why were you considering using one?
> >
> > Roy Lewallen, W7EL
>
> Well, in Jerry Sevick's book on baluns he mentions using one for such an
> antenna. That is the only reason I bring it up. I was leaning towards no
> balun and moving the feedline and rig as little as possible.
> Thanks for the input.
> Larry N0SA
>
HI Larry & Roy,

I've used in the past the method Roy is talking about and it works real
well,, there may be a need for seperate tuned radial on one or more bands to
keep rf off the rig, I found the CW keyer was easily impacted by rf
currents and can make for some funny sounding Morse on CW. I would think
that a well thought out real windom antenna with single wire feed may also
be a viable backpack antenna setup..
one other issue that may need to be looked at is that most internal tuners
are not vary wide range in the 80m & 160 meter bands. Anyway it's food for
thought.
73 Dave kc1di

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1016. Re: Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 14:43:34 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201150643.62a3d32e@posting.google.com>
Source record: 150803

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
news:<u47b29njrv6rec@corp.supernews.com>...
> My calculation using standard assumptions is 234.74 +/- 1.22 K.
>
>
> "wa2elz" <wa2elz@nospamworldnet.att.net> wrote in message
> news:lXi08.268179$WW.13468569@bgtnsc05-news.ops.worldnet.att.net...
> > Any one have a good estimate for a yagi antenna noise temperature, in
> > degrees Kelvin, pointed at the horizon at a receiving frequency of 600mhz
> ?
> > My guess is between 100 to 300 degrees Kelvin, any better guesses ?
> >
> >

...which is closer to 300 k than 100 k!

Jim
N8EE

1017. Re: Tower Wound Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 14:45:36 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201150645.769ab9d2@posting.google.com>
Source record: 150804

Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
news:<3C4399C9.60533D4A@tampabay.rr.com>...
> jason
> the hard part is getting the tower isolated from ground its not to hard on a new
> install but if the tower is up its a lot tougher
>
> Jason Ingram wrote:
>
> > Has anybody had any experience of using their tower as a loaded vertical for
> > 80/40m.
> >
> > I am interested in giving it a go but not sure where or how to start.
> >
> > Any help is appreciated.
> >
> > Jason
> > G7BSK

Shunt feed the tower, or use the whole thing as a folded monopole.
That way the tower could be grounded.

Jim
N8EE

1018. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 14:52:13 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201150652.681db13c@posting.google.com>
Source record: 150805

"N0SA" <n0sa@earthlink.net> wrote in message
news:<q1K08.31579$zw3.3043345@newsread1.prod.itd.earthlink.net>...
> I am planning to do some backpacking this year and will be taking a K1 with
> autotuner. I plan to use a 102 foot flat top fed with about 30 to 40 feet of
> TV twinlead. The aspect of weight and size is important. I am trying to
> decide if a balun is worth the effort and what type I will use. I have a
> copy Jerry Sevicks, "Building And Using Baluns". If I were to use a balun I
> am leaning towards a voltage balun.
> My main question --- is a balun in this situation really worth the effort
> versus just feeding the twinlead directly to my autotuner? What will be
> gained with the balun?
> Larry N0SA

If you are using a balanced antenna with balanced feed line, why do
you need a balun? Does your tuner already have a balanced output?

At the power levels you are talking about, you could wind a balun on a
1" toroid. Even better...wind a few feet of the feedline into a coil
a few inches in diameter. Something like this has been in the ARRL
books for several decades now.

Jim
N8EE

1019. QK-710 questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 15:03:11 UTC
From: marc@laradio.co.za
Message-ID: <3c444459.21227347@news.megaweb.co.za>
Source record: 150806

Hi there,

Anyone have any idea where I can get hold of a construction manual, or
just a diagram, for the QK-710 40m add-on kit for the HY Gain
Explorer-14?

Regards,

Marc ZS6HZ
Johannesburg.

1020. Re: Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 15:09:12 UTC
From: n7ws@yahoo.com
Message-ID: <3c44441b.4713800@news.triconet.org>
Source record: 150807

On Mon, 14 Jan 2002 23:12:37 -0500, "AstroMan"
<AstroMan@dont.bug.me.with.spam.nyet> wrote:

|My calculation using standard assumptions is 234.74 +/- 1.22 K.

Couldn't you give us another decimal point?

This reminds me of when H-P gave the ARRL lab an 8970 noise figure box. The lab did some product reviews and spouted the NFs to two decimal place precision.

I once tuned up a 1296 MHz preamp for a friend. We measured 0.7 dB NF. Then I put it on the (scalar) network analyzer and measured the mismatches (~ 10:1) and did the uncertainty calculations.

His NF was 0.7 +/- 0.6 dB. So as Rich Measures would say, "The Nearly Perfect Amplifier."

N7WS

1021. Re: Horizon antenna noise temperature ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 15:09:16 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <wCX08.375505$W8.13672185@bgtnsc04-news.ops.worldnet.att.net>
Source record: 150808

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
news:u47b29njrv6rec@corp.supernews.com...
> My calculation using standard assumptions is 234.74 +/- 1.22 K.
>

How did you use standard assumptions and presume an accuracy within 1% and precision within 2 decimal places?

Steve VE9SRB

1022. MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 15:13:26 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c44a0be_1@news1.prserv.net>
Source record: 150725

Group:

There have been a couple of mentions of the folded unipole for AM broadcasting in Broadcast Engineering recently, but the technical information given on design is a little shallow and incomplete. Has a rigorous analysis of this design ever been published, and if so where? It doesn't seem to show up in IEEE or any of the broadcast related technical publications. Apparently it came along since LaPorte, and neither Kraus nor Jasik treat this particular configuration. Even a good method of moments analysis using NEC by a third party would help.

--
Crazy George
Remove NO and SPAM from return address

1023. Re: Newbie DXing for Israeli broadcasts in UK.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 15:18:37 UTC
From: Juergen Eitle <jurgen.eitle@elca.ch>
Message-ID: <3C4448D6.5A850DD8@elca.ch>
Source record: 150809
Body handling: Binary attachment payload not displayed: jurgen.eitle.vcf

See the following link
http://www.israel-mfa.gov.il/mfa/go.asp?MFAH0dth0

[One or more binary attachments are retained only in the source text.]

1024. FS/FT Ant switche box

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 15:19:49 UTC
From: IUSB Student <someone@IUSB.edu>
Message-ID: <a21hamlff1@flotsam.uits.indiana.edu>
Source record: 150810

okay, I got a homebrew ANT switch box (1 to 5 with the option for a 6th) the Input/output connector is SO-259 with 3 SO-259 and 2 screw terminal blocks for connecting. My MFJ259 swept it has good for 20 meters thru 160 meters(less than 2:1 on 20 meters and flat on 160 meters), I only have a tech lic (KB9YMX) and can't use HF so I'm getting rid of it. Pic's on request and will answer every question I can.

THIS IS NOT MY NORMAL ACCOUNT.... (I'm at school right now) ... I can be reached at Tazanator1@attbi.com I trade under tazanator on ebay for referances (27 as of this morning).

1025. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 16:36:34 UTC
From: Bart Rowlett <bart@wb6hqk.ampr.org>
Message-ID: <3C445A92.C4E4B27E@wb6hqk.ampr.org>
Source record: 150812

CAM wrote:
>
> K4IA wrote:
> > Why limit yourself to only three bands? Use a tuner and ladder line and work
> > all the bands with one antenna. The
> > antenna "should" be at least 3/8 wavelength on the lowest frequency you plan to
> > operate. I used 102 feet because I had an old G5RV laying around. It tunes
> > 160-10 meters and gets out well even though it is "short on 160.
>
> I would have to disagree with you about 160m. According to EZNEC, a 102
> ft. dipole on 160m would have a feedpoint impedance of 5.8-j1474 ohms
> and an SWR of 900:1 on the 450 ohm ladder-line at the antenna. Assuming
> a matched line loss of 0.05 dB, the losses in the ladder-line would
> be about 8 dB. Assuming no tuner losses, only 1/7 of the power
> reaches the antenna.
> --

Remember the loss in dry ladder line at HF is primarily due to the
series
resistance in the conductors. Let's say the feedline is an eighth
wavelength
or so in length, a reasonable value for the urban ham with space
restrictions
on the 160m band.

Suppose the termination is 45 ohms resistive, the SWR is 10:1 and the
transmission line losses are near maximum due to the high current
everywhere
along the line.

Now suppose the termination is 4500 ohms resistive, the SWR is still
10:1 but
the losses are now significantly _lower_ than if the transmission line
were
matched because the currents are so low.

Do you still trust your calculations?

bart
wb6hqk

1026. G5RV (ladder line fed dipole) theory

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 16:39:53 UTC
From: rasw <atdot.dotat@at.sorry>
Message-ID: <a21m15$39h8b$1@rn.area.com>
Source record: 150813

Can anyone out there explain why a "diplole" center fed with twinlead can be tuned for any band (with a tuner) and how that's different from, say, putting an old boxspring in your tree and tuning that for any band?

Is there something special about the length of the antenna and feedline and, if so, what is it?

--
Robert

1027. Re: G5RV (ladder line fed dipole) theory

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 17:05:26 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <v7o84u0nc15uq13v8rt95qcinh0krrokbt@4ax.com>
Source record: 150814

Why not just read about it from the creator.
http://www.qsl.net/aa3px/g5rv.htm

Dick - W6CCD

On Tue, 15 Jan 2002 08:39:53 -0800, "rasw" <atdot.dotat@at.sorry>
wrote:

>Can anyone out there explain why a "diplole" center fed with twinlead can be
>tuned for any band (with a tuner) and how that's different from, say,
>putting an old boxspring in your tree and tuning that for any band?
>
>Is there something special about the length of the antenna and feedline and,
>if so, what is it?

1028. Re: Re : Optimizing an AM broadcast band low power Xmitter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 17:48:56 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <7cq84u07b70b6cras55gi6dbgsld5ai1re@4ax.com>
Source record: 150815

On Tue, 15 Jan 2002 13:48:05 +0100, Jerome HALPHEN
<jhalphen@dial.oleane.com> wrote:

>Hello,
>
>I am hoping that the great wealth of antenna expertise in this NG can
>help me with this problem :
>
>I have built the Ramsey Electronics AM-25 synthesized AM radio
>transmitter. The power is 100 mW at 1350 KHz.
>Following the manucfacturer's recommendations, i use (indoors) a
>vertical length of 6ft of insulated wire as the antenna, loaded at the
>bottom by a 350 micro Henry coil. The coil is 190 turns of enamel magnet
>wire randomly wound on a 1.5" diameter PVC tube 5" long. There is no
>variable capacitor either in series or in parallel to "peak" the
>antenna. The transmitter output has a double Pi filter output filter (3
>inductors/6 fixed caps). The inductors and caps are selected in a table
>given by Ramsey according to output frequency.
>
>The transmitter works well BUT :
>
>I get only about 150 ft range which i think is not much considering the
>100 mW power. The transmitter is in a non-metal building appartment on
>the 5th floor and i went in the street below with various AM receivers.
>I loose the signal about 50 ft away from the building/
>
>Receivers near the transmitter exhibit hum, even when the transmitter is
>powered by batteries !
>The hum is dependent on position in the room and sometimes cancels out.
>Do i need a ground ?
>
>I tried measuring antenna resonance by approaching a transistorized
>grid-dip meter, but can find no resonance. When used in the field
>strength mode, the meter shows radiation a few inches away from the
>loading coil but not along the antenna.
>
>My conclusions so far :
>
>- The antenna is poorly matched because the loading coil is either too
>high or too low in value, but how can i measure resonance if the
>grid-dip shows nothing ? should i insert a variable cap in series with
>the antenna at the transmitter output ?
>
>- I probably need a ground (difficult in an appartment with out of spec

>wiring).
>
>What is your advice ?
>
>Thank you very much in advance for your recommendations,
>
>Best Regards
>
>jhalphen@dial.oleane.com
>Paris/France

Hi Jerome ,

I don't know what your government restricts antenna size to for this low powered AM service, hopefully it is not limited to 2 meters. If that is the case, so be it. However, you could drop a ground wire from your 5th floor (being clever to hide it - and even if it did not touch ground) and find your coverage boosted considerably. The problem is in the efficiency of the short antenna (= none). The addition of inductors, capacitors, in any combination is unlikely to bring much reward when what you need is size.

You would do well to review past postings to this group about 160M Antenna characteristics, especially those wanting to use that band mobile (and thus revealing the huge losses that must be suffered).

73's
Richard Clark, KB7QHC

1029. Re: Tower Wound Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 18:29:33 UTC
From: Jason Ingram <jason.ingram@ntlworld.com>
Message-ID: <B86A258D.5FD3%jason.ingram@ntlworld.com>
Source record: 150816

Thanks chaps,

I have a 33ft glavanised steel box section telescopic tower
I will have a look at the ARRL website to see what's available.

Incidently has anybody had any experience of using E/H field antennas?.

Jason
> From: jim.bolinger@lintek.aeroflex.com (JLB)
> Organization: http://groups.google.com/
> Newsgroups: rec.radio.amateur.antenna
> Date: 15 Jan 2002 06:45:36 -0800
> Subject: Re: Tower Wound Antennas?
>
> Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
> news:<3C4399C9.60533D4A@tampabay.rr.com>...
>> jason
>> the hard part is getting the tower isolated from ground its not to hard on a
>> new
>> install but if the tower is up its a lot tougher
>>
>> Jason Ingram wrote:
>>
>>> Has anybody had any experience of using their tower as a loaded vertical for
>>> 80/40m.
>>>
>>> I am interested in giving it a go but not sure where or how to start.
>>>
>>> Any help is appreciated.
>>>
>>> Jason
>>> G7BSK
>
> Shunt feed the tower, or use the whole thing as a folded monopole.
> That way the tower could be grounded.
>
> Jim
> N8EE

1030. Re: 3 band dipole with single feed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 18:33:58 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C447616.F65DD77@IEEE.org>
Source record: 150817

Bart Rowlett wrote:
>
> CAM wrote:
> >
> > K4IA wrote:
> > > Why limit yourself to only three bands? Use a tuner and ladder line and work
> > > all the bands with one antenna. The
> > > antenna "should" be at least 3/8 wavelength on the lowest frequency you plan to
> > > operate. I used 102 feet because I had an old G5RV laying around. It tunes
> > > 160-10 meters and gets out well even though it is "short on 160.
> >
> > I would have to disagree with you about 160m. According to EZNEC, a 102
> > ft. dipole on 160m would have a feedpoint impedance of 5.8-j1474 ohms
> > and an SWR of 900:1 on the 450 ohm ladder-line at the antenna. Assuming
> > a matched line loss of 0.05 dB, the losses in the ladder-line would
> > be about 8 dB. Assuming no tuner losses, only 1/7 of the power
> > reaches the antenna.
> > --
>
> Remember the loss in dry ladder line at HF is primarily due to the
> series
> resistance in the conductors. Let's say the feedline is an eighth
> wavelength
> or so in length, a reasonable value for the urban ham with space
> restrictions
> on the 160m band.
>
> Suppose the termination is 45 ohms resistive, the SWR is 10:1 and the
> transmission line losses are near maximum due to the high current
> everywhere
> along the line.
>
> Now suppose the termination is 4500 ohms resistive, the SWR is still
> 10:1 but
> the losses are now significantly _lower_ than if the transmission line
> were
> matched because the currents are so low.
>
> Do you still trust your calculations?

Yep, the 0.05dB is the estimate for the losses for *100 ft* of ladder-line
on 160m. 100 ft of ladder-line includes a current maximum point when
the feedpoint impedance is the estimated 6-j1400 ohms for a 102 ft
dipole used on 160m. Since 100ft of feedline doesn't include a current

minimum point, it looks like I *underestimated* the losses due to SWR.
In my original response, I should have said, "Assuming a matched line
loss of 0.05dB/100ft." Sorry I omitted the 100ft parameter.
--
cheers, CAM http://www.qsl.net/w5dxp

1031. Re: G5RV (ladder line fed dipole) theory

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 18:54:08 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C447AD0.CEC5F0FD@IEEE.org>
Source record: 150818

rasw wrote:
>
> Can anyone out there explain why a "diplole" center fed with twinlead can be
> tuned for any band (with a tuner) and how that's different from, say,
> putting an old boxspring in your tree and tuning that for any band?
>
> Is there something special about the length of the antenna and feedline and,
> if so, what is it?

Any SWR circle on the Smith Chart crosses the purely resistive line at a point where the purely resistive impedance is less than the characteristic impedance of the transmission line. For dipoles at least 3/8 wavelength long, that purely resistive point is a good place to feed the antenna system from the transmitter since that pure resistance is usually between 25 ohms and 100 ohms yielding a 50 ohm SWR of 2:1 or less. The thing responsible for the transformation of the antenna feedpoint impedance into a relatively low pure resistance is the transmission line, e.g. Z0 = 300 ohms in the case of the G5RV.

The G5RV is 3/2 wavelengths on 20m and is fed with 1/2 wavelength of 300 ohm line.

On 20m, the antenna feedpoint impedance is close to purely resistive and transforming that resistive impedance through 1/2 wavelength of 300 ohm line yields an impedance that is close to resistive and easy to match.

On 40m, the antenna feedpoint impedance is highly resistive and highly inductive. 1/2WL on 20m = 1/4WL on 40m so the 300 ohm matching section transforms the high feedpoint impedance into a low impedance relatively close to being purely resistive and is easy to match.

On 80m, the antenna feedpoint impedance is low resistance with a component of capacitive reactance. 1/2WL on 20m = 1/8WL on 80m so the 300 ohm matching section transforms the feedpoint impedance into a low impedance relatively close to being purely resistive and is easy to match.

A similar thing happens on 12m where there is an easy match. The match is not as good on 15m but is still acceptable.

The 1/2WL on 20m length of 300 ohm line turns out to be a terrible choice for 30m, 17m, and 10m where the G5RV is predictably, a poor performer.

There is something special about the length of the matching section but, unfortunately, it is not special on all 8 HF bands.
--
cheers, CAM http://www.qsl.net/w5dxp

1032. Antenna question, repair?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 20:03:49 UTC
From: Bruce & Mary Jack <aa370@fan.nb.ca>
Message-ID: <Pine.SOL.3.91.1020115155954.23545A-100000@fan1.fan.nb.ca>
Source record: 150719

Good afternoon all

I have a question. I have a deep fringe VHF/UHF/FM directional antenna.
Its about 6 months old and has suffered ice/snow damage.
My question is has anyone heard of anyone that has or sells replacement
elements for these antennas or even just the bulk aluminum tubing to cut
to size and fabricate?
I would lke to save this antenna if possible.
All help would be greatly appreciated. thanks

1033. Re:RJX 1011D

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 20:15:24 UTC
From: ME <hrbe@dingoblue.net.au>
Message-ID: <3c448d5e$0$25446$afc38c87@news.optusnet.com.au>
Source record: 150720

List,

I apologise for the repost, but so far no response.

I have acquired a National RJX 1011D txcvr.

However I have no details with the unit at all, I desperately in need of the microphone pinout details as the unit has no mike, and also a good readable copy of the tuning details, perhaps the full operators manual.
I will pay for a good copy etc

John McLean
VK2KCE

1034. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 20:36:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C4492DB.1DF4ED3@eznec.com>
Source record: 150721

Feedline radiation is caused whenever the currents in the two conductors of the feedline aren't equal and opposite. Using a symmetrical antenna and symmetrical feedline like twinlead don't guarantee this. If you connect one conductor of your "balanced" feedline to the center conductor of your rig's antenna connector and the other to the chassis, you're just about guaranteed to have unbalanced currents in your feedline. Your rig produces equal and opposite currents on the center conductor and on the inside of the ground part of the coax connector. All the current from the center conductor flows into one conductor of the feedline. But the current from the inside of the ground part of the connector splits. Part goes into the second feedline conductor, and part flows over the outside of the rig to ground however it can get there. Exactly the same thing happens at the antenna end of the feedline if you connect coax to a dipole. The amount of imbalance depends on the relative impedances of the two available paths for the ground or shield current. Either twinlead or coax can carry balanced currents and be balanced, and either can carry unbalanced currents and be unbalanced. Using twinlead doesn't help current balance in any way.

Tuners with a "balanced" output usually have an integral 4:1 voltage balun. This should work fine if the impedance of the antenna isn't too high and if it's physically symmetrical. The problem is that the impedance of a multiband dipole can be too high on some bands for the balun to work effectively.

To learn more about this, see "Baluns: What They Do and How They Do It" in the _ARRL Antenna Compendium_, Vol. 1.

Roy Lewallen, W7EL

JLB wrote:
>
> If you are using a balanced antenna with balanced feed line, why do
> you need a balun? Does your tuner already have a balanced output?
>
> At the power levels you are talking about, you could wind a balun on a
> 1" toroid. Even better...wind a few feet of the feedline into a coil
> a few inches in diameter. Something like this has been in the ARRL
> books for several decades now.
>
> Jim
> N8EE

1035. Re: G5RV (ladder line fed dipole) theory

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 20:57:14 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4497A8.6A9DEC7E@icok.net>
Source record: 150722

Robert,
When you really 'get down to it', there isn't a huge
difference. It's more a matter of getting the 'correct'
input impedance of the 'box springs' so your transmitter
will 'like' it. It'll work. It won't be all that 'good'
of an antenna on 80 meters, but better than you might think
above 15 meters. It'd also help if you had two 'box springs',
you know, keep it balanced. If you happen to try this for
an antenna, would you please take pictures? I wanna see
how you get the 'springs' up into the tree...
'Doc

1036. Re: G5RV (ladder line fed dipole) theory

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 21:04:32 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C44995E.9A319546@icok.net>
Source record: 150723

Robert,
Joking aside, the G5RV is a 1.5 wave 20 meter antenna with
a fairly odd impedance matching system, that just happens to
work on other bands (with a tuner). The reason for that sort
of matching method is that those components are what Mr. Varny
happened to have on hand. I had the opportunity to ask him,
that's what he said...
'Doc

1037. Re: Re : Optimizing an AM broadcast band low power Xmitter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 21:15:32 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C449BF1.77C7E6AE@icok.net>
Source record: 150724

Jerome,
The performance of your transmitter sounds like it's
about 'normal' for the antenna your using. Aside from
the legality, a larger antenna would give you more range.
From an appartment, you will really have 'fun' using a
larger antenna! Meaning a 1/4 wave (about 180 feet) is
going to be very difficult. You might search for information
about "small, loop, transmitting antennas". I still
wouldn't expect much improvement, but there will be some.
Your neighbors are going to ~love~ you...
'Doc
PS - A ground will improve the performance.

1038. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 21:30:47 UTC
From: N0SA <n0sa@earthlink.net>
Message-ID: <bc118.33887$Vz3.3336958@newsread2.prod.itd.earthlink.net>
Source record: 150726

Back to the subject of a voltage balun. In Sevvick's book he mentions some tests he ran and experiments he did with voltage baluns specifically for tuners and dipoles for multi band operation. Any thoughts to his ideas?? I also plan to operate only on 40, 30 ,20 and 15 M bands. i am going to do a little experimenting myself to come up with a dipole and feedline length to cut down on impedence excursions as much as possible. Interesting topic, to me anyway.
Larry N0SA

1039. Re: Antenna question, repair?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 21:32:54 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c44a3fa_2@news1.prserv.net>
Source record: 150728

Texas Towers www.texastowers.com sells raw aluminum tubing, and probably some of the other antenna shops in your part of the country do also. One trick we used to do is to visit an antenna installer and buy a couple of old busted antennas for the tubing. If there are only a few breaks, splicing them becomes cheaper than replacement. Use stainless sheet metal screws wherever possible.

--
Crazy George
Remove NO and SPAM from return address
Bruce & Mary Jack <aa370@fan.nb.ca> wrote in message
news:Pine.SOL.3.91.1020115155954.23545A-100000@fan1.fan.nb.ca...
> Good afternoon all
>
> I have a question. I have a deep fringe VHF/UHF/FM directional antenna.
> Its about 6 months old and has suffered ice/snow damage.
> My question is has anyone heard of anyone that has or sells replacement
> elements for these antennas or even just the bulk aluminum tubing to cut
> to size and fabricate?
> I would lke to save this antenna if possible.
> All help would be greatly appreciated. thanks
>

1040. Re: Antenna question, repair?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 21:36:36 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a2277q$ra0$1@bob.news.rcn.net>
Source record: 150727

"Bruce & Mary Jack" <aa370@fan.nb.ca> wrote:

> My question is has anyone heard of anyone that has or sells replacement
> elements for these antennas or even just the bulk aluminum tubing to cut
> to size and fabricate?

In the USA, the "Toy and Model" stores sell a variety of
small aluminum and brass tubing. So does a hardware
store chain known as OSH (Orchard Supply Hardware).

Good luck -- Mark

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

1041. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 22:00:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C44A66E.D80A62B@eznec.com>
Source record: 150729

I'm sorry, I haven't read the book mentioned earlier. In his "Transmission Line Transformers", he presents many measurements which I fully believe are valid, but I've gotten the distinct impression that he doesn't really quite understand what the purpose of a balun is in the first place. I put my views forth quite a few years ago now in the Compendium article, and have seen no evidence since that any of what I said there is incorrect. In that article I explain how:

1. The purpose of a balun used in feeding an antenna is to prevent common mode feedline current, and therefore feedline radiation.
2. Common mode feedline current is the vector sum of the two conductor currents (or half this value depending on your definition), so common mode current is zero only when the conductor currents are equal and opposite.
3. The "current" balun (a term I coined in that article) is one that forces the conductor currents to be equal and opposite, which is what a balun needs to do when used with an antenna. A current balun can also be appropriately called a choke balun or common mode choke.
4. A "voltage" balun (also coined in that article) is one that forces the conductor voltages to be equal and opposite relative to the "cold" side of the balun input.
5. If the antenna is entirely symmetrical with respect to ground, the third winding in a 1:1 voltage balun conducts no current. It can then be disconnected with no effect. The result is identical to a two-winding 1:1 current balun.
6. If the antenna isn't entirely symmetrical with respect to ground, a voltage balun will CAUSE common mode current to flow by attempting to balance the conductor voltages.

So at best, a voltage balun will work as well as a current balun. At worst, it'll increase feedline radiation. At the time that article was written, nearly all the commercial baluns were voltage baluns. I'm glad to report that this has changed.

I'd like to note that there is a place for voltage baluns, in feeding voltage driven push-pull amplifiers, for example. But they're not the thing to use for feeding antennas.

I highly recommend the analysis of balun operation at http://fermi.la.asu.edu/w9cf/articles/balun/index.html.

Roy Lewallen, W7EL

N0SA wrote:
>
> Back to the subject of a voltage balun. In Sevvick's book he mentions some

> tests he ran and experiments he did with voltage baluns specifically for
> tuners and dipoles for multi band operation. Any thoughts to his ideas??
> I also plan to operate only on 40, 30 ,20 and 15 M bands. i am going to
> do a little experimenting myself to come up with a dipole and feedline
> length to cut down on impedence excursions as much as possible.
> Interesting topic, to me anyway.
> Larry N0SA

1042. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 22:14:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C44A9A8.D7B480F5@eznec.com>
Source record: 150730

To name a few:

J.B. Lewis, "Use of Folded Monopoles in Antenna Arrays", and J. Leonhard, R.D. Mattuck, and J. Pote, "Folded Unipole Antennas", IRE Trans. A&P, July, 1955

L.M. Vallese, "A Broad-Banded Folded Monopole Antenna", IEEE Trans. A&P, January, 1972

Ron Nott, K5YNR, "Unipole Antennas -- Theory and Practical Applications", QST. (My photocopy doesn't show the date, but it's 1987 or later judging by the references.)

Paul H. Lee, _The Amateur Radio Vertical Antenna Handbook_, 2nd Ed. (CQ, 1984)

A folded unipole is nothing more than half a folded dipole, which you'll find discussed in just about any text, such as Kraus, Jasik, or Johnson.

Roy Lewallen, W7EL

Crazy George wrote:
>
> Group:
>
> There have been a couple of mentions of the folded unipole for AM
> broadcasting in Broadcast Engineering recently, but the technical
> information given on design is a little shallow and incomplete. Has a
> rigorous analysis of this design ever been published, and if so where? It
> doesn't seem to show up in IEEE or any of the broadcast related technical
> publications. Apparently it came along since LaPorte, and neither Kraus nor
> Jasik treat this particular configuration. Even a good method of moments
> analysis using NEC by a third party would help.
>
> --
> Crazy George
> Remove NO and SPAM from return address

1043. Re: AM Antenna (Justice or Super Select-A-Tenna)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 23:19:32 UTC
From: ipassets <machine.age@verizon.net>
Message-ID: <3C44B904.194FF33F@verizon.net>
Source record: 150731
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment

I have used both the Kiwa and the Terk extensively. The Kiwa is not worth the money. The terk is as good as it gets, unless you roll your own---but make it big.

jme

N9ZEF wrote:

> you should try the kiwa loop.
> it is better than the two you are inquiring about.
> but it is not cheap. about $300 iirc.
>
> 73
> paul
>
> "Daniel Simpson" <dzan@qwest.net> wrote in message
> news:110120020819552121%dzan@qwest.net...
> > I have a Mckay Dymek AM7 with a Terk antenna plug into it I would like
> > better reception then what i am getting and have been looking at the
> > Justice or Super Select-A-Tenna Does anybody have opinions on these
> > models or other sugestions.
> >
> > Thank You
> > Dan

1044. Silvertone "RadioNet" aerial

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 23:26:20 UTC
From: SK <skrason@TAKETHISOUTerols.com>
Message-ID: <a22dfn$lc1$1@bob.news.rcn.net>
Source record: 150732

Greetings!

I'm researching a circa 1943 Silvertone Mod. 7051 console radio. The schematic refers to a loop antenna, but there is none. There is a sticker inside the cabinet that refers to a "Radionet Self-Contained Aerial System". There are also a bunch of short reddish strands of wire/cloth remnants throughout the inside of the cabinet. Is this some kind of antenna 'fabric' that was used at that time? Anyway to replace it?

TIA

Steve

1045. full size van and antennas for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 23:30:49 UTC
From: jclind@sentex.net
Message-ID: <dG80d04f0oVk-pn2-5O6w8Z9dQdJQ@localhost>
Source record: 150733

-- I drive a full size van for work and I want to install an HF rig and antenna. I currently have a President HR2510 and a modified K40 mounted on the roof. It works fine for 10M. I want to install an ICOM 706MKIIG. I have a hustle but I am concerned that it would be too close to the van body if I mounted it on the driver side bumper and even worse if I attached it to the side panel. What are other hans using and where have you got them mounted. The roof is not an option as I sometimes go into areas that are height restricted.

Thanks

John
ve3sjv@rac.ca

1046. FA: Motorola Syntor X9000 dual radio VHF/UHF

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 23:35:00 UTC
From: Dan <dan@marinpicific.com>
Message-ID: <E0318.32970$kh6.426537121@newssvr14.news.prodigy.com>
Source record: 150734

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1322468727

1047. Re: Silvertone "RadioNet" aerial

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-15 23:37:07 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C44BD23.1A5B0B5D@coqui.net>
Source record: 150735

SK wrote:
>
> Greetings!
>
> I'm researching a circa 1943 Silvertone Mod. 7051 console radio. The
> schematic refers to a loop antenna, but there is none. There is a sticker
> inside the cabinet that refers to a "Radionet Self-Contained Aerial System".
> There are also a bunch of short reddish strands of wire/cloth remnants
> throughout the inside of the cabinet. Is this some kind of antenna 'fabric'
> that was used at that time? Anyway to replace it?
>
> TIA
>
> Steve

First, let me invite you over to rec.antiques.radio+phono where someone might be able to help more than I.
I have a large table model 1581 that has all the jazz about the Radionet on its back panel. The Radionet antenna itself in this model isn't much more than a glorified loop antenna, in my case about 12" square. Since its a multi-band SW set there may be some windings specific for BC and SW but I really haven't attempted to sort it out. I don't know if Silvertone used the 'Radionet' term in a generic sense but it wouldn't be a surprise.
If you don't have the schematic, you might want to check http://www.nostalgiaair.org click the Rider's Online link and see if its there and if it depicts anything notable about the antenna on the schematic such as separate windings, etc.
One like mine would certainly be re-creatable, so if you need any specific info re turns dimensions, I'll be happy to provide them.

Regards,
Bill WX4A
http://www.sparkbench.com

1048. Re: Antenna question, repair?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 00:39:01 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C44CB57.8047F3AA@bellatlantic.net>
Source record: 150736

If they're crimped aluminum rod elements like a typical TV antenna.. its pretty easy to install wood dowels of proper size into the bent elements and re-form the aluminum around. If the whole thing is bent up bad, you'd probably get off cheaper to replace it. Real Aluminum Tubing isn't cheap.

'73 KI4Z

Bruce & Mary Jack wrote:

> Good afternoon all
>
> I have a question. I have a deep fringe VHF/UHF/FM directional antenna.
> Its about 6 months old and has suffered ice/snow damage.
> My question is has anyone heard of anyone that has or sells replacement
> elements for these antennas or even just the bulk aluminum tubing to cut
> to size and fabricate?
> I would lke to save this antenna if possible.
> All help would be greatly appreciated. thanks
>

1049. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 00:58:04 UTC
From: tdonaly@cs.com
Message-ID: <20020115195804.22706.00001878@mb-mi.news.cs.com>
Source record: 150737

In the third edition of Jerry Sevick's book,
Transmission Line Transformers, starting on page 9-3 he writes,
referencing a schematic of a three winding Ruthroff balun,
"The third wire, winding 5-6, according to Ruthroff's 1959 paper, is
necessary to complete the path for the magnetizing current (ref 9).
From recent discussions with colleagues, including Ruthroff, it was agreed
that the third wire is not necessary in the performance of his 1:1 balun
in antenna applications. When the reactance of the windings is much greater
than RL (at the lowest frequency of interest), then only transmission line
currents flow and the magnetizing current, as such, is irrelevant."
He goes on to enumerate the disadvantages of using a three-winding Ruthroff
balun for antenna use.

Later he writes;
"On the other hand, the Guanella 1:1 balun shown in figure 9-3, which is
nothing
more than a coiled bifilar winding, does not have the negative effects of the
Ruthroff balun." He goes on to say why he thinks so.

For those who want to know Jerry Sevick's opinions on baluns for antenna use,
chapter 9 of the third edition of his book is a good read.

Tom Donaly KA6RUH

W7EL wrote;
>
>
>I'm sorry, I haven't read the book mentioned earlier. In his
>"Transmission Line Transformers", he presents many measurements which I
>fully believe are valid, but I've gotten the distinct impression that he
>doesn't really quite understand what the purpose of a balun is in the
>first place. I put my views forth quite a few years ago now in the
>Compendium article, and have seen no evidence since that any of what I
>said there is incorrect. In that article I explain how:
>
>1. The purpose of a balun used in feeding an antenna is to prevent
>common mode feedline current, and therefore feedline radiation.
>2. Common mode feedline current is the vector sum of the two conductor
>currents (or half this value depending on your definition), so common
>mode current is zero only when the conductor currents are equal and
>opposite.
>3. The "current" balun (a term I coined in that article) is one that
>forces the conductor currents to be equal and opposite, which is what a
>balun needs to do when used with an antenna. A current balun can also be
>appropriately called a choke balun or common mode choke.

>4. A "voltage" balun (also coined in that article) is one that forces
>the conductor voltages to be equal and opposite relative to the "cold"
>side of the balun input.
>5. If the antenna is entirely symmetrical with respect to ground, the
>third winding in a 1:1 voltage balun conducts no current. It can then be
>disconnected with no effect. The result is identical to a two-winding
>1:1 current balun.
>6. If the antenna isn't entirely symmetrical with respect to ground, a
>voltage balun will CAUSE common mode current to flow by attempting to
>balance the conductor voltages.
>
>So at best, a voltage balun will work as well as a current balun. At
>worst, it'll increase feedline radiation. At the time that article was
>written, nearly all the commercial baluns were voltage baluns. I'm glad
>to report that this has changed.
>
>I'd like to note that there is a place for voltage baluns, in feeding
>voltage driven push-pull amplifiers, for example. But they're not the
>thing to use for feeding antennas.
>
>I highly recommend the analysis of balun operation at
>http://fermi.la.asu.edu/w9cf/articles/balun/index.html.
>
>Roy Lewallen, W7EL
>

1050. Re: Antenna Matching Advice Needed (Homebrew Mobile Tuner)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 01:01:10 UTC
From: motsteve@mediaone.net
Message-ID: <motsteve-1501022003190001@dplane-176-88-250.pompano.net>
Source record: 150738
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In article <a21imc$tr7lp$1@ID-124126.news.dfncis.de>, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

> Irv, why didn't *I* think of that ? Sometimes it's so easy to overlook the
> glaringly obvious.
> ---
> Reg.
>
> ============================
> > Jusy clip a 'stinger' -- a couple feet of stiff wire onto
> > the end of the
> > hustler whip and trim it down to resonance.

Someone out there is going to laugh at me, but at my age, I don't care. If you have a 10mtr whip already, is it not possible to get one of the old telescoping whips for a CB portable, lash it to the top of the whip and then extend it when you want to operate at 12mtrs? I know this sounds like real "amateur radio", but what the heck, that's the way the hobby goes. :-)

BTW, for the purest, let's not worry about a return loss of 10 db versus 14 at the desired freq. Let's get on the air! Keep that Poynting vector pointing in the right direction. E X H, rah, rah, rah! :-)

Steve
WB4CZR
Plantation, FL

RF should be fun and not a pain.

1051. Rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 01:46:59 UTC
From: rob <rhka0fbj@winco.net>
Message-ID: <3C44DB93.DF2AF5AB@winco.net>
Source record: 150739

wtb YAESU 450 or earlier model elevation rotator

1052. Re: Tower Wound Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 02:05:44 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C44D393.BF53C8A3@worldnet.att.net>
Source record: 150740

Jason Ingram wrote:

>Incidently has anybody had any experience of using E/H field antennas?.

If that is the "cross field" antenna that has been widely cussed and discussed here, just do a Google search on the archives of this NG to find more than you ever wanted to know. Not good.

Dick

1053. Antewnna for Icom R2 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 02:09:01 UTC
From: F73Yi8wT3 <AtHome@Excite.com>
Message-ID: <a22nbf$u8v4v$1@ID-59690.news.dfncis.de>
Source record: 150741

Whats a good all around antenna as well as one for 800-900 MHz?
Size is no diiference to me, I thuink the stubbys are for local only and not used to get DX right?

1054. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 02:28:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C44E558.99D04593@eznec.com>
Source record: 150742

Thanks very much for bringing my attention to Chapter 9 of Sevick's book. I had looked at the first edition of his book in considerably more detail, but haven't looked much at the second edition. It was that and some of his other writings that made me think he didn't understand the function of baluns when applied to antennas. In the second edition, he's completely revised this chapter, and agrees that a current balun is the preferred implementation for antenna applications. So he has figured it out -- I stand corrected. I'm glad to see he's carried this on to the third edition, which I don't have.

Now, can someone please explain to me exactly what it means for the third winding on a voltage (or Ruthroff) balun to "complete the path for the magnetizing current"? This is the only explanation Ruthroff gives in his paper for its existence, and Sevick uses exactly the same wording without further explanation. Of course, what it actually does is force the voltages to be equal and opposite through conventional transformer action. But what does this have to do with magnetizing current? The only use of the term I'm familiar with is the current that flows in the winding of an unloaded transformer. It can be made smaller by making the winding inductances higher, and is generally considered to be undesirable. Perhaps he explains this in the third edition?

Roy Lewallen, W7EL

Tdonaly wrote:
>
> In the third edition of Jerry Sevick's book,
> Transmission Line Transformers, starting on page 9-3 he writes,
> referencing a schematic of a three winding Ruthroff balun,
> "The third wire, winding 5-6, according to Ruthroff's 1959 paper, is
> necessary to complete the path for the magnetizing current (ref 9).
> From recent discussions with colleagues, including Ruthroff, it was agreed
> that the third wire is not necessary in the performance of his 1:1 balun
> in antenna applications. When the reactance of the windings is much greater
> than RL (at the lowest frequency of interest), then only transmission line
> currents flow and the magnetizing current, as such, is irrelevant."
> He goes on to enumerate the disadvantages of using a three-winding Ruthroff
> balun for antenna use.
>
> Later he writes;
> "On the other hand, the Guanella 1:1 balun shown in figure 9-3, which is
> nothing
> more than a coiled bifilar winding, does not have the negative effects of the
> Ruthroff balun." He goes on to say why he thinks so.
>

> For those who want to know Jerry Sevick's opinions on baluns for antenna use,
> chapter 9 of the third edition of his book is a good read.
>
> Tom Donaly KA6RUH
>

1055. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 03:29:22 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c44f77f_4@news1.prserv.net>
Source record: 150743

Ah, but there's the rub, Roy:

The specific configurations being discussed aren't pure folded monopoles. Several variations include multiple down wires which may even be individually fed by multiple transmitters on different frequencies, the fold may or may not be at the top, funny things (well, reactances in peculiar configurations) appear at the bottom as part of the feed, and so on. The early A&P articles may well be what I am looking for, as I didn't search back that far. The BE articles intimate that the design is much newer than that. Folded unipoles at VHF I know from the 1940s Andrew designs for two-way radio, (I think there is still one out in the antenna boneyard somewhere) but this is more involved, or at least that is what the broadcasters try to lead one to believe.
--
Crazy George
Remove NO and SPAM from return address

Roy Lewallen <w7el@eznec.com> wrote in message
news:3C44A9A8.D7B480F5@eznec.com...
> To name a few:
>
> J.B. Lewis, "Use of Folded Monopoles in Antenna Arrays", and J.
> Leonhard, R.D. Mattuck, and J. Pote, "Folded Unipole Antennas", IRE
> Trans. A&P, July, 1955
>
> L.M. Vallese, "A Broad-Banded Folded Monopole Antenna", IEEE Trans. A&P,
> January, 1972
>
> Ron Nott, K5YNR, "Unipole Antennas -- Theory and Practical
> Applications", QST. (My photocopy doesn't show the date, but it's 1987
> or later judging by the references.)
>
> Paul H. Lee, _The Amateur Radio Vertical Antenna Handbook_, 2nd Ed. (CQ,
> 1984)
>
> A folded unipole is nothing more than half a folded dipole, which you'll
> find discussed in just about any text, such as Kraus, Jasik, or Johnson.
>
> Roy Lewallen, W7EL
>
>
> Crazy George wrote:
> >
> > Group:
> >

> > There have been a couple of mentions of the folded unipole for AM
> > broadcasting in Broadcast Engineering recently, but the technical
> > information given on design is a little shallow and incomplete. Has a
> > rigorous analysis of this design ever been published, and if so where?
It
> > doesn't seem to show up in IEEE or any of the broadcast related
technical
> > publications. Apparently it came along since LaPorte, and neither Kraus
nor
> > Jasik treat this particular configuration. Even a good method of
moments
> > analysis using NEC by a third party would help.
> >
> > --
> > Crazy George
> > Remove NO and SPAM from return address

1056. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 03:32:53 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C44F465.6000105@europa.com>
Source record: 150744

Dick Carroll wrote:

>>
>
> Mike, if you use an Isotron on 160 you'll just *think* you're on 160.
> You won't work anyone outside the neighborhood. It's almost as bad on
> 75/80.

Hi Dick, is this from first hand experience or what you have heard?
I've not found a lot of reviews on it or old messages, but I
didn't find any that were worse than "It's better than nothing".
But then, it could be that not many people use them. I wish it was
something I could get at Home Deopot or Sears because if it didn't
work I'd be able to take it back and get my money back.

Thanks

Mike
KJ4TX

--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1057. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 03:57:17 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C44FA1D.BC30FBB1@IEEE.org>
Source record: 150747

Mike Jordan wrote:
> I've not found a lot of reviews on it or old messages, but I
> didn't find any that were worse than "It's better than nothing".
> But then, it could be that not many people use them. I wish it was
> something I could get at Home Deopot or Sears because if it didn't
> work I'd be able to take it back and get my money back.

Mike, if they worked, I would have one. Maybe you would get better
results if you asked the newsgroup to design a 160m antenna for
you given your boundary conditions.
--
cheers, CAM http://www.qsl.net/w5dxp

1058. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 03:57:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C44FA27.AE3E8A75@eznec.com>
Source record: 150745

I'm sorry. I read your posting too rapidly. From the context, it sounded like "this design" was referring to folded monopoles in general, rather than to a specific design. I don't subscribe to Broadcast Engineering, so don't have any idea what the design you're referring to looks like. Based on your brief description, it sounds like something that NEC could probably handle. Have you tried contacting the author of the article?

Roy Lewallen, W7EL

Crazy George wrote:
>
> Ah, but there's the rub, Roy:
>
> The specific configurations being discussed aren't pure folded monopoles.
> Several variations include multiple down wires which may even be
> individually fed by multiple transmitters on different frequencies, the fold
> may or may not be at the top, funny things (well, reactances in peculiar
> configurations) appear at the bottom as part of the feed, and so on. The
> early A&P articles may well be what I am looking for, as I didn't search
> back that far. The BE articles intimate that the design is much newer than
> that. Folded unipoles at VHF I know from the 1940s Andrew designs for
> two-way radio, (I think there is still one out in the antenna boneyard
> somewhere) but this is more involved, or at least that is what the
> broadcasters try to lead one to believe.
> --
> Crazy George
> Remove NO and SPAM from return address

1059. Re: full size van and antennas for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 03:58:20 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C44FA5A.A6414A3D@icok.net>
Source record: 150746

John,
There are a number of mounting options, door hinges, trailer-
hitch (if any), specialty mounts tot he frame, and who knows what
else...
'Doc

1060. antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 04:29:03 UTC
From: savitesh@yahoo.com
Message-ID: <da32bb5a.0201152029.296563b8@posting.google.com>
Source record: 150748

If the diameter of a half wave dipole antenna is increased from (wavelength/100) to (wavelength/50) then its
a) bandwidth increases
b) bandwidth decreases
c)gain increases
d)gain decreases
Please tell me what is correct answer and why?

1061. LONG WIRE Antenna feed point Z?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 04:36:42 UTC
From: Levent <lsasmazel__NOSPAM@home.com>
Message-ID: <ur718.341697$ez.49578953@news1.rdc1.nj.home.com>
Source record: 150749

I have a very simple question. I hope I will get simple answers. What is the impedance of a long wire 414 feed long and 60 feed from ground. Feed point is one of the end points of this antenna. I think I need to supply the frequencies also. Lets say 3900, 7150 , 14170, 21200, 28500 (All KHz).
Thanks in advance
Levent - KC2CNY
PS: If you like to replay directly lsasmazel@home.com

1062. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 05:01:44 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C450936.24643C98@icok.net>
Source record: 150753

savitesh wrote:
>
> If the diameter of a half wave dipole antenna is increased from (wavelength/100)
> to (wavelength/50) then its
> a) bandwidth increases
> b) bandwidth decreases
> c)gain increases
> d)gain decreases
> Please tell me what is correct answer and why?

"a" 'Cuz you have increased the "k".
'Doc

1063. Re: LONG WIRE Antenna feed point Z?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 05:06:14 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C450A46.ECDB207B@IEEE.org>
Source record: 150756

Levent wrote:
>
> I have a very simple question. I hope I will get simple answers. What is the
> impedance of a long wire 414 feed long and 60 feed from ground. Feed point
> is one of the end points of this antenna. I think I need to supply the
> frequencies also. Lets say 3900, 7150 , 14170, 21200, 28500 (All KHz).
> Thanks in advance
> Levent - KC2CNY
> PS: If you like to replay directly lsasmazel@home.com

You can answer your own question by downloading the free demo version of
EZNEC from eznec.com.
--
cheers, CAM http://www.qsl.net/w5dxp

1064. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 05:07:04 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C450A75.93E0C2DC@icok.net>
Source record: 150755

savitesh wrote:
>
> If the diameter of a half wave dipole antenna is increased from (wavelength/100)
> to (wavelength/50) then its
> a) bandwidth increases
> b) bandwidth decreases
> c)gain increases
> d)gain decreases
> Please tell me what is correct answer and why?

"a)", because the value of 'k' is decreased.
'Doc

1065. How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 05:13:52 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C450C0F.E66FFBF5@capnet.com>
Source record: 150757

.

1066. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 05:36:47 UTC
From: n4codnospam@arrl.net
Message-ID: <3c45116d.5275445@news.mia.bellsouth.net>
Source record: 150750

Thanks, Doc, but unfortunately the windows aren't the jalousie type
with the narrow panes. I had that once before and just used a piece of
wood or plexiglass like you suggest. These awning types that are
common in SoFla are about 18 inches wide and four feet long, with
rubber seals. A pain (sorry about the pun) to replace.
--Phil

On Mon, 14 Jan 2002 04:16:54 GMT, 'Doc <w5lz@icok.net> wrote:

>Phil,
> You can still do the 'through the window' thing with
>the 'jalousy'(?) type windows, just takes a little more
>effort. Some of those type windows have only a small
>metal tab holding the glass in. Bend the tab out of the
>way and replace the glass with plexiglas, or what ever.
> 'Doc

1067. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 05:48:02 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C451412.8305C047@coqui.net>
Source record: 150758

StarGazer wrote:
>
> .

Because Canada has its own rules and the USA has its own rules.

-WX4A

1068. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 05:54:22 UTC
From: n4codnospam@arrl.net
Message-ID: <3c451444.6002509@news.mia.bellsouth.net>
Source record: 150751

Thanks, Dennis

The coax is buried coming up to the exterior wall and the station is
just inside the wall, so I am hoping to make a direct path through the
wall rather than up and down. Also, I can seal it tight that way with
silicone or caulk. I had to take down a dipole that I fed through the
attic vent and down the wall. It was tied to trees and a million ants
followed the feedline into the house and made a home in the wall. Took
the exterminator months to kill them all! We have all kinds of creepy
crawlies down here and they seem to find every entry into the house.

73,
Phil
N4COD

On Mon, 14 Jan 2002 03:44:22 GMT, Dennis Kaylor
<k4oxg@tampabay.rr.com> wrote:

>hey phl
>i have the same problem except that i dont mind a big gapping hole in the
>wall....grin
>what you can do is if you can get into the attic is fish the cable thru
>the overhang into the attic then down the inside of the wallmy problem
>here is i have no access to the attic some idiot installed an attic fan in
>the only hole to the attic
>good luck
>
>"Phil B." wrote:
>
>> Hello all.
>> I am now living in a typical South Fla home, stucco exterior with
>> those lovely awning-type crank-open windows, so replacing a pane with
>> plexiglass isn't possible, as in previous dwellings. Before I drill a
>> hole through the wall, as the cable guy did, does anyone have a neater
>> way of passing the coax through the wall? I am thinking of putting
>> some kind of plate on the outside, running RG8x through a hole, then
>> another plate with a connector on the interior wall. Anyone have pics
>> or description of a good entry through concrete block wall?
>> Thanks es 73
>> Phil N4COD
>

1069. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 05:54:33 UTC
From: n4codnospam@arrl.net
Message-ID: <3c451597.6341443@news.mia.bellsouth.net>
Source record: 150752

Thanks for the feedback and suggestions. I was looking at all the boxes at the home improvement warehouse store and kinda liked the weather-tight outlet boxes. Are there boxes like that made just for coax?

Thanks for the drilling, tip, too. The inside wall is finished sheetrock so I am not too concerned about that, as I can put a box or plate there, too, I think. Any suggestions as to how to avoid connecting with existing wiring in the wall. I will shut off the breaker to the outlets, of course.

73,
Phil
N4COD

On Sun, 13 Jan 2002 23:42:19 -0400, Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net> wrote:

>"Phil B." wrote:
>>
>> Hello all.
>> I am now living in a typical South Fla home, stucco exterior with
>> those lovely awning-type crank-open windows, so replacing a pane with
>> plexiglass isn't possible, as in previous dwellings. Before I drill a
>> hole through the wall, as the cable guy did, does anyone have a neater
>> way of passing the coax through the wall? I am thinking of putting
>> some kind of plate on the outside, running RG8x through a hole, then
>> another plate with a connector on the interior wall. Anyone have pics
>> or description of a good entry through concrete block wall?
>> Thanks es 73
>> Phil N4COD
>
>As an ex-cable installer, I second your idea. I have done that
>before...one particular installation was where the guy wanted outlets
>OUTSIDE for temporary connections out on his deck, patio, etc. The
>trick was doing it with no wires showing which meant poking thru the
>back of his interior outlets.
>You can get blank wall plates for this purpose and for outside you might
>want to consider mounting a regular weatherproof receptacle box. That
>will allow you to enter the box from the bottom (neater) and whatever
>connection is inside will remain closed to the weather.
>Drill from inside out so that plaster chipping can be covered by the box
>:-)
>-Bill WX4A
>

1070. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 06:00:00 UTC
From: n4codnospam@arrl.net
Message-ID: <3c4516da.6664975@news.mia.bellsouth.net>
Source record: 150754

Thanks for all the excellent suggestions, everyone.

And very impressive, Owen! Very nice installantion and clear pics.

Maybe RG8U will be a little easier. If mine looks neat enough, I will
post some pics, too. We have a big hamfest here in a couple of weeks,
so I will probably shop for hardware then to get all the right
connectors.

73,
Phil
N4COD

On Tue, 15 Jan 2002 06:52:24 +1100, Owen Duffy <owen@oda.com.au>
wrote:

>
>
>Owen Duffy wrote:
>>
>> Here is an implementation that brings 2 x LDF4-50 and 2 x RG-312 to a
>> patch panel which is based on a standard electical outlet.
>>
>> The patch panel from the inside:
>>
>> http://www.owenduffy.com.au/electronics/post08.jpg
>>
>> The cable entry ducting on the outside:
>>
>> http://www.owenduffy.com.au/electronics/post05.jpg
>>
>> The duct was later painted to match the wall.
>>
>> It is not unobtrusive, but there ain't an elegant way to get LDF4-50
>> into a wall mounted panel.
>>
>
>Some have guessed that there may be other pics and found them. If you
>are interested, they are linked of a page that pulls it all together:
>
>http://www.owenduffy.com.au/electronics/post.htm
>
>The notes provide more detail of the earthing treadment.
>
>Re the comments about equipotential bonding, the earths are bonded in
>accordance with AS3000 (standard for electrical installations) and

>AS1768 (standard for lightning protection).
>
>Conductors that might take a significant portion of a lighting
>down-current are 25 sqmm or 35 sqmm, and equipotential bonding
>conductors are 6 sqmm. Conductors here are rated on their cross
>sectional (conductor) area, so 35 sqmm is a little over a quarter inch
>diameter copper.

1071. Re: LONG WIRE Antenna feed point Z?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 07:03:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C4525CB.E571E434@eznec.com>
Source record: 150759

Actually, there isn't an easy answer to the question, and EZNEC can't answer it. Asking for the impedance at one end of an antenna that's 60 feet in the air is exactly like asking what the resistance of a one-leaded resistor is. You can't connect to a one-terminal resistor, and you can't connect to a one-terminal antenna. Ultimately, you've got to have a return current equal to the current going out. And the path it takes represents an impedance in series with the antenna. For example, if you connect a piece of coax to your rig, a current flows on the center conductor and an equal and opposite current flows on the inside of the shield. At the other end of the coax, suppose you connect the center conductor of the coax to the antenna and leave the braid disconnected. Whatever current flows to the antenna has to be matched by an equal and opposite current on the inside of the shield. The only place for this current to go (or come from) is along the outside of the coax. So the impedance along the outside of the coax has as much to say about how much current flows into the antenna as the antenna itself does. If you put a current balun at the feedpoint to choke off the current on the outside of the coax (or the path to ground along the outside is a quarter wavelength), it'll act like the coax is open circuited at the end. The coax will see a high impedance, regardless of what kind of antenna you hook to it.

For either a person or a program to answer the question, it's necessary to know exactly what the feed system looks like. The feed system is just as much a part of the radiating antenna as the part you think of as the antenna. It has at least as much effect on the impedance as the "antenna" does. The feedline is the other lead of the "resistor".

Roy Lewallen, W7EL

CAM wrote:
>
> Levent wrote:
> >
> > I have a very simple question. I hope I will get simple answers. What is the
> > impedance of a long wire 414 feed long and 60 feed from ground. Feed point
> > is one of the end points of this antenna. I think I need to supply the
> > frequencies also. Lets say 3900, 7150 , 14170, 21200, 28500 (All KHz).
> > Thanks in advance
> > Levent - KC2CNY
> > PS: If you like to replay directly lsasmazel@home.com
>
> You can answer your own question by downloading the free demo version of
> EZNEC from eznec.com.
> --

> cheers, CAM http://www.qsl.net/w5dxp

1072. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 07:15:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a239jr$tsdda$1@ID-124126.news.dfncis.de>
Source record: 150760

savitesh wrote

> If the diameter of a half wave dipole antenna is increased from
(wavelength/100)
> to (wavelength/50) then its
> a) bandwidth increases
> b) bandwidth decreases
> c)gain increases
> d)gain decreases
> Please tell me what is correct answer and why?
====================================

a) is correct, but -

Doubling diameter increses bandwidth by an almost imperceptible amount. So forget it. Diameter has to be increased a hundred fold, or much more (from thin wire to fat cage), to have any useful effect on bandwidth.

Considered as an LC tuned circuit, capacitance increases by an almost imperceptible amount and inductance decreases by an almost imperceptible amount but the damping resistance, the radiation resistance, tends to remain the same.

So resonant Q = (Omega * L) / (Radiation resistance) decreases with L.

Resonant frequency and velocity factor (1 / Sqrt(L*C)) tend to remain the same.

Gain is relative. Relative to what? Another 1/2-wave dipole? dBd? c) and d) are meaningless.

1073. Re: LONG WIRE Antenna feed point Z?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 08:35:31 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a23ekj$tpv95$1@ID-124126.news.dfncis.de>
Source record: 150761

It's not a simple question. It is an impossible question to answer. You
omitted to give wire diameter.

And if the transmitter is at ground level will not the 60 feet of wire in
the vertical feedline entirely change the actual feedpoint impedance and
become part of the radiating system. You will have an inverted-L.

If the transmitter is actually at the end of the long wire, the 60 feet long
connection down to ground from the transmitter ground terminal will still
form a very important part of the radiating system. The input impedance
looking down into the vertical part should be added to the impedance looking
into the long wire.

What do you propose to do with the figures when you have them ?

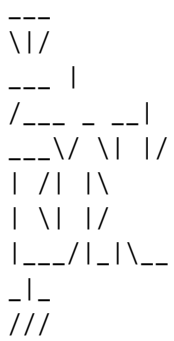
Try downloading program ENDFEED from website below. Takes only a few
seconds. Use it to model whole system including ground electrodes. Will
also provide L and C values for various types of tuner.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Levent <lsasmazel__NOSPAM@home.com> wrote in message
news:ur718.341697$ez.49578953@news1.rdc1.nj.home.com...
> I have a very simple question. I hope I will get simple answers. What is
the
> impedance of a long wire 414 feed long and 60 feed from ground. Feed point
> is one of the end points of this antenna. I think I need to supply the
> frequencies also. Lets say 3900, 7150 , 14170, 21200, 28500 (All KHz).
> Thanks in advance
> Levent - KC2CNY
> PS: If you like to replay directly lsasmazel@home.com
>
>
>
>

1074. Balun or Isolation transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 09:07:24 UTC
From: post_to_usenet@hotmail.com
Message-ID: <b6b4e772.0201160107.432ce38f@posting.google.com>
Source record: 150762

I have always wondered why, when talking about baluns, nobody even mentions the possibility of using a 1:1 (or X:1) isolation transformer at the antenna side of the transmission line. Like:



From a "not knower" point of view it would resolve all the problems of unbalanced currents, no matter wheter the antenna is balanced or not. What are the problems of it? Is it a question of expense/difficulty of building or maybe is that is cannot work as a balun? Please explain :-)

1075. Re: BALUN or NO BALUN???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 09:20:28 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a23gk8$3tm$1@slb0.atl.mindspring.net>
Source record: 150763

Roy:

I too do not understand what Sevick meant about that support of the magnetizing inductance by the "third" winding.

Here's my understanding of the terms.

Magnetizing Inductance Lm in the conventional transformer is the very desirable "large" apparent shunting inductance which appears essentially across the input or output terminals of a transformer behind the small leakage inductances.

A large magnetizing inductance Lm is desirable since it extends the low frequency cut-off of the transformer. This is in contrast to the Leakage Inductances Le1 and Le2 which are small apparent series inductances in series with each winding. It is desirable to have the leakage inductances Le1 and Le2 as small as possible since they limit the upper frequency cutoff of the transformer.

Ignoring winding resistances, and self and interwinding capacitances, to a first order, on a two winding conventional transfromer, quick measurements of Magnetizing and Leakage inductances Lm and Le can be made by measuring the open circuit and short circuit inductances Loc and Lsc on a bridge.

The open circuit inductance Loc is the inductance measured across one winding with the other winding open. Loc is approximately Lm+Le. And since Lm>>Le, then Loc~Lm. The short circuit inductance Lsc is the inductance measured across one winding with the other winding shorted, it is approximaely equal to the leakage inductance Le. Measurements of Loc are "more accurate" than measurements of Lsc since the equvalent inductance is of much higher Q and gives better bridge nulls.

I believe, from making many such measurements in the lab, and using them to predict performance, and correlating those results with bamdwidth performance measurements, that my understanding of these terms is correct.

I guess I need to read Sevick again several times to "get" how that third winding works... what?

-Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C44E558.99D04593@eznec.com...
> Thanks very much for bringing my attention to Chapter 9 of Sevick's
> book. I had looked at the first edition of his book in considerably more
> detail, but haven't looked much at the second edition. It was that and
> some of his other writings that made me think he didn't understand the

> function of baluns when applied to antennas. In the second edition, he's
> completely revised this chapter, and agrees that a current balun is the
> preferred implementation for antenna applications. So he has figured it
> out -- I stand corrected. I'm glad to see he's carried this on to the
> third edition, which I don't have.
>
> Now, can someone please explain to me exactly what it means for the
> third winding on a voltage (or Ruthroff) balun to "complete the path for
> the magnetizing current"? This is the only explanation Ruthroff gives in
> his paper for its existence, and Sevick uses exactly the same wording
> without further explanation. Of course, what it actually does is force
> the voltages to be equal and opposite through conventional transformer
> action. But what does this have to do with magnetizing current? The only
> use of the term I'm familiar with is the current that flows in the
> winding of an unloaded transformer. It can be made smaller by making the
> winding inductances higher, and is generally considered to be
> undesirable. Perhaps he explains this in the third edition?
>
> Roy Lewallen, W7EL
>
> Tdonaly wrote:
> >
> > In the third edition of Jerry Sevick's book,
> > Transmission Line Transformers, starting on page 9-3 he writes,
> > referencing a schematic of a three winding Ruthroff balun,
> > "The third wire, winding 5-6, according to Ruthroff's 1959 paper, is
> > necessary to complete the path for the magnetizing current (ref 9).
> > From recent discussions with colleagues, including Ruthroff, it was
agreed
> > that the third wire is not necessary in the performance of his 1:1 balun
> > in antenna applications. When the reactance of the windings is much
greater
> > than RL (at the lowest frequency of interest), then only transmission
line
> > currents flow and the magnetizing current, as such, is irrelevant."
> > He goes on to enumerate the disadvantages of using a three-winding
Ruthroff
> > balun for antenna use.
> >
> > Later he writes;
> > "On the other hand, the Guanella 1:1 balun shown in figure 9-3, which is
> > nothing
> > more than a coiled bifilar winding, does not have the negative effects
of the
> > Ruthroff balun." He goes on to say why he thinks so.
> >
> > For those who want to know Jerry Sevick's opinions on baluns for antenna
use,
> > chapter 9 of the third edition of his book is a good read.
> >

> > Tom Donaly KA6RUH
> >

1076. Re: Balun or Isolation transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 09:22:52 UTC
From: Val <val_a20@hotmail.com>
Message-ID: <3C45466C.7E650D6@hotmail.com>
Source record: 150764

Cushcraft uses or, at least used to have this in thier
vertical amateur antennas.... So someone HAS thought about
it.

V.

Toni wrote:
>
> I have always wondered why, when talking about baluns, nobody even
> mentions the possibility of using a 1:1 (or X:1) isolation transformer
> at the antenna side of the transmission line. Like:
> ___
> \|/
> ___ |
> /___ _ __|
> ___\/ \| |/
> | /| |\
> | \| |/
> |___/|_|__
> _|_
> ///
>
> From a "not knower" point of view it would resolve all the problems of
> unbalanced currents, no matter wheter the antenna is balanced or not.
> What are the problems of it? Is it a question of expense/difficulty of
> building or maybe is that is cannot work as a balun? Please explain
> :-)

1077. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 12:12:44 UTC
From: ac6v <ac6v@amsat.org>
Message-ID: <3C456E3B.9AA2FE8D@amsat.org>
Source record: 150766

Guess it is because the FCC sez so. And it might have something to do
with the fact there are
700,000 hams in the USA and about 65,000 in Canada. On 20 Meters - USA
allotment is now 150 kHz for CW/Data and 200 kHz for CW phone/image --
seems fair. One can operate CW in the "phone band" but few do.

I seem to recall the USA phone privileges were expanded a few years
back. About 1987
--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!
AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
AC6V Brag Tape at http://ac6v.com/brag.htm
==========
StarGazer wrote:

> .

1078. Re : Optimizing an AM broadcast band low power Xmitter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 13:35:12 UTC
From: Jerome HALPHEN <jhalphen@dial.oleane.com>
Message-ID: <3C458190.104C8364@dial.oleane.com>
Source record: 150767

Richard Clark wrote :
>
>
> Hi Jerome ,
>
> I don't know what your government restricts antenna size to for this
> low powered AM service, hopefully it is not limited to 2 meters. If
> that is the case, so be it. However, you could drop a ground wire
> from your 5th floor (being clever to hide it - and even if it did not
> touch ground) and find your coverage boosted considerably. The
> problem is in the efficiency of the short antenna (= none). The
> addition of inductors, capacitors, in any combination is unlikely to
> bring much reward when what you need is size.
>
> You would do well to review past postings to this group about 160M
> Antenna characteristics, especially those wanting to use that band
> mobile (and thus revealing the huge losses that must be suffered).
>
> 73's
> Richard Clark, KB7QHC

Thank you for your reply.

Hanging a ground wire outside the front of a building located in a restricted (historical) section of town is not really an option. For ground connection choices i have :

- A water drainage pipe on the balcony
- AC power supply ground 30 ft away in the kitchen

would any of these do ?

Option 2 : lengthen the antenna using fine enamel wire going around the room at ceiling level (about 40 ft) would i need to insert a variable cap in series (value ?) to tune for resonance.

Thank you for your help &

Best Regards

jhalphen@dial.oleane.com

1079. Re : Optimizing an AM broadcast band low power Xmitter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 13:47:30 UTC
From: Jerome HALPHEN <jhalphen@dial.oleane.com>
Message-ID: <3C458472.B4571180@dial.oleane.com>
Source record: 150768

'Doc wrote :
>
> Jerome,
> The performance of your transmitter sounds like it's
> about 'normal' for the antenna your using. Aside from
> the legality, a larger antenna would give you more range.
> From an appartment, you will really have 'fun' using a
> larger antenna! Meaning a 1/4 wave (about 180 feet) is
> going to be very difficult. You might search for information
> about "small, loop, transmitting antennas". I still
> wouldn't expect much improvement, but there will be some.
> Your neighbors are going to ~love~ you...
> 'Doc
> PS - A ground will improve the performance.

Thank you very much for replying. Don't worry too much about the neighbors, i have selected a free channel frequency, and even at night there is nothing there. The modulation is not driven beyond 80% (scope check) and there is no splatter. Besides, the standard AM band is practically abandoned by the French, in the daytime there are only 5 stations on the entire dial, including the BBC World Service on 648 KHz. Historically, say 40 years ago , France broadcasted mainly on Long Wave, then in 1981 the FM band opened up to commercial service, so the standard AM band was never very occupied over here.

Thank you for your help &

Best Regards

jhalphen@dial.oleane.com

1080. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 14:16:45 UTC
From: OldBiker <vito@crosslink.net>
Message-ID: <3C458B4D.AB3D65AC@crosslink.net>
Source record: 150669

ac6v wrote:
>
> Guess it is because the FCC sez so. ... On 20 Meters - USA
> allotment is now 150 kHz for CW/Data and 200 kHz for CW phone/image --
> seems fair. One can operate CW in the "phone band" but few do.

This seems odd to me. All the CW gurus I know say that CW gets thru QRM far better than, say, SSB and my very limited experience bares that out. So, why does a superior signal need special allocations? It seems more logical to protect SSB, etc, from CW than vice versa.

73
KA3DWW

1081. Any 6m HT antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 15:45:30 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020116104530.00126.00001830@mb-ms.aol.com>
Source record: 150671

Does anyone know of any monoband antennas for 6m for an HT? I've been told that a 5/8 antenna on 2m is a 1/4 wave on 6m, so could I use a telescoping 2m 5/8 antenna as a 1/4 wave on 6m?

=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

1082. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 15:50:36 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <Odh18.10440$WM6.1905656@e420r-atl1.usenetserver.com>
Source record: 150670

Hi All,
I've got a similar challenge. The exceptions are vinyl ladder line and
very, very strict housing, i.e. no drilling. The house is a pillbox with no
attic and all concrete construction from the foundation to the roof as well.
I'm gonna have to talk to somebody to see what can be done with the
window.
Drink
"Phil B." <n4codnospam@arrl.net> wrote in message
news:3c45116d.5275445@news.mia.bellsouth.net...
> Thanks, Doc, but unfortunately the windows aren't the jalousie type
> with the narrow panes. I had that once before and just used a piece of
> wood or plexiglass like you suggest. These awning types that are
> common in SoFla are about 18 inches wide and four feet long, with
> rubber seals. A pain (sorry about the pun) to replace.
> --Phil
>
> On Mon, 14 Jan 2002 04:16:54 GMT, 'Doc <w5lz@icok.net> wrote:
>
> >Phil,
> > You can still do the 'through the window' thing with
> >the 'jalousy'(?) type windows, just takes a little more
> >effort. Some of those type windows have only a small
> >metal tab holding the glass in. Bend the tab out of the
> >way and replace the glass with plexiglas, or what ever.
> > 'Doc
>
>

1083. Microwave materials properties help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 16:10:19 UTC
From: JB <john_joanneb@yahoo.com>
Message-ID: <a248dt$8f4$1@shale.ftech.net>
Source record: 150672
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Can anyone please help with any good leads on where to find a table of transmission or blocking properties, (attenuation :vs: freq?), for typical engineering polymers and coatings for polymers (conductive EMC shield paints?).
I'm particulary interested in the 2GHz-7GHz range.
Many thanks in advance,
JB

please excuse the cross-post

1084. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 16:13:50 UTC
From: rasw <atdot.dotat@at.sorry>
Message-ID: <a248s0$3ans0$1@rn.area.com>
Source record: 150673

"ac6v" <ac6v@amsat.org> wrote in message news:3C456E3B.9AA2FE8D@amsat.org...

> . One can operate CW in the "phone band" but few do.

Not only that, but you often get YELLED at if you do! Maybe they're just
embarrassed that they don't know CW anymore (or never did).

--
Robert "A F 2 M"
AF2M (@) robert.to

1085. Re: Full size van and antennas for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 16:25:59 UTC
From: Steve Barreres <s.barreres-wb2mmh@att.net>
Message-ID: <3C45AAB1.99BDF57@att.net>
Source record: 150674

I have the same type van, a 1986 Chevy G-20, and installed a 706 as soon as ICOM manufactured the original model. Here is how I proceeded after a lot of thought.

After careful consideration I chose a "Screw Driver" style antenna. "Why get a multiband radio and have to switch coils or sticks...?" were my thoughts. I waited a long time to install a serious mobile rig, let's do it right. The expense is well worth it. Mobile HF has its limitations, especially at the longer wave lengths. Why waste power with an inefficient antenna arrangements.

As the antenna current is maximum from the feed point to just below the center coil, an this is where max radiation occurs. I chose to mount it in a way that the body's effect would be minimal. Drivers front bumper with a special trailer receiver tube welded to the frame worked fine. Actually my antenna is removable from the van and easily installed on the family station wagon, drivers rear position. You do get a few unusual looks, but the antenna works better than I could have anticipated. Remember to pay attention to grounding at the feed point. A good, low impedance ground is a must to the body. I used 1.5 inch copper strap for this. Also watch your height considerations. It is easy to start hitting a lot of overhead obstructions.

I purchased a High Seirra screwdriver and their hitch mount. It work the best for my plans. I guess if I had the time and was not working all day long with RF equipment, I might have built a screwdriver antenna. The real deal is that it is a trade off between your spare time and available dollars.

Best Regards,
Steve Barreres - K2CX

ProNews/2 User wrote:

> -- I drive a full size van for work and I want to install an HF rig
> and antenna. I currently have a President HR2510 and a modified K40
> mounted on the roof. It works fine for 10M. I want to install an ICOM
> 706MKIIG. I have a hustle but I am concerned that it would be too
> close to the van body if I mounted it on the driver side bumper and
> even worse if I attached it to the side panel. What are other hans
> using and where have you got them mounted. The roof is not an option
> as I sometimes go into areas that are height restricted.
>
> Thanks
>
> John

> ve3sjv@rac.ca

1086. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 16:30:05 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C45AA8D.E7197B34@capnet.com>
Source record: 150677

Well our rules need to be changed. And who the hell appointed
the ARRL the rulemaker. I should be able to use the same
portion of the phone bands as them. Especially since CW has
become such a joke of an operating mode.

Your Friend Bill wrote:

> StarGazer wrote:
> >
> > .
>
> Because Canada has its own rules and the USA has its own rules.
>
> -WX4A

1087. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 16:33:17 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C45AB4D.2EA72C12@capnet.com>
Source record: 150678

Thanks for making my point. Since their are so many US hams
all the more reason to have a much bigger phone band like
Canada (Phone being more popular of a mode and much
more practical) And I do a lot more CW than phone.
The fact that ham radio is more popular in the US than Canada
is irrelevant.

ac6v wrote:

> Guess it is because the FCC sez so. And it might have something to do
> with the fact there are
> 700,000 hams in the USA and about 65,000 in Canada. On 20 Meters - USA
> allotment is now 150 kHz for CW/Data and 200 kHz for CW phone/image --
> seems fair. One can operate CW in the "phone band" but few do.
>
> I seem to recall the USA phone privileges were expanded a few years
> back. About 1987
> --
> 73 From AC6V, Rod In Oceanside, CA
> I doubt, therefore I might be!
> AC6V Mega Ham Index at http://ac6v.com
> AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
> AC6V Brag Tape at http://ac6v.com/brag.htm
> ====================================
> StarGazer wrote:
>
> > .

1088. Re: ground-mounted vertical antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 16:36:16 UTC
From: alex@localhost.localdomain
Message-ID: <slrna4bb72.ltv.alex@homer.linux1.lan>
Source record: 150675

On <atdot.dotat@at.at> wrote:
> Folks:
>
> I'm interested in installing a free standing ground-mounted vertical
> antenna. What's the best way of securing this to the ground? I don't think
> I can sledgehammer some mast deep enough to be secure.

This is what I did for mounting a vertical antenna, along with
a spare mast for experiments

get a 8 ft long pressure treated 4x4, and 2 8 ft long treated 2x6s

mount the 2x6 sections across one surface of the 4x4, seperate them by about
3 feet.

sink a 4 ft deep hole in the ground with a posthole digger, then stick the
post into the groun. Use U-bolts to attach antenna masts to horizontal 2x6's

see cheesy ascii art for details ... (not to scale)

```
III
======III======
u u <-- 2x6 u's are u-bolts
======III======
III
III
III <-- 4x4
III
III
======III======
u u <-- 2x6 u's are u-bolts
======III======
III
III
---------------------- <-- ground level
III
III
III
III
```

1089. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 16:39:06 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C45AC95.841F8669@shaw.ca>
Source record: 150676

StarGazer wrote:
>
> .

It's not just Canada -- there are many other countries
that share that portion of the band that you are denied.

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1090. Re: Re : Optimizing an AM broadcast band low power Xmitter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 17:18:04 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <a4bb4u4c4j5ldu1ifpjkpuli0ppnifkfpv@4ax.com>
Source record: 150679

On Wed, 16 Jan 2002 14:35:12 +0100, Jerome HALPHEN
<jhalphen@dial.oleane.com> wrote:

>Thank you for your reply.
>
>Hanging a ground wire outside the front of a building located in a
>restricted (historical) section of town is not really an option. For
>ground connection choices i have :
>
>- A water drainage pipe on the balcony
>- AC power supply ground 30 ft away in the kitchen
>
>would any of these do ?
>
>Option 2 : lengthen the antenna using fine enamel wire going around the
>room at ceiling level (about 40 ft) would i need to insert a variable
>cap in series (value ?) to tune for resonance.
>
>Thank you for your help &
>
>Best Regards
>
>jhalphen@dial.oleane.com
>

Hi Jerome ,

Adding length to the antenna is in order, only if your government
allows (this goes for the suggested wire dropped out the window too).
Your suggestion of looping it around the room might boost performance
- maybe.

Connection to the drainpipe could do the trick, or to the ground at
the AC supply in the kitchen(?). This would bring the building wiring
into the act as being part of the radiator (until that ground wire
actually hits ground). Either of these extends the radiator
considerably further than may be thought.

You ask about inserting a capacitor, and if it would be effective.
This is something that is best determined experimentally as the local
conditions and variables are such wild cards at this wavelength. It
is very unlikely you will hit on the solution the first time, or
possibly even the tenth time. You have to recall, the whole point of
your kit was to limit broadcast range so as to not to interfere with
licensed sources. With such limitations built in, you may already be
at the limit of what is possible. Frankly, I think those 2 pi filters

(although very necessary) are designed to an impedance that serves to kill most of that same 100 mW. That is, without a matched load (proper antenna) there is a massive SWR at the connector due to the low radiation resistance. That "proper antenna" by law here in the US is impossible to connect to (we have limits to how much height can be used for these experimental transmitters).

Any way you look at it, by either law or design or both, your situation is one of incredible inefficiency - maybe 0.1% at best and probably much worse. This means that from that initial 100 mW, you are probably only radiating 100 ï¿½W (which is still quite a lot, locally - within one block).

73's
Richard Clark, KB7QHC

1091. Re: full size van and antennas for HF

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 17:37:15 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201160937.4a73ec45@posting.google.com>
Source record: 150680

jclind@sentex.net (ProNews/2 User) wrote in message
news:<dG80d04f0oVk-pn2-5O6w8Z9dQdJQ@localhost>...
> -- I drive a full size van for work and I want to install an HF rig
> and antenna. I currently have a President HR2510 and a modified K40
> mounted on the roof. It works fine for 10M. I want to install an ICOM
> 706MKIIG. I have a hustle but I am concerned that it would be too
> close to the van body if I mounted it on the driver side bumper and
> even worse if I attached it to the side panel. What are other hans
> using and where have you got them mounted. The roof is not an option
> as I sometimes go into areas that are height restricted.
>
> Thanks
>
> John
> ve3sjv@rac.ca

I guess it depends on what bands you want to work. The body of the van
can be a problem, and it's always better to mount on top if you can
get away with it. But for low band antennas , this is going to be hard
to do. I'd rather be off the front bumper than the rear if the van has
a short" hood". But it does look a bit funky...Many mount of the rear
bumpers, but the body does lower the performance of the antenna. Maybe
you could mount off the rear panel up a bit with a side ball mount,
but not all the way to the roof. Then use a hustler fold over mast to
get into low places. It's very important to try to keep the coil above
roof level if you can. For the high bands, I'd probably use modified
ham sticks on the roof itself and just let them slap off stuff much
like your K40 does. A roof mount on a van is about as good as it gets
for a mobile antenna platform. I'm sure you've noticed the K40 on the
roof works like a hose. Or should anyway... MK

1092. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 17:45:21 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <aYi18.53574$V55.3421864@e3500-atl1.usenetserver.com>
Source record: 150683

Are you leasing your home? Is that why you can't drill? I went thru my wall with a couple
pieces of 5/8" hardline left over from a job. I split the ends so that a "barrel" connector would
fit in each end, and burned out the diaelectic with a torch just enough for these connectors to
slide inside the outer metal jacket. I then used small hose clamps to tighten down onto the
hardline "trapping" the barrel connectors inside. After checking for continuity, I slid these thru
the wall and connected the antenna coax and the rig via a short jumper (I drilled a hole, of course!~). Works fine. I own my house and I don't have a homeowner's association trying to
tell me what I can/cannot do with my own property. I'm too independent for that! LOL!

Jerry
K4KWH
Drink <REMOVE_THISdrink@coqui.net> wrote in message
news:Odh18.10440$WM6.1905656@e420r-atl1.usenetserver.com...
> Hi All,
> I've got a similar challenge. The exceptions are vinyl ladder line and
> very, very strict housing, i.e. no drilling. The house is a pillbox with no
> attic and all concrete construction from the foundation to the roof as well.
> I'm gonna have to talk to somebody to see what can be done with the
> window.
> Drink
> "Phil B." <n4codnospam@arrl.net> wrote in message
> news:3c45116d.5275445@news.mia.bellsouth.net...
> > Thanks, Doc, but unfortunately the windows aren't the jalousie type
> > with the narrow panes. I had that once before and just used a piece of
> > wood or plexiglass like you suggest. These awning types that are
> > common in SoFla are about 18 inches wide and four feet long, with
> > rubber seals. A pain (sorry about the pun) to replace.
> > --Phil
> >
> > On Mon, 14 Jan 2002 04:16:54 GMT, 'Doc <w5lz@icok.net> wrote:
> >
> > >Phil,
> > > You can still do the 'through the window' thing with
> > >the 'jalousy'(?) type windows, just takes a little more
> > >effort. Some of those type windows have only a small

> > >metal tab holding the glass in. Bend the tab out of the
> > >way and replace the glass with plexiglas, or what ever.
> > > 'Doc
> >
> >
>
>
>

1093. Re: RJX 1011D

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 17:46:45 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201160946.3cae6526@posting.google.com>
Source record: 150681

"ME" <hrbe@dingoblue.net.au> wrote in message
news:<3c448d5e$0$25446$afc38c87@news.optusnet.com.au>...
> List,
>
> I apologise for the repost, but so far no response.
>
>
> I have acquired a National RJX 1011D txcvr.
>
> However I have no details with the unit at all, I desperately in need of the
> microphone pinout details as the unit has no mike, and also a good readable
> copy of the tuning details, perhaps the full operators manual.
> I will pay for a good copy etc
>
> John McLean
> VK2KCE

The mike would be simple. Just get a gator clip jumper wire and probe
the pins to ground. When you get one that keys the rig, you have your
PTT hot line. It's possible there may be a floating ground on there
also, but depends. When you find the one that keys the rig, then clip
to the others and just let the other lead float. When you get to one
that produces some hum, that is your audio hot line. Once you find
those two lines, you can check to see if any of the other pins are a
ground. Some just use the chassis as the ground and have two pins.
Some may have 4 pins, and grounds. BTW, make sure your drive levels
are set to low before you start trying to key the rig. You don't want
it keying up with full drive, and having the finals mismatched. :(MK

1094. Re: RJX 1011D

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 17:50:17 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201160950.16264b33@posting.google.com>
Source record: 150682

"ME" <hrbe@dingoblue.net.au> wrote in message
news:<3c448d5e$0$25446$afc38c87@news.optusnet.com.au>...
> List,
>
> I apologise for the repost, but so far no response.
>
>
> I have acquired a National RJX 1011D txcvr.
>
> However I have no details with the unit at all, I desperately in need of the
> microphone pinout details as the unit has no mike, and also a good readable
> copy of the tuning details, perhaps the full operators manual.
> I will pay for a good copy etc
>
> John McLean
> VK2KCE

Also, I probably should have noted obviously you will need to be
listening on a recvr tuned to freq to listen for the hum on the audio
line once you get it to key up. MK

1095. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 18:12:26 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C45C28A.14DB87A2@IEEE.org>
Source record: 150684

StarGazer wrote:
> Well our rules need to be changed. And who the hell appointed
> the ARRL the rulemaker.

Nobody appointed the ARRL the rulemaker. The ARRL doesn't make
the rules. The federal government appointed the FCC to make
the rules.
--
cheers, CAM http://www.qsl.net/w5dxp

1096. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 18:17:21 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C45C3B1.C08F2DEB@IEEE.org>
Source record: 150685

rasw wrote:
>
> "ac6v" <ac6v@amsat.org> wrote in message news:3C456E3B.9AA2FE8D@amsat.org...
>
> > . One can operate CW in the "phone band" but few do.
>
> Not only that, but you often get YELLED at if you do! Maybe they're just
> embarrassed that they don't know CW anymore (or never did).

I hear lots of hams checking into SSB nets using CW because they cannot
be heard on SSB. When SSB fades, I switch over to CW and complete the
QSO on the same frequency.
--
cheers, CAM http://www.qsl.net/w5dxp

1097. Re: Balun or Isolation transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 18:19:37 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C45C439.4D625725@IEEE.org>
Source record: 150686

Toni wrote:
>
> I have always wondered why, when talking about baluns, nobody even
> mentions the possibility of using a 1:1 (or X:1) isolation transformer
> at the antenna side of the transmission line. Like:
> ___
> \|/
> ___ |
> /___ _ __|
> ___\/ \| |/
> | /| |\
> | \| |/
> |___/|_|__
> _|_
> ///
>
> From a "not knower" point of view it would resolve all the problems of
> unbalanced currents, no matter wheter the antenna is balanced or not.
> What are the problems of it?

One problem is that you would have a difficult time designing a circuit
that works over all HF ham frequencies with the impedances involved.
--
cheers, CAM http://www.qsl.net/w5dxp

1098. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 18:26:54 UTC
From: rasw <atdot.dotat@at.sorry>
Message-ID: <a24glg$3ap15$1@rn.area.com>
Source record: 150688

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C45C3B1.C08F2DEB@IEEE.org...
> rasw wrote:
).
>
> I hear lots of hams checking into SSB nets using CW because they cannot
> be heard on SSB. When SSB fades, I switch over to CW and complete the
> QSO on the same frequency.

I like to build simple QRP transmitters, which are mostly CW. Whenever I've tried to reply to some SSB station in CW, it's rare that I get a cordial reply. And I go real s-l-o-w, too!

1099. Re: Balun or Isolation transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 18:28:58 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <59gb4u0pvehp41vlkfg19r64k6lcat8mu0@4ax.com>
Source record: 150687

On 16 Jan 2002 01:07:24 -0800, post_to_usenet@hotmail.com (Toni)
wrote:

>I have always wondered why, when talking about baluns, nobody even
>mentions the possibility of using a 1:1 (or X:1) isolation transformer
>at the antenna side of the transmission line. Like:
> ___
> \|/
>___ |
> /___ _ __|
>___\/ \| |/
> | /| |\
> | \| |/
> |___/|_|__
> _|_
> ///
>
>From a "not knower" point of view it would resolve all the problems of
>unbalanced currents, no matter wheter the antenna is balanced or not.
>What are the problems of it? Is it a question of expense/difficulty of
>building or maybe is that is cannot work as a balun? Please explain
>:-)

Hi Toni,

The simple explanation is there is no single explanation (nor single device to cover all situations). In part, what you describe is called link coupling. There are also autotransformer connections to tank circuits that do much the same thing. Each has its appropriate application where it works well, if not dominating all other methods, but that does not translate into universal applicability.

The problem is that the marketplace expects a one device solution and that in turn yields a design of maximum application with no optimization anywhere. Your only hope is that this same design does not carry too many downsides with it. One consequence has been the nearly universal adoption of coaxial feed which necessarily enforces an unbalanced configuration. This was all established with the finals' presentation of a balanced transformer output - immediately tied to ground at one side. Link coupling is built into nearly every modern transistorized rig and then discarded with a wire connection to ground (or through the unbalanced low pass filters that follow the finals).

73's
Richard Clark, KB7QHC

1100. Re: Tower Wound Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 19:44:11 UTC
From: Jason Ingram <jason.ingram@ntlworld.com>
Message-ID: <B86B888B.6087%jason.ingram@ntlworld.com>
Source record: 150689

> From: Dick Carroll <dickc58@worldnet.att.net>
> Organization: Naw....
> Reply-To: dickc58@worldnet.att.net
> Newsgroups: rec.radio.amateur.antenna
> Date: Wed, 16 Jan 2002 02:05:44 GMT
> Subject: Re: Tower Wound Antennas?
>
>
>
> Jason Ingram wrote:
>
>> Incidently has anybody had any experience of using E/H field antennas?.
>
>
> If that is the "cross field" antenna that has been widely cussed and discussed
> here, just do a Google search on the archives of this NG to find more than you
> ever
> wanted to know. Not good.
>
> Dick
>
Dick,

Yes it is, I have read a few articles recently and it seems interesting. I
have no experience of using or building them at all, so I was just after
some opinions / experience.
Why are they not good?.

Jason

1101. Re: Any 6m HT antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 20:12:34 UTC
From: bobbichin <bobtakeoutbichin@ntlworld.com>
Message-ID: <16l18.33264$_x4.5004907@news2-win.server.ntlworld.com>
Source record: 150690

I have experimented with this and mobile mounted on the roof ,
A 141 cm Stainless steel whip works on 6/2/70 but not perfect, nueven swr
curve
But i'v got it down to under 1.6 on all 3 bands.

VHFRadioBuff <vhfradiobuff@aol.comspamsux> wrote in message
news:20020116104530.00126.00001830@mb-ms.aol.com...
> Does anyone know of any monoband antennas for 6m for an HT? I've been told
that
> a 5/8 antenna on 2m is a 1/4 wave on 6m, so could I use a telescoping 2m
5/8
> antenna as a 1/4 wave on 6m?
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
> 73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
> Toms River, NJ USA! Grid FM29ww
> http://vhfradiobuff.tripod.com
> http://edfas.tripod.com

1102. Re: Balun or Isolation transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 20:59:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C45E9B8.8243683@eznec.com>
Source record: 150691

If you can make the tranformer truly act like a transformer, it'll do the isolation job. The problems are more practical than theoretical. You have several things to worry about in designing the transformer. One is winding impedance. The winding impedance, in this case, has to be considerably greater than the differential mode impedance. If it isn't, it'll appear directly across the transmission line. If you use a low permeability high frequency material core, you'll have trouble getting enough impedance in the first place, and you'll have trouble with winding resonances. If you use high permeability low frequency material, it's easier to get a high broadband impedance. But if it ever gets too low, you'll have substantial loss and transformer heating. Another potential problem is capacitive coupling between the windings. This will allow a path for unbalanced currents to flow. The impedance of this path has to be high relative to the common mode antenna impedance.

In contrast, the common current balun degrades gracefully. If its impedance is too low, it simply becomes less effective as a balun, but doesn't add a low impedance across the transmission line. Its impedance has to be high relative to the impedance to ground along the outside of the coax (or the equivalent conductor of a twinlead line) to be effective. The interwinding capacitance is absorbed in the transmission line that constitutes the winding. And the transmission line design is inherently broad band.

This isn't to say that you can't make this method work. It just involves different tradeoffs and would be harder to make work well over as wide a range of frequencies as the more common current balun design.

Roy Lewallen, W7EL

Toni wrote:
>
> I have always wondered why, when talking about baluns, nobody even
> mentions the possibility of using a 1:1 (or X:1) isolation transformer
> at the antenna side of the transmission line. Like:
> ___
> \|/
> ___ |
> /___ _ __|
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> | \| |/
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> _|_
> ///

>
> From a "not knower" point of view it would resolve all the problems of
> unbalanced currents, no matter wheter the antenna is balanced or not.
> What are the problems of it? Is it a question of expense/difficulty of
> building or maybe is that is cannot work as a balun? Please explain
> :-)

1103. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 21:01:31 UTC
From: OldBiker <vito@crosslink.net>
Message-ID: <3C45EA2B.6A807508@crosslink.net>
Source record: 150692

rasw wrote:
>
> I like to build simple QRP transmitters, which are mostly CW. Whenever I've
> tried to reply to some SSB station in CW, it's rare that I get a cordial
> reply. And I go real s-l-o-w, too!

I dunno why. Maybe it's your fist. Seriously, I have CW SW on my PC so I can stick a mic hooked to the sound card over by the rig's speaker just for that purpose. Some fists copy FB ... others poorly. Based on that, I recommend y'all download some freeby CW SW and see how it does with your fist. You might find room to improve.

Keep the faith ...
KA3DWW

1104. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 21:07:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C45EBAB.B2186D09@eznec.com>
Source record: 150693

Chuckle.

I remember the first QSO I had with an SSB station. It was in the late '50s. It was a Canadian station that answered my CW CQ. He said he had gotten tired of being told by AM stations that his signal was terribly distorted, and figured that a CW op would at least have his BFO switched on. This QSO couldn't have taken place if the Canadians weren't allowed to operate down into our CW bands.

Now I return you to the CW/SSB flame wars. Have fun.

Roy Lewallen, W7EL

rasw wrote:
>
> "CAM" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3C45C3B1.C08F2DEB@IEEE.org...
> > rasw wrote:
>).
> >
> > I hear lots of hams checking into SSB nets using CW because they cannot
> > be heard on SSB. When SSB fades, I switch over to CW and complete the
> > QSO on the same frequency.
>
> I like to build simple QRP transmitters, which are mostly CW. Whenever I've
> tried to reply to some SSB station in CW, it's rare that I get a cordial
> reply. And I go real s-l-o-w, too!

1105. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 21:11:59 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C45EC97.7EDDEB6C@icok.net>
Source record: 150694

OldBiker,
Just as a point of information, the old saying, "CW gets
through where voice doesn't", is a carry-over from the 'AM'
days, when it was true. If your using SSB, the saying is
no longer true (given the same circumstances).
'Doc

1106. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 21:13:53 UTC
From: rasw <atdot.dotat@at.sorry>
Message-ID: <a24qei$3b14a$1@rn.area.com>
Source record: 150696

Maybe it is my fist, but 25+ years ago (before computers copied it), nobody had trouble!

But I don't use a straight-key anymore. In fact, any radio I've built in the past 5 years has a built-in 12C509 PIC keyer.

"OldBiker" <vito@crosslink.net> wrote in message news:3C45EA2B.6A807508@crosslink.net...
> rasw wrote:
> >
> I dunno why. Maybe it's your fist. Seriously, I have CW SW on my PC so I
> can stick a mic hooked to the sound card over by the rig's speaker just
> for that purpose.

1107. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 21:19:08 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C45EE46.78AFCCC0@icok.net>
Source record: 150695

Computer based CW programs are easily defeated. Mostly,
because they are 'digital' in nature. Why not use an 'analog'
based computer which doesn't have the same constraints? While
the 'fist' still needs to at least be 'close' to 'good', it
doesn't have to be as 'close' to 'perfect' as required by a
digital program. The 'best' analog CW decoding device is
organic in nature and is normally located between a person's
ears (I've also heard some that seemed to be located in another
place).
'Doc

1108. Re: Microwave materials properties help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 21:21:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C45EEE0.6DB4C1DD@eznec.com>
Source record: 150697
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Last I checked, there was a wide variety of formulations and materials available, and I'd hesitate to accept any "typical" values.

A Google web search of "EMI coatings" gave about 80 hits, mostly coating manufacturers. Any of these should be able to furnish detailed information about their products, and you'll probably find quite a bit on their web pages.

If you're interested in absorptive coatings, see Emerson & Cuming's offerings at http://www.eccosorb.com.

Roy Lewallen, W7EL

JB wrote:
>
> Can anyone please help with any good leads on where to find a table of
> transmission or blocking properties, (attenuation :vs: freq?), for typical
> engineering polymers and coatings for polymers (conductive EMC shield
> paints?).
> I'm particulary interested in the 2GHz-7GHz range.
> Many thanks in advance,
> JB
>
> please excuse the cross-post

1109. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 21:32:19 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C45F15C.13D6EECD@icok.net>
Source record: 150698

StarGazer,
All privileges of amateur licenses are not created equal.
Countries have different requirements and priviledges in their
licensing structure. All countries can't (and shouldn't) be
like the U.S.A., different strokes for different folks, you
know?
If you don't like the way the licensing structure works in
the U.S., petition the FCC to change it. You'll need some very
good reasons, and because "they" can, isn't a very good reason.
It becomes more understandable if you know the history of radio
in this country, at least you'll understand how some of the
rules came about. It also gives you a better knowledge base,
which really comes in handy when you want to change things.
'Doc

1110. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 22:02:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a252vc$ulbb7$1@ID-124126.news.dfncis.de>
Source record: 150703

```
> The ARRL doesn't make
> the rules. The federal government appointed
> the FCC to make the rules.
=========================

And so in the USA you end up with idiotic numbers such as the magic 120
radial, shallow-buried, ground wires because BL&E were fresh out of wire and
forgot to measure soil resistivity. As a European citizen I do not consider
myself bound by such rules. ;o) ;o)
---
Reg.
```

1111. Re: Any 6m HT antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 23:25:59 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C460BB4.E7AAD0B7@tampabay.rr.com>
Source record: 150699

hey there
a 1/4 wave on 6 is 54 inches its rather tough to get something that long on an HT
something that long will cause undue stress on the antenna connection
the best thing you can do is put up an outside antenna and use an adapter to
connect the coax to it

VHFRadioBuff wrote:

> Does anyone know of any monoband antennas for 6m for an HT? I've been told that
> a 5/8 antenna on 2m is a 1/4 wave on 6m, so could I use a telescoping 2m 5/8
> antenna as a 1/4 wave on 6m?
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
> 73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
> Toms River, NJ USA! Grid FM29ww
> http://vhfradiobuff.tripod.com
> http://edfas.tripod.com

1112. Re: LONG WIRE Antenna feed point Z?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 23:29:08 UTC
From: Levent <lsasmazel__NOSPAM@home.com>
Message-ID: <81o18.343763$ez.49806158@news1.rdc1.nj.home.com>
Source record: 150700

I know it was a loaded question. I do not think EZNEC is solwing long wire problems but may be I am wrong.

OK. Lets say I am using #14 ST. type cable from Home Depo and I am trying to feed this system with a coax (52 ohm) what is the best balun 1:1 or 1:256 (Joke)..... I was looking this system as a LONG WIRE for 40 meters and higher ferquencies.

```
<-------------------414 feet----------------->
B------------------------------------------ <- B is the 1:Y
BALUN
| ^
| RG-8X ( x Length ) |
| |
(60 feet from ground)
+---+ v
+---+ TUNER
```

--Levent lsasmazel@home.com

1113. Re: x-50 vs AR270

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 23:30:58 UTC
From: haywire4 <haywire4@earthlink.net>
Message-ID: <S2o18.109$Aj.11122@newsread2.prod.itd.earthlink.net>
Source record: 150701

"codemaan" <codeman@gj.net> wrote in message
news:a205cg01ror@enews3.newsguy.com...
> I believe I have both. I use the VHF side of the diamond x-50 and am very
> satisfied. I have the cushcraft yagi(ar-270 I believe or is the dual
band
> yagi called something else?) dual band and hate it. You could have it
> (figure of speech) if you would climb the tower and take it down. Now I
> have had the Cushcraft Ringo Ranger and have been satisfied with it so I
am
> not really against Cushcraft in general.

Thanks for the reply and the offer,
but I don't care to climb towers,
getting too old,that's why I want to go
with something small and easy to set
up.
73,KB9VHL

1114. Re: Feedline entry into concrete block house

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 23:35:28 UTC
From: la8ak.xnd@online.no
Message-ID: <3c45f6a9.189952493@news.online.no>
Source record: 150702

On Tue, 15 Jan 2002 06:52:24 +1100, Owen Duffy <owen@oda.com.au>
wrote:

>
>
>Owen Duffy wrote:
>>
>> Here is an implementation that brings 2 x LDF4-50 and 2 x RG-312 to a
>> patch panel which is based on a standard electical outlet.
>>
here in the basement it are 2x LDF 7-50, 2x RG-6, 10x RG-213 and H100,
2x RG58 (control lines) and two rotor cables, also had a balanced 600
ohm ladder line
The worst problem is that water follows the cables into the house

Patch panels are not good for UHF/SHF

I use plastic tubes for the cables going under ground in the garden

73
LA8AK
--
remove ,xnd to reply

1115. Re: Silvertone "RadioNet" aerial

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-16 23:58:30 UTC
From: steve <skrason@REMOVEerols.com>
Message-ID: <a23pgk$o80$1@bob.news.rcn.net>
Source record: 150765

Thanks for the reply! The schematic shows 2 loops, but thats about all.
I'll post in radio+phono and see what turns up. Thanks!

"Your Friend Bill" <"Remove The NO In The Reply To Address"@coqui.net> wrote
in message news:3C44BD23.1A5B0B5D@coqui.net...
> SK wrote:
> >
> > Greetings!
> >
> > I'm researching a circa 1943 Silvertone Mod. 7051 console radio. The
> > schematic refers to a loop antenna, but there is none. There is a
sticker
> > inside the cabinet that refers to a "Radionet Self-Contained Aerial
System".
> > There are also a bunch of short reddish strands of wire/cloth remnants
> > throughout the inside of the cabinet. Is this some kind of antenna
'fabric'
> > that was used at that time? Anyway to replace it?
> >
> > TIA
> >
> > Steve
>
> First, let me invite you over to rec.antiques.radio+phono where someone
> might be able to help more than I.
> I have a large table model 1581 that has all the jazz about the Radionet
> on its back panel. The Radionet antenna itself in this model isn't much
> more than a glorified loop antenna, in my case about 12" square. Since
> its a multi-band SW set there may be some windings specific for BC and
> SW but I really haven't attempted to sort it out. I don't know if
> Silvertone used the 'Radionet' term in a generic sense but it wouldn't
> be a surprise.
> If you don't have the schematic, you might want to check
> http://www.nostalgiaair.org click the Rider's Online link and see if
> its there and if it depicts anything notable about the antenna on the
> schematic such as separate windings, etc.
> One like mine would certainly be re-creatable, so if you need any
> specific info re turns dimensions, I'll be happy to provide them.
>
> Regards,
> Bill WX4A
> http://www.sparkbench.com
>

1116. Re: W9INN Antennas Page - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 00:01:03 UTC
From: David Schronce <dschronce@ec.rr.com>
Message-ID: <3C461455.4000700@ec.rr.com>
Source record: 150705

It looks like you have a cached version of the site Tom.. visit the
site, hold down the SHIFT key and click on RELOAD.

I'll recommend teh latest verson of Mozilla as a replacement for
Netscape. http://www.mozilla.org - it's the code that the new Netscape
is being built from, but doesn't have all the AOL advertising in it...

Charles Johnston wrote:

>Hello Tom,
> The site tests OK with Netscape 6.2 . Any of the version 4 Netscape
>browsers are not supported directly. My site stats show fewer than 4% of
>my visitors use Netscape of any version thus the impetus to troubleshoot
>this matter and possibly break it for the other 96% of my visitors is
>low.
>
> I think you might like Netscape 6.2..it is a nice looking internet
>suite......thanks for letting me know about this performance issue.....
>
>
>--
>
>
>73 / DX
>
>Charles T Johnston
>Prescott, Arizona - U.S.A.
>charles@ab7sl.com
>
>AB7SL - Ham Radio Pages
>Official W9INN Antennas Page
>www.ab7sl.com
>
>
>
>

1117. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 00:02:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C46149B.46719F2E@IEEE.org>
Source record: 150704

'Doc wrote:
>
> OldBiker,
> Just as a point of information, the old saying, "CW gets
> through where voice doesn't", is a carry-over from the 'AM'
> days, when it was true. If your using SSB, the saying is
> no longer true (given the same circumstances).
> 'Doc

CW has a considerable edge over SSB as far as signal/noise/bandwidth
goes. What I objected to was: "CW gets through when no other mode will."
That means CW will get through on 10m at night during the bottom
of the sunspot cycle. It ain't gonna happen.
--
cheers, CAM http://www.qsl.net/w5dxp

1118. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 02:05:20 UTC
From: whagen6@cs.com
Message-ID: <20020116210520.05001.00001615@mb-ce.news.cs.com>
Source record: 150706

They work like any other base loaded 10 foot vertical on 160 meters, not very well compared to a dipole or full vertical, maybe 1% or less efficiency, but even with that, work can be done, just dont expect to scream dx into antartica.

1119. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 02:29:43 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <6Eq18.26739$4i5.2906312@news20.bellglobal.com>
Source record: 150707

Not only that, but you often get YELLED at if you do! Maybe they're just embarrassed that they don't know CW anymore (or never did).

Robert "A F 2 M"
AF2M (@) robert.to

Good answer R o b e r t. Did you think that one up all by yourself? I'm a Canadian ham who had to learn code to get on those bands. I still copy it somewhat, but the fact that I choose not to use it is my choice and my choice only. Doesn't mean I don't "know" code. It's typical dumbass answers like yours that separate the gentleman from the idiots. Which one are you?

1120. Vertical Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 02:47:11 UTC
From: Ace_On_Par3 <pwhelton@hal-pcNOSPAM.org>
Message-ID: <a25e0f$7fh$1@news.hal-pc.org>
Source record: 150709

When feeding a ground mounted vertical with coax what is the standard method of routing the feedline to the shack? I would think you would have to bury it or be very careful when you mow the lawn. If you do have to bury it does it have to be in conduit or PVC? Could be they make some super coax these days that can be buried without the need for conduit. Seems like conduit could fill up with moisture if you are not careful.

1121. Rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 02:57:01 UTC
From: rob <rhka0fbj@winco.net>
Message-ID: <3C463D7D.B9870AF0@winco.net>
Source record: 150708

WTB YAESU G550 or earlier model elevation rotator.
Thanks for looking. Rob

1122. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 04:21:46 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C46515A.7070807@europa.com>
Source record: 150710

Hi Cam,

CAM wrote:

> Mike Jordan wrote:
>
>> I've not found a lot of reviews on it or old messages, but I
>>didn't find any that were worse than "It's better than nothing".
>>But then, it could be that not many people use them. I wish it was
>>something I could get at Home Deopot or Sears because if it didn't
>>work I'd be able to take it back and get my money back.
>>
>
> Mike, if they worked, I would have one. Maybe you would get better
> results if you asked the newsgroup to design a 160m antenna for
> you given your boundary conditions.

The problem that I have is that I live in a house with aluminum siding, a patio with tin roofing, a neighbor on one side that has already tried to sue us over a tree and fence on the property line and tried to include my dipole antenna in the suit (he said it was a very dangerous wire hanging above their heads) and I can only get up about 25 feet from poles I have mounted at two corners of the back yard. I don't care if I take out every non-FCC compliant appliance the one neighbor has, but the other neighbors are pretty decent so I try to minimize the amount of wire I have running back and forth in the yard and over our house.

That's why the Isotron, if it worked even half decent, would be a good alternative. I don't chase DX, I don't get into contests, I'm not into nets. I'm just your basic, old fashion ragchewer that has a group of people (including my dad) within Oregon and the neighboring states that I would like to be able to talk to on 160. But I've used enough marginal antennas to know t hat if the Isotron was as good as they would have you believe that a lot of people would have them. I just don't know how many people do, so that is why I asked on here. So far I seem to be getting a pretty good idea of how well it works. <grin>

Right now I have a 80 meter dipole (it's actually an 80/40 something that has been around for a long time and I can tune on most of the other bands as well) that is about 105 feet total length (it's been up awhile and I can't remember what I measured it as). It is in the shape of an L (with the two legs almost equal), with one leg down the length of a 75' 6 foot wood fence and up about 22' on a telescoping mast that is bolted to a post near the end of the fence.

The middle with the 259 connector is up about 25' on another telescoping mast. The other leg goes up about 30' into a tree that is straight out in the front yard (and is also the tree the neighbor tried to sue us to get cut down). The tree is about 60' high and is a big Siberian Elm. I've tried to get a line over some of the higher limbs, but I've not had any luck. I can't use an arrow because of the houses around and I've been hesitant to use my slingshot for the same reason. The two angles I need are either towards the grouchy neighbor or into our house.

I've tried bringing another leg back over the house, but it's a two story and the wire was only a couple of feet over the roof and right over my wife's office who is on the phone a lot. I don't know why, but she doesn't like being on the receiving end of my ham conversations. <grin>

I should be glad that I can talk on 75 to 10 meter bands with what I got. A lot of people can't even do that with the limitations they have. One of these days we hope to move to someplace that has some land with it, maybe then I'll be able to put up a full size 160 meter dipole.

Thanks

Mike
--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1123. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 04:28:12 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C4652DC.3030602@europa.com>
Source record: 150711

William F. Hagen wrote:

> They work like any other base loaded 10 foot vertical on 160 meters, not very
> well compared to a dipole or full vertical, maybe 1% or less efficiency, but
> even with that, work can be done, just dont expect to scream dx into antartica.

Hi William,

As I said in my previous post, I don't chase DX. I did use a mag mount loaded 75 meter antenna on top of a trailer I was living in for awhile. If the Isotron worked as good as that I'd be satisfied. But I doubt it will. with the 75 meter antenna, even though it had a very narrow bandwidth, from Central Oregon I was able to talk to most of Oregon, Washington, Idaho and Calf. That was from the valley that I was staying in. Of course when the bands were marginal I could barely get out of the trailer park, but I've had that happen with the best of antennas.

Well, at least I asked before buying one and trying it. I'm just going to have to be satisfied with 75 to 10 until I can get some space around me to be able to put up something for 160.

Thanks for the comments.

Mike

--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1124. Re: Vertical Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 04:45:51 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4656FB.DD1685CC@icok.net>
Source record: 150712

Ace,
There are a few types of coax that have jackets that
allow burying. You can also put the feedline in pipe of
some kind. What ever is easiest for you...
'Doc

1125. Re: Tower Wound Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 04:53:50 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4658D9.71E47107@icok.net>
Source record: 150713

Jason,
No one has verified ~any~ of the test results quoted
by the designers/developers. The results on at least one
of the test antennas were verified as being falsified.
And to my knowledge there is only one of these antennas
still in use. Not exactly the 'best' track record...
'Doc

1126. Re: Antenna for Icom R2 Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 07:32:38 UTC
From: ok1sip@atlas.cz
Message-ID: <8f3e93b5.0201162332.7e6b3870@posting.google.com>
Source record: 150714

Hi,
what about a discone antenna ? It has almost 1:10 frequency coverage
and a good 50 ohm matching. Seek the web for "discone".

BR from Ivan

1127. Re: LONG WIRE Antenna feed point Z?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 08:01:54 UTC
From: ok1sip@atlas.cz
Message-ID: <8f3e93b5.0201170001.6f3966f6@posting.google.com>
Source record: 150715

Hi,Levent
you wrote
> Lets say I am using #14 ST. type cable from Home Depo and I am trying
> to feed this system with a coax (52 ohm) what is the best balun 1:1 or 1:256
> (Joke).
So the unbalanced port of the balun goes via the coax into the rig -
O.K. One pin of the balun's balanced port goes into the wire - still
clear. And the second pin of the balun's balanced port goes where ? To
nowhere ? Is it an open circuit with (almost) infinite impedance ? But
transforming infinite impedance in 1:anything ratio results still into
infinite impedance ! NO, NOT THIS WAY.
A commonly sensed longwire antenna is a piece of wire more than two
wavelengths long on the lowest working frequency (the length is
usually non_integer_number * half_of_wawelength on ANY of the working
frequencies to avoid very high impedances) connected DIRECTLY to the
center conductor of the rig's antenna connector. The rig's case,
grounding, power outlet etc. form together the other half of the
circuit, though rather unpredictable.
If you are looking for something more predictable, search the web for
end-fed wire antennas, e.g. the Zeppelin or bazooka antenna.

BR from Ivan

1128. Re: Antenna Restrictions: Seeking General Ham Radio Info for Townhome Association BOD

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 10:07:35 UTC
From: Martin <mab@delete-this.capita.nildram.co.uk>
Message-ID: <u4d84oh5805u87@corp.supernews.com>
Source record: 150716

"Jake Brodsky" <frussle@erols.com> wrote in message
news:g9mp0uora4b846srrte9t23ait4anvbvlu@4ax.com...
> Scott, I would handle the issue this way: First, examine the exact
> wording of the agreement you signed (and any amendments the HOA made
> since you moved there). You may find a loophole big enough to drive a
> truck through.
>
...
>
> Finally, if you can't do that, go mobile. If you're doomed to a lousy
> signal, you might as well make it mobile and have fun another way.
>

the most creative solution to restrictive covenants that I have seen
recently is
to buy an old pick-up truck, mount the biggest mobile antenna you can find
on it, park it outside your house and run a feeder into the shack - bet your
covenants don't mention car aerials!

>
> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"

Martin (M3ABL)

--
==========
No, I am not paranoid and I'm sure that you are not going to
send me anything particularly sensitive but, since it seems
to annoy all sorts of official busy-bodies, you may like to encrypt
any mail you send me. You can get my public key from the
following URL :

<http://keyserver.pgp.com/pks/lookup?op=get&exact=off&search=Martin+Arthur+B
radford>

1129. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 10:16:59 UTC
From: Martin <mab@delete-this.capita.nildram.co.uk>
Message-ID: <u4d8mcqtsgpa43@corp.supernews.com>
Source record: 150717

"stnapgaf" <jh@bnhnet.com> wrote in message
news:3BFFFF7B.22518FA7@bnhnet.com...
> I have the normal 15 amp service in the radio room.
> How much light dimming do others experience in the
> room where you do CW. I'm just doing 100 watts CW
> and the flicker is very annoying.
> I hate the idea of running a whole new circuit to the radio
> room just for the radio.
> I wonder if a flourescent bult would flicker less?
>
>

The fluorescent tube may flicker more - I'll always remember a trip
round a high power government radio station during which the party
piece in the main transmitter room was to switch off the lights just to
show that they stayed on!

Martin (M3ABL)

1130. Re: Antenna Restrictions: Seeking General Ham Radio Info for Townhome Association BOD

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 12:32:06 UTC
From: Ed Cregger <663jlm@vei.net>
Message-ID: <u4dgqjl53ksf21@corp.supernews.com>
Source record: 150718

Better yet, buy an old, barely running, severely beat up,
UPS van. Then buy and place on top of the UPS van a rooftop
tower with assorted antennas, rotator and verticals.

When you are home you can run a power line out to the truck
to "charge the battery" (wink). In fact, you could build the
whole station in the van and have room to spare.

Just think of the new friends you would make in the
community and no bitching from the YL because you junked up
the house with your radio gear. <G>

Ed Cregger
nm2k@adoublerl.net

PS: Don't ask about how I know this works...

"Martin" <mab@delete-this.capita.nildram.co.uk> wrote in
message news:u4d84oh5805u87@corp.supernews.com...
>
> "Jake Brodsky" <frussle@erols.com> wrote in message
> news:g9mp0uora4b846srrte9t23ait4anvbvlu@4ax.com...
> > Scott, I would handle the issue this way: First, examine
the exact
> > wording of the agreement you signed (and any amendments
the HOA made
> > since you moved there). You may find a loophole big
enough to drive a
> > truck through.
> >
> ...
> >
> > Finally, if you can't do that, go mobile. If you're
doomed to a lousy
> > signal, you might as well make it mobile and have fun
another way.
> >
>
> the most creative solution to restrictive covenants that I
have seen
> recently is
> to buy an old pick-up truck, mount the biggest mobile
antenna you can find
> on it, park it outside your house and run a feeder into

the shack - bet your
> covenants don't mention car aerials!
>
> >
> > Jake Brodsky, AB3A mailto:frussle@erols.com
> > "Beware of the massive impossible!"
>
> Martin (M3ABL)
>
>
> --
> ==========
> No, I am not paranoid and I'm sure that you are not going
to
> send me anything particularly sensitive but, since it
seems
> to annoy all sorts of official busy-bodies, you may like
to encrypt
> any mail you send me. You can get my public key from the
> following URL :
>
>
<http://keyserver.pgp.com/pks/lookup?op=get&exact=off&search
=Martin+Arthur+B
> radford>
>
>
>
>

1131. Folded dipole wound around tower

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 12:51:17 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <yNz18.41$eh3.34287@newsfeed.slurp.net>
Source record: 150619

Hope not to start another waving-dead-chicken-and-mumbling-incantations thread.

Anyone out there remember the 80M f-d wound around two plastic hula hoops?

It sorta-worked.

Helically space-winding the same f-d vertically around one of my former R25 towers, worked, in the early seventies, in the anec-data sense: it heard and talked DX about as well as anything else I ever rigged in a 50-ft-wide urban back yard.

Is it worth expending some energy and time on such a project in this day and age? I have a lot more room now, but these tantalizing old ideas waft in over the transom from time to time ;o)))

Would modelling the thing at a frequency high enough to get around segment-limitations have any validity?

What effects could the tower 'core' have on the thing?

'Preciate all pertinent thoughts, and remember, I do not want to start another waving-dead-chicken-and-mumbling-incantations thread.

73, Dave, K3BHJ

1132. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 13:44:05 UTC
From: OldBiker <vito@crosslink.net>
Message-ID: <3C46D525.C0662B9@crosslink.net>
Source record: 150620

rasw wrote:
>
> Maybe it is my fist, but 25+ years ago (before computers copied it), nobody
> had trouble!

That's because folks with good ears can copy less-than-perfect CW far
better than a computer and/or us poor half-deaf geezers. Down side of
that is some folks unknowingly let their fist slip. "Must be OK if my
friends can copy me" isn't really true. Your contacts may be exceptional
people.
>
> But I don't use a straight-key anymore. In fact, any radio I've built in the
> past 5 years has a built-in 12C509 PIC keyer.
>

Then my comment clearly doesn't apply to you. My appologies.

73 KA3DWW

1133. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 13:57:31 UTC
From: OldBiker <vito@crosslink.net>
Message-ID: <3C46D84B.18220429@crosslink.net>
Source record: 150621

'Doc wrote:
>
> Computer based CW programs are easily defeated....

Yes! That's why they offer a good measure of the quality of one's fist.

> ... The 'best' analog CW decoding device is organic in nature ...

True again, unless they have been injured as mine have. OTOH, why
expect the listener to compensate for one's own lack of sending skill?
Many good folks who consider themselves great at CW would be so dismayed
to find how imperfect their fist really is they'd go into denial ... ;o)

73 KA3DWW

1134. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 13:58:42 UTC
From: OldBiker <vito@crosslink.net>
Message-ID: <3C46D892.C258BBB5@crosslink.net>
Source record: 150622

'Doc wrote:
>
> OldBiker,
> Just as a point of information, the old saying, "CW gets
> through where voice doesn't", is a carry-over from the 'AM'
> days, when it was true. If your using SSB, the saying is
> no longer true (given the same circumstances).
> 'Doc

Thanks.

1135. What is 6ALJ Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 14:42:22 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <ipB18.378640$W8.13877097@bgtnsc04-news.ops.worldnet.att.net>
Source record: 150623

Any info? Thanks.

Steve VE9SRB

1136. Re: What is 6ALJ Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 14:55:50 UTC
From: ac6v <ac6v@amsat.org>
Message-ID: <3C46E5F6.AC53AB5@amsat.org>
Source record: 150624

Heard it was a broadband dipole. No other info.
ZS8D has one --- see URL:
http://www.geocities.com/Area51/Matrix/3783/
Maybe write him

VE9SRB wrote:

> Any info? Thanks.
>
> Steve VE9SRB

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!
AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
AC6V Brag Tape at http://ac6v.com/brag.htm

1137. Re: What is 6ALJ Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 15:13:38 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <CSB18.378658$W8.13878652@bgtnsc04-news.ops.worldnet.att.net>
Source record: 150625

Thanks,

His site confirms it's a broadband dipole near 14 MHz. I'll try to contact
him.

Steve

"ac6v" <ac6v@amsat.org> wrote in message news:3C46E5F6.AC53AB5@amsat.org...
> Heard it was a broadband dipole. No other info.
> ZS8D has one --- see URL:
> http://www.geocities.com/Area51/Matrix/3783/
> Maybe write him
>
> VE9SRB wrote:
>
> > Any info? Thanks.
> >
> > Steve VE9SRB
>
> --
> 73 From AC6V, Rod In Oceanside, CA
> I doubt, therefore I might be!
> AC6V Mega Ham Index at http://ac6v.com
> AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
> AC6V Brag Tape at http://ac6v.com/brag.htm
>
>

1138. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 17:31:02 UTC
From: sjbeyers@trianglenet.net
Message-ID: <72befaab.0201170931.5c11cb5b@posting.google.com>
Source record: 150626

I've been using a short vertical (42 feet) on 160 meters, and it works fine at 100 watts. But when I try to go to higher power (500W or so), unpleasant things start to happen. I've been wondering if running a wire up the side of the antenna (it's a steel tower), connecting it at the top, and feeding at the bottom as a folded monopole, would increase radiation resistance. This (I hope) would make for lower swr and the ability to run more power. I do all matching in the shack with a "balanced-L type tuner, and use tis antenna on all bands. I can, and do, on occasion, run 500+ watts on all other bands (except 30M, of course).

I've been playing with modelling this with EZNEC. The results seem to be what I would expect with antenna heights in the neighborhood of resonance. But with very short folded monopoles (42 ft, like mine), the results vary widely with different conductor diameters and different nubers of segments used. After trying a variety of combinations, I think maybe I could increase radiation resistance from about 2 ohms, which it is with my present monopose, to about 11 ohms with a folded monopole. Does this seem reasonable? Am I making mistakes (as usual) in modelling or reasoning?

Ordinarily I would just go ahead and try something like this, but it's cold outside, so I thought I'd ask first. Thanks.

1139. Re: LONG WIRE Antenna feed point Z?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 18:06:10 UTC
From: Levent <lsasmazel__NOSPAM@home.com>
Message-ID: <moE18.124$5t4.39076@news1.rdc1.nj.home.com>
Source record: 150627

Thanks for the info Ivan but I do not agree with you. If you look ARRL Antenna Handbook or the ARRL WEB page you will see that harmonic antennas can be feed only at the end or at a current loop. But current loop fed is not considered as a real LONG WIRE feed because of the single frequency behavior of the current loop (Antenna Hand Book page 13-3) Look Baker & Williamsons Vee antenna http://www.bwantennas.com/eng/veeant.eng.htm it does feed at the end. Look the Beverage Antenna http://www.geocities.com/CapeCanaveral/1138/bev-page.html it feed at the end and has 1 wl or 2 wl size and years used for transmission also (1940s). I do NOT think this antenna has Infinite impedance on one end !

--Levent lsasmazel@home.com

"Ivan" <ok1sip@atlas.cz> wrote in message news:8f3e93b5.0201170001.6f3966f6@posting.google.com...
> Hi,Levent
> you wrote
> > Lets say I am using #14 ST. type cable from Home Depo and I am trying
> > to feed this system with a coax (52 ohm) what is the best balun 1:1 or 1:256
> > (Joke).
> So the unbalanced port of the balun goes via the coax into the rig -
> O.K. One pin of the balun's balanced port goes into the wire - still
> clear. And the second pin of the balun's balanced port goes where ? To
> nowhere ? Is it an open circuit with (almost) infinite impedance ? But
> transforming infinite impedance in 1:anything ratio results still into
> infinite impedance ! NO, NOT THIS WAY.
> A commonly sensed longwire antenna is a piece of wire more than two
> wavelengths long on the lowest working frequency (the length is
> usually non_integer_number * half_of_wawelength on ANY of the working
> frequencies to avoid very high impedances) connected DIRECTLY to the
> center conductor of the rig's antenna connector. The rig's case,
> grounding, power outlet etc. form together the other half of the
> circuit, though rather unpredictable.
> If you are looking for something more predictable, search the web for
> end-fed wire antennas, e.g. the Zeppelin or bazooka antenna.
>
> BR from Ivan

1140. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 18:12:25 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C4713F1.686F0BF2@shaw.ca>
Source record: 150628

Martin wrote:
>
> "stnapgaf" <jh@bnhnet.com> wrote in message
> news:3BFFFF7B.22518FA7@bnhnet.com...
> > I have the normal 15 amp service in the radio room.
> > How much light dimming do others experience in the
> > room where you do CW. I'm just doing 100 watts CW
> > and the flicker is very annoying.
> > I hate the idea of running a whole new circuit to the radio
> > room just for the radio.
> > I wonder if a flourescent bult would flicker less?
> >
> >
>
> The fluorescent tube may flicker more - I'll always remember a trip
> round a high power government radio station during which the party
> piece in the main transmitter room was to switch off the lights just to
> show that they stayed on!
>
> Martin (M3ABL)

Check the line voltage with a multimeter. That will tell
you if it is
a load problem or not. I once had a problem similar to
yours, and it was
because the screws connecting the AC line in the breaker box
were loose.
Tightening them down cured the problem.I thought it was RF!
Long time ago!
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1141. Re: LONG WIRE Antenna feed point Z?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 18:40:18 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <uj6e4uoc7d4cf8l93nkf2fbo0a1klno6fu@4ax.com>
Source record: 150629

On Thu, 17 Jan 2002 18:06:10 GMT, "Levent"
<lsasmazel__NOSPAM@home.com> wrote:

>Antenna Handbook or the ARRL WEB page you will see that harmonic antennas
>can be feed only at the end or at a current loop.

Only?

Danny

1142. Qso Manager

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 20:32:25 UTC
From: Paolo Nossa <ik4clf@inwind.it>
Message-ID: <txG18.3100$RQ5.64450@news1.tin.it>
Source record: 150630

www.qsl.net/ik4clf
HF QSO/QSL/Award managment, ADIF Import/Export, full version free to
everybody.
Requires Access 97 or Access 2000 (with JPEG and TIFF filter installed),
screen resolution 800x600/1024x768.
Includes: over 9500 logged QSO's for easy/quick testing of performance and 5
maps (Italy, Usa, Usa-Cal, Usa-Fla, Svalbard Is).
Full mapping (382 maps) available at Downloads page or free on request
(CD-ROM).

1143. Re: Tower Wound Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 20:44:36 UTC
From: Jason Ingram <jason.ingram@ntlworld.com>
Message-ID: <B86CE834.6184%jason.ingram@ntlworld.com>
Source record: 150631

Doc,

Are you refering to a tower wound antenna for 80/40m or the second question I had on cross field antennas?.

If it is the one about cross field antennas, then I saw some interesting photos on the following site that claims to have had good results on HF. See what you think,

http://www.qsl.net/master.htm

Then select W0KPH.

Jason

> From: 'Doc <w5lz@icok.net>
> Organization: Internet Communications of Oklahoma (icok.net)
> Newsgroups: rec.radio.amateur.antenna
> Date: Thu, 17 Jan 2002 04:53:50 GMT
> Subject: Re: Tower Wound Antennas?
>
> Jason,
> No one has verified ~any~ of the test results quoted
> by the designers/developers. The results on at least one
> of the test antennas were verified as being falsified.
> And to my knowledge there is only one of these antennas
> still in use. Not exactly the 'best' track record...
> 'Doc

1144. Re: point AM antenna N-S, station thus located E-W?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 21:24:10 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <ufP18.3399$nA4.852501@monolith.news.easynet.net>
Source record: 150647

Its very roughly in the direction broadside on; that is to the East or West.
Better deal is to move until you get the least signal. One end of the
antenna bar is then pointing at the station. This may be inaccurate at night
on distant stations. mountains will have little effect by day.
Bryan

Dan Jacobson <jidanni@deadspam.com> wrote in message
news:m23d1p1zni.fsf@dan.jacobson.tw...
> I point my dimestore AM radio and thus also its ferrite bar antenna
> along a north south axis to get best reception of a certain station.
> What does this tell me about the station's location. Thanks, and
> sorry for so amateur a question. Mountains affect answer much?
> --
> http://www.geocities.com/jidanni/ Tel+886-4-25854780

1145. smartuner repair

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 23:02:08 UTC
From: Snafu <snafu@starband.net>
Message-ID: <aKI18.23$xR.4548726@twister1.starband.net>
Source record: 150632

I have a SGC model SG-230 Smartuner that I bought about six years ago for a mobile application. I didn't work out (back then) and I stored it under cover in my garage until now. It never was exposed to any weather.

Recently I put up a long wire and thought I would finally use this expensive peice of equipment that I have been storing all this time.

As luck would have it, I can not get it to tune. I know it has power to it but it will not even attempt to tune on any band. It "clicks" on and off when 12v dc power is applied but I do not hear the tell-tale "chattering" of the relays when Rf power is applied. (and the VSWR is on the moon on every band) I do have a couple ground rods and I believe the antenna is properly grounded.

I called SGC and they would be happy to make it work for the sum of $265.00! It's a flat fee they charge regardless of what is wrong!
Does anyone have any ideas about how I can get this working for a lot less than that? I can use a meter and a soldering iron, but that is about where it ends.

--
Remove (nospam) from reply e-mail address

1146. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 23:20:45 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201171520.3277a22e@posting.google.com>
Source record: 150633

CAM <Cecil.A.Moore@IEEE.org> wrote in message
> That means CW will get through on 10m at night during the bottom
> of the sunspot cycle. It ain't gonna happen.

Actually it does quite a bit. Just people don't notice it much. Sporadic E and sometimes the fluke nighttime F layer stuff can crop up at the weirdest times. Of course, being many people are asleep, many miss it. I remember a few years back a few locals did a 17m propagation "study" where they got on 17m at about 1-2 AM every weekend for quite a few months. I used to get on and help them listen sometimes. You'd be amazed at what you can work when the band is "dead". We found if you get out there and make a lot of noise, you will dig up qso's. Even in the middle of the night. We worked all over the world. Many times with booming signals. But at a casual listen you would think the band was dead. :) BTW, we worked ssb, so not related to the cw argument. I think cw is still about the best for weak signal work. Just as good as psk31, etc, etc after trying those modes. I think PSK31 is over rated in the s/n area. I notice if I start to lose audio reception , I start to lose print also. I seem to have to hear the psk to some degree to decode it. About the same as CW, so myself, I consider them about equal really. Note that on 70 cycle longwave they like to use real super slow cw that is detected with puter programs visually. MK

1147. Re: Antenna Restrictions: Seeking General Ham Radio Info for Townhome Association BOD

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 23:27:07 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <KbJ18.1755$Y17.69897@e3500-atl2.usenetserver.com>
Source record: 150637

LOL! But then you'll have the ones who *may* point out an ordinance against
dilapidated,
non-running vehicles in the yard. Many cities have these ordinances that
have nothing to do
with CC & Rs, and there are plenty of grumpy, busy-body neighbors that would
take advan-
tage of that!

The best solution is to find an older neighborhood that has no covenants and
blue-haired old
ladies telling you what you can and can't do on your own damned property.
That's what I
did!

73

Jerry

Ed Cregger <663jlm@vei.net> wrote in message
news:u4dgqjl53ksf21@corp.supernews.com...
> Better yet, buy an old, barely running, severely beat up,
> UPS van. Then buy and place on top of the UPS van a rooftop
> tower with assorted antennas, rotator and verticals.
>
> When you are home you can run a power line out to the truck
> to "charge the battery" (wink). In fact, you could build the
> whole station in the van and have room to spare.
>
> Just think of the new friends you would make in the
> community and no bitching from the YL because you junked up
> the house with your radio gear. <G>
>
> Ed Cregger
> nm2k@adoublerl.net
>
> PS: Don't ask about how I know this works...
>
>
>
>
> "Martin" <mab@delete-this.capita.nildram.co.uk> wrote in
> message news:u4d84oh5805u87@corp.supernews.com...
> >
> > "Jake Brodsky" <frussle@erols.com> wrote in message

> > news:g9mp0uora4b846srrte9t23ait4anvbvlu@4ax.com...
> > > Scott, I would handle the issue this way: First, examine
> the exact
> > > wording of the agreement you signed (and any amendments
> the HOA made
> > > since you moved there). You may find a loophole big
> enough to drive a
> > > truck through.
> > >
> > ...
> > >
> > > Finally, if you can't do that, go mobile. If you're
> doomed to a lousy
> > > signal, you might as well make it mobile and have fun
> another way.
> > >
> >
> > the most creative solution to restrictive covenants that I
> have seen
> > recently is
> > to buy an old pick-up truck, mount the biggest mobile
> antenna you can find
> > on it, park it outside your house and run a feeder into
> the shack - bet your
> > covenants don't mention car aerials!
> >
> > >
> > > Jake Brodsky, AB3A mailto:frussle@erols.com
> > > "Beware of the massive impossible!"
> >
> > Martin (M3ABL)
> >
> >
> > --
> > ==========
> > No, I am not paranoid and I'm sure that you are not going
> to
> > send me anything particularly sensitive but, since it
> seems
> > to annoy all sorts of official busy-bodies, you may like
> to encrypt
> > any mail you send me. You can get my public key from the
> > following URL :
> >
> >
> <http://keyserver.pgp.com/pks/lookup?op=get&exact=off&search
> =Martin+Arthur+B
> > radford>
> >
> >

> >
> >
>
>

1148. Re: Vertical Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 23:27:23 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201171527.11ad07f8@posting.google.com>
Source record: 150634

"Ace_On_Par3" <pwhelton@hal-pcNOSPAM.org> wrote in message
news:<a25e0f$7fh$1@news.hal-pc.org>...
> When feeding a ground mounted vertical with coax what is the standard method
> of routing the feedline to the shack? I would think you would have to bury
> it or be very careful when you mow the lawn. If you do have to bury it does
> it have to be in conduit or PVC? Could be they make some super coax these
> days that can be buried without the need for conduit. Seems like conduit
> could fill up with moisture if you are not careful.

I use rg-213. It's an RG-8 equal that has a direct burial jacket. Also
mil-spec shield. The specs are about the same as rg-8 as far as
losses,power handling , etc. Half my coax is 2 inches deep in water
when it rains hard and the water is gushing off the roof. I just have
it laying on the ground. I don't bury it. But I could though if I
wanted to. MK

1149. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 23:30:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C475E8D.8B6D4B83@eznec.com>
Source record: 150635

Folding the antenna will multiply the radiation resistance -- as seen at the feedpoint -- by a factor of four. It'll also multiply the reactance by four, and the loss resistance as seen at the feedpoint by the same factor. So it won't do anything to improve the efficiency. You might or might not find it easier to match the new feedpoint impedance with four times larger resistance and reactance.

Roy Lewallen, W7EL

Steve Beyers wrote:
>
> I've been using a short vertical (42 feet) on 160 meters, and it works
> fine at 100 watts. But when I try to go to higher power (500W or so),
> unpleasant things start to happen. I've been wondering if running a
> wire up the side of the antenna (it's a steel tower), connecting it at
> the top, and feeding at the bottom as a folded monopole, would
> increase radiation resistance. This (I hope) would make for lower swr
> and the ability to run more power. I do all matching in the shack
> with a "balanced-L type tuner, and use tis antenna on all bands. I
> can, and do, on occasion, run 500+ watts on all other bands (except
> 30M, of course).
>
> I've been playing with modelling this with EZNEC. The results seem to
> be what I would expect with antenna heights in the neighborhood of
> resonance. But with very short folded monopoles (42 ft, like mine),
> the results vary widely with different conductor diameters and
> different nubers of segments used. After trying a variety of
> combinations, I think maybe I could increase radiation resistance from
> about 2 ohms, which it is with my present monopose, to about 11 ohms
> with a folded monopole. Does this seem reasonable? Am I making
> mistakes (as usual) in modelling or reasoning?
>
> Ordinarily I would just go ahead and try something like this, but it's
> cold outside, so I thought I'd ask first. Thanks.

1150. Re: smartuner repair

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-17 23:33:17 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C475F3A.9FFCEAB6@icok.net>
Source record: 150636

Snafu,
Do you happen to have the service manual, or at least a
schematic for the tuner? If you do, and if you're not
comfortable
trouble shooting it, take it to a reputable shop ~with~ the
manual or schematic. They're much more apt to 'take a look' at
it with those. If you don't have them, well, it still doesn't
hurt to ask...
'Doc

1151. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 00:25:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a27qc6$rjvue$1@ID-124126.news.dfncis.de>
Source record: 150638

> Folding the antenna will multiply the
> radiation resistance -- as seen at the
> the feedpoint -- by a factor of four.
==========
Only if the pair of conductors have the same diameters. Unequal diameters
result in different transformation factors.

1152. Re: smartuner repair

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 01:25:33 UTC
From: Snafu <snafu@starband.net>
Message-ID: <DQK18.43$Km3.14906455@twister1.starband.net>
Source record: 150639

I do have the manual with schematics. Thanks for the suggestion.

--
Remove (nospam) from reply e-mail address

1153. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 01:47:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C477EB4.A03CD28F@eznec.com>
Source record: 150640

You're absolutely correct. And when the diameters are different, it also depends on the wire spacing. The transformation factor can be a lot different than 4 if the diameters are very different. Another thing to keep in mind is that by folding, you've created a shorted transmission line stub across the feedpoint. When the monopole is nearly a quarter wave long, the impedance of this stub is high and can often be ignored. In shorter monopoles it should be considered.

But the ground loss is always transformed by the same factor as the radiation resistance, and the ground loss is always the same before and after folding.

Thanks for the correction. I apologize for the oversimplification.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> > Folding the antenna will multiply the
> > radiation resistance -- as seen at the
> > the feedpoint -- by a factor of four.
> ============================
> Only if the pair of conductors have the same diameters. Unequal diameters
> result in different transformation factors.

1154. Need Instructions for Icom AH-3

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 02:37:12 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C478AD4.1C52CEE2@home.com>
Source record: 150641
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna

I need the instructions for an Icom AH-3 antenna tuner. A copy or scanned set or faxed copy would be great.

Thanks,
Les, AA4F
lcox107nojunk@home.com
Take out the nojunk

1155. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 03:14:11 UTC
From: whagen6@cs.com
Message-ID: <20020117221411.15641.00005117@mb-ci.news.cs.com>
Source record: 150642

If you have an 80 meter dipole, you have the basics for an antenna that will surpass the isotron already. take a short piece of coax with connectors on both ends, and cut it in the middle, cut the shield all around, and short it to the center connector. Insert this in between your coax and tuner, with the end with the shield floating on the tuner side. You have just converted you dipole into a tee for 160, worked against ground. A good set of radials helps. Just match it with the tuner. I will be not as efficient as a dipole but better than nothing...
It works well for a compromise antenna, give it a try.
You can also cut the connector off and connect the center wire to the longwire terminals of your tuner if it has them etc.

1156. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 03:19:42 UTC
From: whagen6@cs.com
Message-ID: <20020117221942.15641.00005122@mb-ci.news.cs.com>
Source record: 150643

see my posting on the other thread, about making a tee from your dipole.
I have done fairly will with the isotron, from chico into oregon and
washington, also with the tee configuration. Currently I have a 120 foot wire
that is in an inverted vee config, fed at the end, and the center is about 45
feet up. the other end goes to the back fence, stand off a few feet with and
insulator. I worked new jersy from chico the other evening, and have workd
mexico city on it, 160 meter band.
If you want to spend the money, get a screwdriver antenna, do the 160 meter
mods to it. It works well too, the key is the base of the screwdriver has high
current, thus good radiation.

1157. Re: smartuner repair

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 03:28:11 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C47964B.E4225CAA@IEEE.org>
Source record: 150644

Snafu wrote:
> Does anyone have any ideas about how I can get this working for a lot less
> than that? I can use a meter and a soldering iron, but that is about where
> it ends.

Here's a shot in the dark for you. My SGC-230 quit working and the problem
was that the internal connection on the output post had loosened. I took the
cover off, discovered the loose connection, and tightened it up. Worked
like a charm after that.
--
cheers, CAM http://www.qsl.net/w5dxp

1158. Re: smartuner repair

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 04:42:10 UTC
From: "J. David Schronce" <david.nospam@schronce.f2s.com>
Message-ID: <3C47A7B4.5070302@schronce.f2s.com>
Source record: 150645

If all else fails you can visit
http://www.wireservices.com/n9zrt/SG-239/ - there you'll find links to a couple of SGC Smarttuner mailing lists - I'm sure one of those folks can help you out..

Snafu wrote:

>I have a SGC model SG-230 Smartuner that I bought about six years ago for a
>mobile application. I didn't work out (back then) and I stored it under
>cover in my garage until now. It never was exposed to any weather.
>
>Recently I put up a long wire and thought I would finally use this expensive
>peice of equipment that I have been storing all this time.
>
>As luck would have it, I can not get it to tune. I know it has power to it
>but it will not even attempt to tune on any band. It "clicks" on and off
>when 12v dc power is applied but I do not hear the tell-tale "chattering" of
>the relays when Rf power is applied. (and the VSWR is on the moon on every
>band) I do have a couple ground rods and I believe the antenna is properly
>grounded.
>
>I called SGC and they would be happy to make it work for the sum of $265.00!
>It's a flat fee they charge regardless of what is wrong!
>Does anyone have any ideas about how I can get this working for a lot less
>than that? I can use a meter and a soldering iron, but that is about where
>it ends.
>
>--
>Remove (nospam) from reply e-mail address
>
>

1159. Anyone have experiance of 6mtr tonna.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 04:46:22 UTC
From: chris <chris.c@ntlworld.com>
Message-ID: <1NN18.43594$_x4.6481208@news2-win.server.ntlworld.com>
Source record: 150646

Has anyone on here had any experiance or problems with the tonna 5 element 6 mtr yagi....??

I seem to be have loads of probs.......

I put it together as per the instructions and put it on 30 feet of pole, but the SWR is high...i tried re-doing the conections, but its no better....the SWR is supposed to be good between 49.5 Mhz and 50.5 Mhz, but mine is 6:1 from 50.0-50.56 Mhz and then drops slowly across the next 150 Khz down to 1.1 back up to 6:1.

I now have the aerial 4 feet off the ground in the garden and the SWR now is 3:1 from 50-50.5 Mhz and then goes up after that.

Is there some sort of mod for this aerial that makes it work, or have i got a bad one that needs putting in the bin.

Any help please.........Cheers...Chris.

1160. Re: What is 6ALJ Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 07:02:50 UTC
From: marcabsolutelynospam@laradio.spamfree.co.za
Message-ID: <3c47c702.2240123@news.megaweb.co.za>
Source record: 150648

The 6ALJ is a broadband dipole type antenna manufactured by Webb Industries in Johannesburg, South Africa. It went out of production about five years ago. According to Terry Reuss, the R&D Engineer at Webb, the royalties on the design were too high, so production was stopped. I don't know who the designer or original manufacturer was.

The antenna itsself if a folded dipole type, made from incredibly durable materials. The main target market was the South African military and the Police. It was a very expensive antenna in it's day (around $1700-00), and it could handle around 5kW.

A pretty inefficient antenna, but if you put enough power into it, you would get reasonable results. If memory serves me correctly, it is a 4 to 30 MHz antenna.

'73 de Marc, ZS6HZ
Johannesburg, South Africa

On Thu, 17 Jan 2002 14:42:22 GMT, "VE9SRB" <srbest@att.net> wrote:

>Any info? Thanks.
>
>Steve VE9SRB
>
>

1161. Re: smartuner repair

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 08:15:26 UTC
From: Bob G4VGO <rmread@attglobal.net>
Message-ID: <3c47dbfa_1@news2.prserv.net>
Source record: 150649

"Snafu" <snafu(nospam)@starband.net> wrote in message
news:aKI18.23$xR.4548726@twister1.starband.net...
> I have a SGC model SG-230 Smartuner that I bought about six years ago for
a
> mobile application. I didn't work out (back then) and I stored it under
> cover in my garage until now. It never was exposed to any weather.
>
> Recently I put up a long wire and thought I would finally use this
expensive
> peice of equipment that I have been storing all this time.
>
> As luck would have it, I can not get it to tune. I know it has power to it
> but it will not even attempt to tune on any band. It "clicks" on and off
> when 12v dc power is applied but I do not hear the tell-tale "chattering"
of
> the relays when Rf power is applied. (and the VSWR is on the moon on every
> band) I do have a couple ground rods and I believe the antenna is properly
> grounded.
>
> I called SGC and they would be happy to make it work for the sum of
$265.00!
> It's a flat fee they charge regardless of what is wrong!
> Does anyone have any ideas about how I can get this working for a lot less
> than that? I can use a meter and a soldering iron, but that is about where
> it ends.
>
> --
> Remove (nospam) from reply e-mail address

I have one and the loose output post happened to me. Also the relays would only pull in and begin to work at 13.0 volts after a couple of years, you might check the volts to the unit.

Otherwise, I have used it all over the world and it works like a champ.

73 de Bob G4VGO
>
>

1162. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 08:16:54 UTC
From: Bob G4VGO <rmread@attglobal.net>
Message-ID: <3c47dc54_4@news2.prserv.net>
Source record: 150650

"Martin" <mab@delete-this.capita.nildram.co.uk> wrote in message
news:u4d8mcqtsgpa43@corp.supernews.com...
>
> "stnapgaf" <jh@bnhnet.com> wrote in message
> news:3BFFFF7B.22518FA7@bnhnet.com...
> > I have the normal 15 amp service in the radio room.
> > How much light dimming do others experience in the
> > room where you do CW. I'm just doing 100 watts CW
> > and the flicker is very annoying.
> > I hate the idea of running a whole new circuit to the radio
> > room just for the radio.
> > I wonder if a flourescent bult would flicker less?
> >
> >
>
> The fluorescent tube may flicker more - I'll always remember a trip
> round a high power government radio station during which the party
> piece in the main transmitter room was to switch off the lights just to
> show that they stayed on!
>
> Martin (M3ABL)
>
>
Probaly RF to the mains wiring, or if it goes dim when you key, you have
very poor regulation on the incoming power line to the shack.

Bob G4VGO

1163. Re: Stacked Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 08:38:16 UTC
From: Doug <snyder47@bellsouth.net>
Message-ID: <3C47DEF8.40D8C34E@bellsouth.net>
Source record: 150651

Back in the early 70's I had a set of Wilson 4vQuads stacked horizonaly,
Fantastic, Lost them in a close incounter with Tornado like winds.
Now I looking to get another set, getting back into the game again.
Is Wilson still around, can't find them if they are. Can some one
steer me in the right direction to where I can get another set?

Doug.

Mark Hall wrote:

> I just read W4RNL's excellent articles about all sorts of antennas. The
> NEC simulations are outstanding, and give lots of insight into the
> Yagi/Quad discussions. From what I read, it would appear that a Stacked
> 2-element Quad has a lot going for it. Here's what I learned:
>
> 1) Run Double #14 wire elements, Spaced 5": Adds to the bandwidth,
> Gain, and F/B ratio.
>
> 2) Use a Spider Quad: Provides more optimum spacing of course.
>
> 3) Feed each band seperately with 1/4 Wave sections, a remote switch
> which opens both sides. This reduces the intercoupling of the "other
> bands" and provides cleaner patterns.
>
> 4) Seperate the Two 2-element Quads by 30', center to center, feed them
> In-Phase (of course). W4RNL studied vertical stacking, but I'm thinking
> horizontal "stacking" would be easier to implement with a single
> rotator, on a typical tower, and provide a balanced height.
>
> W4RNL's analysis was getting an additional 2.1 dBi gain for the second
> Stacked Quad! Overall, on 20M he was showing 12 or more dB of Gain, and
> great bandwidth/FB ratios! Am I dreaming here? The multiband 2 element
> is way easier to tune than a 4 el, and the stacking factors are
> apparently pretty well known. Should I take down my 4el Quad, redo it
> with spaced double wire elements, and add a 30' horizontal boom, and
> convert to dual 2-element configuration? Also I'm thinking I could get
> a 1 Wave Length 40 meter "Vertical" steerable Loop in there somewhere.
> I'm not sure my GEM Quad spreaders are up for double wire duty, but
> there's not much icing here in the Wash. DC area, and with some extra
> cross bracing, it might work,. Currently my boom is only 25 feet, but
> with the GEM quad spider configuration, I could cut that in half for the
> side booms, add a 30' cross boom, and voila! With a crank up/down
> tower, should stay up if brought down when not in use. If what I read
> is true, this might be a Poor Man's solution to those Super Rich Guy
> Stacked Christmas tree Mono-Band Yagi's with 50' booms at 100', with

> tubular towers that turn I see on DX web sights.
>
> Any Thoughts?
>
> '73 KI4Z

1164. Re: LONG WIRE Antenna feed point Z?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 10:09:42 UTC
From: ok1sip@atlas.cz
Message-ID: <8f3e93b5.0201180209.5b2d7cc9@posting.google.com>
Source record: 150652

Hi Levent,
as can be seen on the picture at
http://www.bwantennas.com/eng/veeant.eng.htm
, one pin of the symmetrical side of the balun connects to the wire of
the vee antenna and the other TO THE GROUND. Similarly, looking at a
Beverage antenna schematic (e.g. http://www.qsl.net/aa3px/design.html
), one end of the high impedance winding of the transformer connects
to the wire, the other TO THE GROUND. (The low impedance winding
connects to the coax of course.) In none case it leads "to nowhere".
Yes, the wire itself is end-fed, but the ground is an active part of
such antenna systems, has a finite impedance and completes the
circuit. The same is valid for many other types of antennas, as simple
verticals (whips).

BR from Ivan

"Levent" <lsasmazel__NOSPAM@home.com> wrote in message
news:<moE18.124$5t4.39076@news1.rdc1.nj.home.com>...
> ... Look Baker & Williamsons Vee antenna http://www.bwantennas.com/eng/veeant.eng.htm
> it does feed at the end. Look the Beverage Antenna
> http://www.geocities.com/CapeCanaveral/1138/bev-page.html it feed at the end
> and has 1 wl or 2 wl size and years used for transmission also ...

1165. Re: Antenna Restrictions: Seeking General Ham Radio Info for Townhome Association BOD

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 13:36:40 UTC
From: Alan White <alannc44@ix.netcom.com>
Message-ID: <IxV18.18120$n81.5296042@typhoon.southeast.rr.com>
Source record: 150653

Finding a neighborhood amenable to hobbies IS the way to go...Even if the residents try to create an association, they can't unless they have 100% cooperation throughout the neighborhood. In my neighborhood some of the guys tried to trick us by collecting funds for a beautification project. "Make your check out to suchandsuch association." I told them I'd donate green stamps but they balked. I guess they figured if they could get me to write a check recognizing a new homeowners' association that they'd be able to formalize something.... Be aware.

Alan

--
Windsurfing Club: http://www.ibscc.org
Homepage: http://pw1.netcom.com/~alannc44/qsl.htm

1166. FS: SMA-to-BNC custom fit antenna adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 14:03:13 UTC
From: gulyas@earthlink.net
Message-ID: <12235960.0201180603.593eddcb@posting.google.com>
Source record: 150654
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.scanner

If you have a need for a high-quality SMA-to-BNC antenna adapter that is
custom made to fit and protect your H.T. or scanner radio, I have the part.

Adapter allows you to:
Quickly change antennas to base,mobile or different style use.
Use the more popular and wider selection available of BNC antennas.
Prevent chassis connector wear or from coming loose due to antenna
changes.

Adapter features:
Gold plated contacts with a teflon insulator.
A low profile design with a rubber covering for a factory antenna look.
The rubber base seals to the top of the radio with no spacers needed
for moisture and dirt protection.
The base also provides an excellent support for any length of antenna
or application.
No need to remove adapter once installed to make a quick and safe
antenna change.

Sizes to fit radio models:
Yaesu: VX-5, VX-1, FT-50-R, VX-10, VX-150, VX-110, VXA-100, VXA-120
Icom: IC-T8A, IC-T81A, IC-Q7A, IC-R2
Kenwood: TH-D7, TH-G71, TH-F6A
Alinco: DJ-V5
Standard: C508A, C510A
Radio Shack: HTX-200, HTX-400, HTX-245
Aor: AR-16

Previewed in the May 2000 Issue of CQ Magazine, and the Nov. 2000
Issue of QST Magazine.

$11.95 + $1.50 S+H(One to unlimited)
(Check or money order only in U.S.Funds)
(Specify-radio-model)

STEPHEN G.GULYAS
706 LALOR ST.
TRENTON, N.J. 08610
U.S.A.

A photo of the adapter is available upon request.
I welcome any questions or comments at my email:
gulyas@earthlink.net
Thanks for looking at my posting.
S.G.G. KC2BHO 73's

1167. Re: Balun or Isolation transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 14:10:09 UTC
From: post_to_usenet@hotmail.com
Message-ID: <b6b4e772.0201180610.73dd02d3@posting.google.com>
Source record: 150655

Thank you all for your answers.

Toni

1168. Re: What is 6ALJ Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 14:35:58 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <ipW18.379833$W8.13973181@bgtnsc04-news.ops.worldnet.att.net>
Source record: 150656

Thank you very much for the information.

Steve VE9SRB

"I Hope .co.za (Marc Lurie)" <marcabsolutelynospam@laradio.spamfree> wrote
in message news:3c47c702.2240123@news.megaweb.co.za...
> The 6ALJ is a broadband dipole type antenna manufactured by Webb
> Industries in Johannesburg, South Africa. It went out of production
> about five years ago. According to Terry Reuss, the R&D Engineer at
> Webb, the royalties on the design were too high, so production was
> stopped. I don't know who the designer or original manufacturer was.
>
> The antenna itsself if a folded dipole type, made from incredibly
> durable materials. The main target market was the South African
> military and the Police. It was a very expensive antenna in it's day
> (around $1700-00), and it could handle around 5kW.
>
> A pretty inefficient antenna, but if you put enough power into it, you
> would get reasonable results. If memory serves me correctly, it is a 4
> to 30 MHz antenna.
>
> '73 de Marc, ZS6HZ
> Johannesburg, South Africa
>
>
> On Thu, 17 Jan 2002 14:42:22 GMT, "VE9SRB" <srbest@att.net> wrote:
>
> >Any info? Thanks.
> >
> >Steve VE9SRB
> >
> >
>

1169. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 14:50:37 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <sL3TiSA9YDS8Ews4@invest.fsbusiness.co.uk>
Source record: 150657

George,

>There have been a couple of mentions of the folded unipole for AM
>broadcasting in Broadcast Engineering recently, but the technical
>information given on design is a little shallow and incomplete. Has a
>rigorous analysis of this design ever been published, and if so where? It
>doesn't seem to show up in IEEE or any of the broadcast related technical
>publications. Apparently it came along since LaPorte, and neither Kraus nor
>Jasik treat this particular configuration. Even a good method of moments
>analysis using NEC by a third party would help.
Have a read of this interesting article which has been around for some
while;

http://www.dlr.com/dlrweb/papers/nabpaper/nabpaper.htm

(((73)))

Phil G4ZOW

1170. Re: smartuner repair

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 15:04:53 UTC
From: OldBiker <vito@crosslink.net>
Message-ID: <3C483995.5869D4F1@crosslink.net>
Source record: 150658

Snafu wrote:
>
> I called SGC and they would be happy to make it work for the sum of $265.00!

Wow! Glad I bought another brand!

1171. Re: smartuner repair

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 15:18:47 UTC
From: Snafu <snafu@starband.net>
Message-ID: <N1X18.200$5Q5.53810306@twister2.starband.net>
Source record: 150659

I will try all these great suggestions. Hopefully, it will save me some
serious money!
--
Remove (nospam) from reply e-mail address

1172. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 15:37:58 UTC
From: richardharrison@webtv.net
Message-ID: <27786-3C484156-14@storefull-115.iap.bryant.webtv.net>
Source record: 150661

Roy Lewallen, W7EL wrote:
"Folding the antenna will multiply the radiation resistance ---as seen at ther feedpoint--- by a factor of four. It`ll also multiply the reactance by four, and the loss resistance as seen at the feedpoint by the same factor. So it won`t do anything to improve efficiency."

I think efficiency improves.

ON4UN in "Low Band DXing" Table 9-2 gives earth resistance from 28.6 ohms for two radials which are too short, to 0.1 ohm for 120 radials which are 0.4 wavelength.

Let`s go for the middle and pick 14 ohms for our ground resistance.

Arnold Bailey in "TV and Other Receiving Antennas" gives 28 ohms as the drive impedance of a perfect 1/4-wave vertical antenna (no ground loss). Bailey gives 150 ohms for a folded unipole (no surprise).

Imagine an equivalent circuit. Our transmitter is connected between a vertical antenna and the earth. There is a complete circuit though it may appear open with what we`ve drawn so far. There is a capacitance between the antenna and earth but it`s not shown in diagrams.

All the antenna current produced by our transmitter flows through our antenna, through the space surrounding our antenna, then through the earth back to our transmitter.

For our purposes, we can redraw our equivalent circuit. Lets replace the antenna with its drivepoint impedance. Replace the space between the antenna and earth with a wire. The capacitance is high enough and the wire like the space has no loss. Replace the earth with a 14-ohm resistor, from the middle of ON4UN`s table.

Now, our equivalent circuit is simply a transmitter with two resistors in series across its output. One resistor is either 28 ohms for the whip or 150 ohms for the folded unipole. The second resistor is the earth resistance which we picked as 14 ohms for our example. We can`t change the earth`s resistance by adding a wire to the vertical antenna.

Let`s pick 100 watts as the power fed to our two resistors in series. In the first case we have 28 ohms in series with 14 ohms. The power divides as the resistances, so by inspection we have 67 watts in the antenna and 33 watts lost in the ground.

You can work it out. You have 100 watts in 42 ohms. E=sq rt PR. E = 65 volts, I =1.54 amps, P=IIR=67 watts in the antenna and 33 watts in the earth loss.

In the case of the folded unipole, you have 100 watts in 164 ohms. E=128 volts, I=0.78 amps.
P=91 watts in the antenna and 9 watts in the earth loss.

I`ll take the efficiency of the folded unipole.

Best regards, Richard Harrison, KB5WZI

1173. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 15:40:23 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c4845a7_2@news1.prserv.net>
Source record: 150660

Thanks, Philip. This is the paper I was looking for. The first paragraph in the conclusions says it all, and this information has not been widely dispersed. Roy, if you are still with us, scan this information. Confirmation of the marketers at work again.
--
Crazy George
Remove NO and SPAM from return address

1174. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 16:44:49 UTC
From: richardharrison@webtv.net
Message-ID: <2147-3C485101-19@storefull-113.iap.bryant.webtv.net>
Source record: 150663

I wrote:
"I think efficiency improves."

Wrong!

Phil, G4ZOW attached a report presented to the NAB by du Treil, Lundin, & Rackley of tests comparing base insulated antennas with similar folded unipoles. There was no difference in signal strengths.

Their conclusion was that no difference in displacement current exists if the power radiated is the same. So current in the ground is the same for either type of antenna. Same current, same loss.

Their tests prove the case.

My mistake was using drive point impedances. The radiation resistance must be the same for both antennas if radiation and ground loss are the same for both antennas.

Best regards, Richard Harrison, KB5WZI

1175. Re: smartuner repair

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 17:11:20 UTC
From: Greg Blair <gblair@sympatico.ca>
Message-ID: <3C485738.872AA10C@sympatico.ca>
Source record: 150662

If you open the unit up, you will see a series of diagnostic LED's that
tell you what is going on as it attempts to tune.

Snafu wrote:
>
> I have a SGC model SG-230 Smartuner that I bought about six years ago for a
> mobile application. I didn't work out (back then) and I stored it under
> cover in my garage until now. It never was exposed to any weather.
>
> Recently I put up a long wire and thought I would finally use this expensive
> peice of equipment that I have been storing all this time.
>
> As luck would have it, I can not get it to tune. I know it has power to it
> but it will not even attempt to tune on any band. It "clicks" on and off
> when 12v dc power is applied but I do not hear the tell-tale "chattering" of
> the relays when Rf power is applied. (and the VSWR is on the moon on every
> band) I do have a couple ground rods and I believe the antenna is properly
> grounded.
>
> I called SGC and they would be happy to make it work for the sum of $265.00!
> It's a flat fee they charge regardless of what is wrong!
> Does anyone have any ideas about how I can get this working for a lot less
> than that? I can use a meter and a soldering iron, but that is about where
> it ends.
>
> --
> Remove (nospam) from reply e-mail address

1176. Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 18:34:04 UTC
From: "Andrew C. Ohnstad" <spam.sux@die.spammers.com>
Message-ID: <MPG.16b234a580f69cbf989699@news.rcn.com>
Source record: 150665

Hello all.

I am building a "copper cactus" J-Pole for 2 meter use. My mounting options are limited to a number of very tall trees in my back yard. My plan is to use a slingshot or something to get a piece of rope or strong fishing line over a high branch. Then I'd like to tie the J-Pole to the line and hoist it up, dangling it from the tree branch.

What I don't know is if I can drill holes in the antenna to tie off the line to. My options are to drill a small hole in both the 1/2 and 1/4 wave sections at the top, or drill one hole in the bottom part (which is commonly shown mounted to a mast) and hanging the thing "upside down." I'm going to try my hand at some basic ascii art here...

```
|<----------add hole here
|
| |<-------add hole here
| |
|--|
|
|
```

OR hang it upside down in the tree like so...

```
|<--------add hole here
|
|--|
| |
| |
|
|
```

This is my first homebrew antenna project and I really don't want to screw it up! Thanks!

--
Andrew C. Ohnstad
"Arguing on The Internet is like running in the Special Olympics. Even when you win you're retarded."
To reply by e-mail: Replace everything before the at sign with livitup followed by the numeral one. Then remove everything after the at sign and add yahoo followed by dot com at the end. Simple!

1177. ARNewsline 1275 - Jan 18 2002

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 18:36:20 UTC
From: radionews@aol.com
Message-ID: <20020118133620.25519.00003269@mb-fc.aol.com>
Source record: 150664

AMATEUR RADIO NEWSLINE(tm) REPORT #1275 - January 18 2002

Amateur Radio Newsline report number 1275 with a release date of
Friday, January 18th 2002 to follow in 5-4-3-2-1.

The following is a Q-S-T. A new ham antenna on the I-S-S and a new microwave record down-under are first on Amateur Radio Newsline report number 1275 coming your way right now!

(Billboard Cart Here)

**

HAM RADIO IN SPACE: NEW ANTENNAS INSTALLED ON THE ISS

An American astronaut and a Russian cosmonaut ventured into space on Monday January 14th to move a construction crane and install a new set of ham radio antennas on the International Space Station. Roy Neal, K6DUE, has the details.

--

THERE IT WAS, ON NASA TELEVISION, TWO WHITE SPACE SUITED CHARACTERS, DWARFED BY THE IMMENSITY OF THE INTERNATIONAL SPACE STATION. FOR THE 32ND TIME ASTRONAUTS AND COSMONAUTS WERE OUTSIDE THE HUGE SPACECRAFT TO ASSEMBLE HARDWARE.

THEIR PRIMARY OBJECTIVE WAS TO MOVE A BIG CARGO CRANE FROM ITS TEMPORARY BERTH ON THE UNITED STATES SIDE OF THE ORBITING OUTPOST TO A PERMANENT LOCATION OUTSIDE THE DOCKING COMPARTMENT OF THE RUSSIAN CONTROL MODULE.

THAT ACCOMPLISHED, THEY WENT ON TO UNFURL A HAM RADIO ANTENNA. ASTRONAUT CARL WALTZ, KC5TIE AND COSMONAUT YURI ONUFRIENKO, RK3DUO, DEPLOYED THE RIBBON OF TAPE THAT SOON WILL BE IN USE ON A HAM RADIO STATION IN THE SERVICE MODULE,. WHERE THE CREWS LIVE AND SLEEP. A SECOND STATION HAS BEEN IN SERVICE FOR SOME TIME INSIDE THE SO CALLED FUNCTIONAL CARGO BLOCK, ANOTHER SECTION OF THE I S S.

FRANK BAUER, KA3HDO, THE CHAIRMAN OF ARISS, THE GROUP THAT IS RESPONSIBLE FOR AMATEUR RADIO ON THE SPACE STATION, CONGRATULATED THE INTERNATIONAL TEAM OF LICENSED HAMS FOR THE SUCCESSFUL CONCLUSION TO MONTHS OF HARD WORK.

ON JANUARY 25th ONUFRIENKO IS SCHEDULED TO GO OUTSIDE AGAIN, WITH FLIGHT ENGINEER DAN BURSCH, KD5PNU, TO INSTALL 3 MORE HAM RADIO ANTENNAS OUTSIDE THE MODULE THEY CALL ZVEZDA, THE CREW COMPARTMENT THAT'S THE SIZE OF A PASSENGER BUS HERE ON EARTH.

HAM RADIO IS GROWING RAPIDLY IN SPACE, ALONG WITH THE INTERNATIONAL STATION ON WHICH IT'S INSTALLED.

FOR THE AMATEUR RADIO NEWSLINE, ROY NEAL, K6DUE

--

The Expedition 4 crew will remain on board the ISS until May. And according to Frank Bauer, KA3HDO, another important task is to bring the automatic packet system back on line. He says that ground technicians are working with the astronauts and cosmonaut on that project and that task will continue as crew time permits. (ARNewsline from information provided by ARISS, NASA.)

**

HAM RADIO RECORDS: 24 GHZ DOWN-UNDER

A new distance record is set on a band where even commercial interests are only now starting to tread. And its a group of Australian hams who have set it. Q-News Graham Kemp, VK4BB, has the details:

--

A new Queensland distance record on 24.048.1 GHz USB was established morning of Tuesday 08 January over a 72.8 Km path. Location 1 was at Wellington Point, with VK3ZQB and VK4ZHL portable. Location 2 was at Caloundra, with VK3XPD and VK5DK portable operating.

Signals strengths up to 5x5 after initial optimization with typical daytime QSB. The visiting team are continuing with local propagation experiments. The challenges of building and operating microwave amateur radio equipment are wonderfully rewarding in many ways!

From Q-News Australia, I’m Graham Kemp, VK4BB, for the Amateur Radio Newsline.

--

Further experimentation is expected to bring even more record setting contacts in this very microwave ham radio band. (Q-News)

**

RESTRUCTURING: BIG LICENSING SUCCESS IN THE UK

A new slow-code license recently introduced in the United Kingdom is also setting records. This in the area of people flocking to get it. Jeramy Boot, G4NJH, days that the new British Foundation License is on its way to becoming a major success:

--

The Radio Licensing Center reports that, as of the 7th of January, exactly 600 of the new M3 Foundation Licenses had been issued.

In the 'QSO Party' for Foundation Licensees that took place on the 1st of January it is estimated that about 100 M3 stations were active. Many joined the one-minute-past-midnight 80-meter net and many more were heard working DX during the subsequent days.

One person active on the 1st of January was Mike Marsden, M3BQH, who also holds the callsign G8BQH. Mike reports that he worked Alex, UR5EDU, in the Ukraine at

two seconds past midnight, using 10 watts on 40 meters. The report was 59+10dB. After a few hours' sleep M3BQH worked 66 stations on the first day, with only two short CQ calls.

"The pile-up queue was never ending, I even managed to work seven other M3s", Mike said.

Jeramy Boot, G4NJH

--

To put this in perspective. The UK has 57,814 hams so 600 is about 1%. Here in the United States we have close to 625,000 licensees. That’s the equivalent of getting 6250 hams signing up for a new license class here in the USA in only a few short days. (GB2RS)

**

BREAK 1

This is ham radio news coming to you from the United States of America. We are the Amateur Radio Newsline, including the W8GK repeater serving Charleston West Virginia.

(5 Sec Pause Here)

**

RADIO REGULATIONS: FCC'S APPROVES DRAFT WRC PROPOSALS

The FCC’s Advisory Committee for the year 2003 World Radiocommunications Conference has approved its preliminary draft proposals. The document has been assigned as D-A-02-101 and deals mainly with satellite and terrestrial allocations in the UHF and microwave bands. Amateur Radio is only briefly mentioned in the area of 890 to 1350 MHz allocations.

The Advisory Committee itself was formed in January of 2001 to assist in the development of United States proposals for WRC 2003. DA-02-101 is based primarily on the committee report. Comments on it are due on it no later than January 28th.

The complete of 55 page text of DA-02-101 is on the FCC website at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-02-101A1.txt (FCC)

**

ENFORCEMENT: CLEAN UP THE INTERFERENCE - PLEASE

The FCC has written to an A-M radio station and an electric power provider to help resolve an unusual and long-standing interference situation. One affecting local amateurs in the Cincinnati and Mason Ohio areas. Amateur Radio Newsline’s Don Wilbanks, KC5MFA, brings us up to date:

--

The letter suggests that multiple sources may be involved in this interference case. Also that two that are possibilities are Cinergy Corporation and radio station WLW. Cinergy is the electric company to the affected area and WLW is a Clear Channel Communications owned power-house AM station serving the greater Cincinnati area from a transmitter in Mason.

WLW operates on 700 kHz with 50,000 Watts into a single element diamond shaped half-wave vertical tower. This is only one of two such towers left in the United States, the other belonging to WSM AM in Nashville Tennessee. Both were constructed in the early 1930's by the now defunct Blaw Knox Construction Corporation.

One of the amateurs affected is Bob Reiff, WA8ULW, of Mason. Reiff told the ARRL Letter that while the noise is most noticeable on 160 meters, it's showing up elsewhere. He says that some local hams suspect it is even causing problems even on a two meter repeater.

In its letters, the Commission says that it recognizes this to be an unusual case. It says that the source of the interference could turn out to be something else unexpected. But the Commission adds that it is turning to the radio station and electric utility company and asking for their help in finding the source of the noise plaguing the Mason ham community. It's also asking that both cooperate with the technical experts from the American Radio Relay League in solving the problem.

For the Amateur Radio Newsline, I'm Don Wilbanks, KC5MFA.

--

By the way, More information on this very interesting Blaw Knox diamond tower design and the ones installed at both WLW and WSM is available on-line. Simply take your browser to http://www.wsmonline.com/w_homepage/tower/index.html. Its very interesting reading. (FCC, ARRL, Amateur News Weekly)

**

ENFORCEMENT: UNLICENSED OPERATOR TOLD TO EXPLAIN

A former ham that the FCC says may have been on the air without a license has been asked by the agency to provide an explanation. The person posing the questions is FCC chief ham radio rules enforcer Riley Hollingsworth, K4ZDH. And in a recent Rain Enforcement log, Hollingsworth outlined the situation:

--
Hollingsworth: "We requested clarifying information from Brian Bailey, ex-KD5PXQ. His license was set aside by the Wireless Bureau on October 19th. We want to know his exact whereabouts on two specific days in September. Bailey has been in touch with us and is deciding weather to provide the information."
--

According to Hollingsworth, the information that the FCC wants from Bailey relates to allegations of unlicensed operations and malicious interference. (FCC, RAIN)

**

HELPING HAMS: HAMDIHAMS NEW E-MAIL ADDRESS

This note: The Courage HandiHam System has a new electronic mail address. You can now reach the group at handiham@courage.org. You may also contact its Director Pat Tice directly at wa0tda@arrl.net. (HandiHams)

**

CONVENTIONS: HAMVENTION SAYS BRING YOUR BUS AND LAVE THE PARKING SPOT TO US

Free parking at the HARA Arena for Hamvention? Well, kind of. Its free if you leave your car at home and charter a bus to bring in a pretty large group of people to the event. Amateur News Weekly's Phil Thomas, W8RMJ has the not so complex details:

--

For Amateurs who charter a bust to make the annual journey to Hamvention, the Dayton Hamvention Committee will reserve a parking place for your chartered bus for the entire three days of Hamvention. The reserved parking will be close to the HARA Arena Complex, allowing not only a place to secure your valued purchases, but also a place to rest those weary feet after walking many, many miles of Hamvention. Space is limited for the new charter bus parking area. Pre registration is required. Availability is on a first come, first served basis.

--

For more information on the new on-site charter bus parking offer or to reserve a space, please contact the Dayton Hamvention office. It's open normal business hours Eastern Standard Time at are code (937) 276-6930. You can also fax your request toll free at
1-800-491-4267. (Amateur News Weekly)

**

CONFERENCES: SE VHF SOCIETY IN APRIL

Greg Robinson KB4NVD says over the VHF Reflector that the Sixth Annual Southeastern VHF Society Conference will take place April 26th through the 27 Th. in Oak Ridge, Tennessee. The conference, hosted by the Southeastern VHF Society, promises to be an interesting and exciting event with presentations from accomplished VHF and up amateur radio enthusiasts from several parts of the country. Registration, program details, hotel and travel information can be found in cyberspace at www.svhfs.org. (SE VHF Society)

**

HAM RADIO EVENTS: KIDS DAY A BIG MID-WEST SUCCESS

The first Kids Day operating event for 2002 was a rousing success in many venues. But in one Mid-West city a bit of coverage on a local T-V station helped to make it even better. Again to Amateur News Weekly and reporter Jack Parker, W8ISH:

--

Kids Day at the Indianapolis Chapter of the American Red Cross got a boost when event coordinator Stece Wendt, KB9RDS, made an appearance on a local TV news program. During the two minute segment. Wendt told viewers that all kids and their parents were welcome to share in the Amateur Radio experience, including an introduction to Morse Code, VHF repeaters and HF:

--
Wendt: “And then we turn around tand take them over to the big radios -- the big base station radios where they can talk -- literally -- around the world.”
--

This is the second year the local Red Cross chapter has shown young people how to tune in the world.

Reporting from Indianapolis Indians for Amateur News Weekly, This is Jack Parker, W8ISH.

--

This is just one of many Kids Day success stories. We will have more in future Amateur Radio Newsline reports. (Amateur News Weekly)

**

BREAK 2

From the United States of America, we are the Amateur Radio Newsline, with links to the world from our only official website - www.arnewsline.org.

(5 sec pause here)

**

ARNEWSLINE(tm) FINANCIAL UPDATE WITH N6TCQ

It’s time for a report on the financial situation here at Amateur Radio Newsline. With it is our Support Fund Administrator and Corporate Treasurer, Andy Jarema, N6TCQ:

--

It is January of 2002. A brand new year for ham radio. And the beginning of another year for us here at the Amateur Radio Newsline. And as we start off the new year, here are the current finances.

Looking in the new corporate checkbook, the balance shows us at about $700 give or take a few bucks. Not very much when you consider that it takes over a thousand dollars a month to produce these weekly 20 minute Q-S-T’s.

Obviously, Amateur Radio Newsline is going to need your help -- and -- need it quickly to keep it from going away and to keep the news of ham radio coming your way.

We have done all that is possible from our side to keep costs under control. But, some fixed expenses like the telephone and long distance calling are a must have. So are electronic mail and world wide web access. There is the cost of the routine maintenance on the tape machines and editing gear. And in a few months the Newsline sponsored Young Ham of the Year Award will be rolling our way. All of this adds up and some costs just keep going up. When you add it all up and average it out, it comes to that $1000 a month figure I just mentioned.

So now is the time when Amateur Radio Newsline has to ask to ask that you help to keep its newscasts coming your way. Your tax deductible contributions can be sent to the Newsline Support Fund, Post Office Box 660937, Arcadia California. The Zipcode is 91066.

Ill be back within the next few weeks with an update on how things are going. For now from the Amateur Radio Newsline support center, I'm Andy Jarema, N6-Tiny-California-Quake.

--

Don't worry if you missed the address. It will be repeated in a few minutes at the end of this weeks newscast. (ARNewsline(tm) Support Fund)

**

ARNEWSLINE(tm): WE ARE GOING MP3

One other piece of news concerning Amateur Radio Newsline. As of March 1st, we will be dropping Real Audio and going exclusively MP3. Why the change? Well ever since we began posting a downloadable MP3 file at our own FTP site along side the Real Audio file, 9 out of 10 people have chosen the MP3. And with good reason. MP3 simply sounds a lot better than Real Audio to most of you. And by dropping the Real Audio, we can make the MP3 sound even better by encoding at a higher bit rate.

Right now, you can still compare the two formats if you like. Until February 22nd we will continue to post both Real Audio and MP3. Take the time to download both. And don't worry. Most modern media players including Real Audio, Microsoft Media and Winamp play MP3 so the chances are that you are already equipped to cover of the digital format change. (ARNewsline(tm))

**

SCIENCE AND TECHNOLOGY: THE NOISE OF EARTH

According to Space Daily, researchers have known for three decades that the Earth is a potent radio transmitter, but they were never able to pinpoint where the noise was coming from. Recently, by using data from the four spacecraft of the European Space Agency's Cluster mission, NASA-funded scientists have precisely located the source of the radio noise along the magnetic field lines. The noise originates several thousand miles above bright regions in the Earth's
northern lights. (AMSAT, Space Daily)

**

INTERNATIONAL-CANADA: ARE AGREEMENT IN B.C.

Turning to international news, Radio Amateurs of Canada which sponsors that nation’s Amateur Radio Emergency Service has signed a Letter Of Understanding and the British Columbia Provincial Emergency Radio Communication Service. The letter represents the collaboration between Radio Amateurs of Canada’s British Columbia Section Manager Fred Orsetti VE7IO and Supervisor of Information and Communications Technology for the Provincial Emergency Program Andrew Bryan VE7KSN, to provide a cooperative plan to carry out emergency communication. The letter also further enhances the work of the Canadian ARES program and compliments the Memorandum of Understanding signed May of 1994 between Radio Amateurs of Canada and Red Cross. (RAC)

**

INTERNATIONAL - CANADA: VE1AWA RESIGNS AS MARITIME PROVENCES SM

Due to personal reason Roy MacIntosh, VE1AWA has stepped down from the position of Section Manager for the Maritimes. Tom Caithness, VE1GTC has been appointed acting Section Manager pending outcome of the upcoming election call. (RAC)

**

INTERNATIONAL - UK: AMSAT-UK COLLOQUIUM

The 17th AMSAT-UK Colloquium will be held at Surrey University in Guildford from the 26th to 28th of July this year. AMSAT-UK is now inviting speakers to submit papers about amateur radio space and associated activities for this event and for the Proceedings document. Offers of papers should be submitted as soon as possible and should be sent only to Richard Limebear, G3RWL. His e-mail goes to g3rwl@amsat.org. (AMSAT-UK)

**

HAM RADIO IN SPACE: WEBSITE UPDATE

AMSAT reports that IK8XLD has updated his website with information about satellite operations, EME, the ham radio operation on the International Space Station, ATV and homebrew equipment. You can visit Rocco’s website at www.qsl.net/ik8xld. (ANS)

**

DX

In DX, DJ4KW and DK9GG are active from Belize as V31YN and V31GW respectively until about the 2nd of February. Activity is on CW, RTTY and PSK 31. (GB2RS)

And KE1F will be active on 10 to 160 meters CW, SSB and perhaps RTTY as ZF2LM from Grand Cayman Island from the 14th to 30th of January. (GB2RS)

Also R1ANF began operations as CE9 slash R1ANF on the 29th of December from a Chilean base in the South Shetland Islands. He is active on 10 to 28 MHz with 100 watts to an R6000 vertical. For all three, QSL as directed on the air. (OPDX)

Last but by no means least, word that JX7DFA, is on a job assignment to Jan Mayen. He is operating as LA7DFA. QSL via his home call. He will reply when he returns home in the Spring. (Modern DX)

**

THAT FINAL ITEM: A CALL FOR ARDF HUNTERS FOR THE WORLD GAMES

And finally this week, 2002 may be the biggest year yet for fans of hidden transmitter hunts, especially the ones that are all on foot. Amateur Radio Newsline’s Joe Moell K0OV helps coordinate happenings like these and has news of two major events.
--

Every two years, hams from around the world gather to see who is best at on-foot hidden transmitter hunting, also called foxtailing, radio-orienteering and ARDF. There are separate events on eighty meters and two meters, each with five transmitters scattered in a forest that can encompass 1000 acres or more.

Competitors are divided into five categories for males and four categories for females. Each country may have up to three persons per category on its team.

Back in Y2K, the championships were in China, with a dozen stateside hams among the competitors from 26 countries. This year, the excitement moves to Slovakia and takes place from September 2 through 7. Once again, ARDF Team USA will be there.

Would you like to be on that team? If so, contact me right away, because USA must submit its Letter of Intent to the Slovakian hosts by the end of January.

Of course you'll need lots of practice beforehand, and you can get plenty by attending USA's own national ARDF championships, which will be April 19-21 in Pine Mountain, Georgia, near Atlanta.

Find out about both championships -- Slovakia and Pine Mountain -- by visiting my Web site: www.homingin.com. Homingin is one word. Then apply for the Team USA roster at my e-mail address on that site, or by postal mail to my callbook address.

Maybe you'll bring home a medal this year. From southern California, where this year's local radio-orienteering training sessions will begin soon, this is Joe Moell K-zero-Oscar-Victor for Amateur Radio Newsline.

--

In case you missed it, Joe’s website is www.homingin.com. “homeingin” is one word. (K0OV, ARNewsline(tm))

**

NEWSCAST CLOSE

With thanks to Alan Labs, Amateur News Weekly, AMSAT, the ARRL, the CGC Communicator, CQ Magazine, the FCC, the Ohio Penn DX Bulletin, Radio Netherlands, Rain, the RSGB and Australia's Q-News, that's all from the Amateur Radio Newsline(tm). Our e-mail address is newsline @arnewsline.org. More

information is available at Amateur Radio Newsline's(tm) only official website located at www.arnewsline.org. You can also write to us or support us at Amateur Radio Newsline(tm), P.O. Box 660937, Arcadia, California 91066.

A reminder that the nominating season for the Dayton Hamvention Radio Amateur of the Year, Technical Achievement and Special Achievement Awards closes January 31st. Nominations should be sent to Post Office Box 964 Dayton Ohio 45401. They can also be filed using the e-form at the Hamvention website. Its at www.hamvention.org.

For now, with Bill Pasternak, WA6ITF, at the editors desk, I'm _____ saying welcome to the year 2002, 73, and we thank you for listening." Amateur Radio Newsline(tm) is Copyright 2002. All rights reserved.

**

Terminal Break

**
RAIN promo
**

1178. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 18:41:11 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C485FF6.A4816C4B@worldnet.att.net>
Source record: 150666

"William F. Hagen" wrote:

> They work like any other base loaded 10 foot vertical on 160 meters, not very
> well compared to a dipole or full vertical, maybe 1% or less efficiency, but
> even with that, work can be done, just dont expect to scream dx into antartica.

Not the Isotron. It's just an enlarged version of a tank circuit hung out in the open, at whatever height you can put it. Some of the versions in use on the higher bands do perform acceptably if minimally, but not on the lower bands. Down there the effiency has to be in the ~.001% area. (No, I haven't calculated it).
I picked up a 75meter version to use as a backup for local use. With it hung at 20 feet I was able to communicate 200 miles with it on 75 SSB in early morning when band noise and QRM was at a minimum, but with an (expected)very weak signal report. It truly was "just better than nothing".

1179. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 18:54:02 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C486EF2.713A20BC@tampabay.rr.com>
Source record: 150668

hey andrew
well when you cap each end of the Jpole you can drill and insert the hanger into that
but if you try and hang that antenna inside the canopy of a tree the leafs on the tree will block the RF from your antenna and tou wont hear or be heard nearly as well as an antenna in the open
if you could climb the tree and attach a mast and the antenna on the mast so the antenna sticks out of the tree top would be a better idea
also remember that the longer your coaz run the more line loss you have and some of the coax generally used now adays have nearly 4db of loss at 150mhz at 100 feet
i assume the reason for the tree mount is you are deed restricted or a renter
there are a couple of antennas that can go on the roof and no one but you would know what they are one is called a ventenna and the other one is a weather vane if you would like i could give you the website for these antennas
good luck

"Andrew C. Ohnstad" wrote:

> Hello all.
>
> I am building a "copper cactus" J-Pole for 2 meter use. My mounting
> options are limited to a number of very tall trees in my back yard. My
> plan is to use a slingshot or something to get a piece of rope or strong
> fishing line over a high branch. Then I'd like to tie the J-Pole to the
> line and hoist it up, dangling it from the tree branch.
>
> What I don't know is if I can drill holes in the antenna to tie off the
> line to. My options are to drill a small hole in both the 1/2 and 1/4
> wave sections at the top, or drill one hole in the bottom part (which is
> commonly shown mounted to a mast) and hanging the thing "upside down."
> I'm going to try my hand at some basic ascii art here...
>
> |<----------add hole here
> |
> | |<-------add hole here
> | |
> |--|
> |
> |
>
> OR hang it upside down in the tree like so...
>

> |<--------add hole here
> |
> |--|
> | |
> | |
> |
> |
>
> This is my first homebrew antenna project and I really don't want to
> screw it up! Thanks!
>
> --
> Andrew C. Ohnstad
> "Arguing on The Internet is like running in the Special Olympics. Even
> when you win you're retarded."
> To reply by e-mail: Replace everything before the at sign with livitup
> followed by the numeral one. Then remove everything after the at sign
> and add yahoo followed by dot com at the end. Simple!

1180. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 18:57:49 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C4863DC.3965B31B@worldnet.att.net>
Source record: 150667

Mike Jordan wrote:

. I don't chase DX, I don't get into contests, I'm

> not into nets. I'm just your basic, old fashion ragchewer that has
> a group of people (including my dad) within Oregon and the
> neighboring states that I would like to be able to talk to on 160.

Mike, several years ago, with winter close at hand and me wanting to use 160 during cold weather and with no 160 antenna for it up, I decided to put up an ALpha Delta DX-A Sloper, a shortened antenna of the approximate size, length and configuration of a 75 meter dipole, that works on 160, 75/80 and 40 meters. I figured it would be a minimal antenna but better than nothing. In short it turned out to work quite well, and I still have it in the air today as a backup, though a few years later I finally got a full size 160 meter dipole put up. It does require either a grounded metal mast of 30 or more feet, or an existing tower (which I have, 60 ft with a tribander and 2meter yagis up top).
The shield side of the coax feedline attaches to the mast/tower and the center conductor attaches to both the "dipole" elements, of which one is an approximate 1/4 wave on 75/80 and the other leg is a 40 meter element with an added loading inductor and an additional length of wire ,both totaling shorter than the
80 meter element. I don't know how much the use of a tower improves its operation over a simple mast, it may be considerable, but I have had very good results from it.

Dick W0EX

1181. Re: Vertical Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 19:25:30 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c4873a2_3@corp.newsgroups.com>
Source record: 150569

"Ace_On_Par3" <pwhelton@hal-pcNOSPAM.org> wrote in message
news:a25e0f$7fh$1@news.hal-pc.org...
> When feeding a ground mounted vertical with coax what is the standard
method
> of routing the feedline to the shack? I would think you would have to
bury
> it or be very careful when you mow the lawn. If you do have to bury it
does
> it have to be in conduit or PVC? Could be they make some super coax these
> days that can be buried without the need for conduit. Seems like conduit
> could fill up with moisture if you are not careful.
>
There are several direct bury types of coax Here's one of my favorites.
http://www.davisrf.com/ham1/coax.htm#buryflex
Happy Haming,
73 Dave KC1DI always qrp

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.314 / Virus Database: 175 - Release Date: 1/11/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

1182. Re: Entangled Photon Pairs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 19:59:25 UTC
From: Scott McClements <yetbbwa@grove.iup.edu>
Message-ID: <3C487E9D.E88506C6@grove.iup.edu>
Source record: 150570

For now I think you should all work on perpetual motion device to power the propeller on your hat.

Scott.

Tony Levand wrote:

> CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C392B79.12D6780@IEEE.org>...
> > "J. Harvey" wrote:
> > >
> > > "CAM" <Cecil.A.Moore@IEEE.org> wrote :
> > > > ...geosynchronous orbit...
> > > > ...instantaneous full-duplex...
> > >
> > > Define "instantaneous" (as pertains to high orbit satellites).
> > > :-)
> >
> > That's the beauty of entangled photon pairs. Once they leave the transmitter,
> > the quantum communication between the two particles is actually
> > instantaneous, i.e. there is no delay between the changes (modulation)
> > in the two particles, i.e. faster than light communications is possible.
> > If I twist a photon in Los Angeles, the twin entangled photon in New York
> > undergoes an opposite twist. The satellite delay is irrelevant. In fact,
> > there is no up link at all - just a transmitter.
>
> One first has to create a radio frequency photon. A half wave sine
> pulse of one electron charge will do in a pinch. Next we need an
> infinitely high Q nonlinear downconverting antenna, identical at each
> end. Super conducting rare earth metal q= 10^9. Well have to wait 40
> years until we can get a room temperature superconducting carbon
> nanotube nanotaylored antenna. Then we need a way to direct the photon
> to each receiver, humm...

1183. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 20:21:41 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C4883D5.74E98809@dialpoint.net>
Source record: 150571

When you build the j-pole, leave the ends of the pipe open so water will not collect in the pipes. Then you can drill the hole near the top of the long pipe and hoist it up. Just don't use any metal objects in the hole to hang it with. The rope will be fine. Leave the top of the antenna a few feet below the tree branch. You might also want to let the roap extend past the antenna and secure it around the feedline to take some of the strain off the coax. You may just want to pass the rope through the long pipe and secure it to the coax at the bottom. Just make sure water will drain out so it will not freeze or maybe you can seal the top of the antenna so water will not get in it.

"Andrew C. Ohnstad" wrote:
>
> Hello all.
>
> I am building a "copper cactus" J-Pole for 2 meter use. My mounting
> options are limited to a number of very tall trees in my back yard. My
> plan is to use a slingshot or something to get a piece of rope or strong
> fishing line over a high branch. Then I'd like to tie the J-Pole to the
> line and hoist it up, dangling it from the tree branch.
>
> What I don't know is if I can drill holes in the antenna to tie off the
> line to. My options are to drill a small hole in both the 1/2 and 1/4
> wave sections at the top, or drill one hole in the bottom part (which is
> commonly shown mounted to a mast) and hanging the thing "upside down."
> I'm going to try my hand at some basic ascii art here...
>
> |<----------add hole here
> |
> | |<-------add hole here
> | |
> |--|
> |
> |
>
> OR hang it upside down in the tree like so...
>
> |<--------add hole here
> |
> |--|
> | |
> | |
> |
> |

>
> This is my first homebrew antenna project and I really don't want to
> screw it up! Thanks!
>
>

1184. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 20:32:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C48866B.D36F2873@eznec.com>
Source record: 150572

You can gain a small amount of efficiency due to the reduced conductor loss in two wires rather than one. Also, the larger effective wire diameter reduces the reactance of a short antenna, which can reduce tuner loss. Exactly the same amount of improvement can be made by simply connecting the same two wires in parallel as an unfolded monopole. In almost all cases, these improvements are inconsequential, and much less than the ground resistance, which isn't improved.

For anyone who believes that folding an antenna reduces the fraction of applied power lost in the ground, do a search at http://groups.google.com for my posting in this newsgroup on November 2, 2001. The subject was "Re: Elevated Feed Vertical Antenna". It shows where the error is in Richard's argument.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Roy Lewallen, W7EL wrote:
> "Folding the antenna will multiply the radiation resistance ---as seen
> at ther feedpoint--- by a factor of four. It`ll also multiply the
> reactance by four, and the loss resistance as seen at the feedpoint by
> the same factor. So it won`t do anything to improve efficiency."
>
> I think efficiency improves.
>
>. . .

1185. Is enamel wire needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 20:52:49 UTC
From: pgardella@yahoo.com
Message-ID: <57d04feb.0201181252.6c0d8613@posting.google.com>
Source record: 150573

I building a Shorty Forty antenna for attic use. (Yes, I know...I'd much rather have a full dipole higher up, but until I can get into the trees, this will have to do!)

Now the big question I have is do I need enamel wire for the trap? I've looked somewhat for #12 enamel wire, to no luck. I have a bunch of hard drawn #12 copper wire here. Could I build the center trap with bare copper? I'm guessing you need the enamel to protect the wire from corrosion, but I'm not that concerned about that in the attic. If needed, could I cover the wire with electrical tape to prevent it from shorting out?

Thanks!

Patrick
KD4LOX

1186. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 20:56:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C488BE4.7CF05E9F@eznec.com>
Source record: 150574

This is deja vu all over again.

Last November, this subject was discussed in some detail on this newsgroup. (See my posting of a few minutes ago on this thread about that.) The paper was mentioned then, too, and the person who brought it to our attention was none other than Richard Harrison. This was shortly after I posted my simple analysis. After the two postings were made, no one put forth any information which contradicted what I and the paper said. The conclusions of the paper are:

"No major differences in field strength between the folded unipole and series-fed test cases were found for any of the configurations tested. The folded unipole was not found to have a significantly better radiation efficiency than the series-fed for a given tower height and ground system. The ground currents for the folded unipole are found to be approximately equivalent to those for a series-fed tower despite the unipole's lower driving point current, which results from a higher input resistance. No major differences in bandwidth were found between the folded unipole and series-fed tower when sideband VSWR was observed rather than simply input resistance. Furthermore, with the wire cage connected to the tower at the top and bottom, the antenna was found to have even wider bandwidth than for either the standard series-fed or unipole skirt-fed tower. . ."

After Richard brought the paper to our attention, I posted:

"Regarding the NAB paper -- it's always comforting when a P.E., PhD, two MSEEs, and a bunch of test equipment and research can come to the same conclusion that can be reached with high school algebra and a little fundamental reasoning. Seriously, though, it is good to see that the careful measurements confirm the fundamental reasoning. It verifies that nothing important was left out of the simple analysis."

Richard, did you not believe my analysis and the conclusion of the paper last November, or did you believe then then but change your mind since?

Roy Lewallen, W7EL

Crazy George wrote:
>
> Thanks, Philip. This is the paper I was looking for. The first paragraph
> in the conclusions says it all, and this information has not been widely
> dispersed. Roy, if you are still with us, scan this information.
> Confirmation of the marketers at work again.
> --
> Crazy George

> Remove NO and SPAM from return address

1187. Re: Is enamel wire needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 21:07:58 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C488EAE.F36FB150@dialpoint.net>
Source record: 150575

If you can keep the wires from shorting out then the bare wire will be fine. You can wind the coils with almost any kind of insulated wire but you might have to adjust the turns somewhat by maybe a turn or two.

Patrick Gardella wrote:
>
> I building a Shorty Forty antenna for attic use. (Yes, I know...I'd
> much rather have a full dipole higher up, but until I can get into the
> trees, this will have to do!)
>
> Now the big question I have is do I need enamel wire for the trap?
> I've looked somewhat for #12 enamel wire, to no luck. I have a bunch
> of hard drawn #12 copper wire here. Could I build the center trap
> with bare copper? I'm guessing you need the enamel to protect the
> wire from corrosion, but I'm not that concerned about that in the
> attic. If needed, could I cover the wire with electrical tape to
> prevent it from shorting out?
>
> Thanks!
>
> Patrick
> KD4LOX

1188. WTB: Ameritron RCS-8 and Comet GP-15 or Diamond V200A plus Triplexer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 21:12:18 UTC
From: Neil <DontDoIt@ImNotHere.com>
Message-ID: <dg3h4u8kle3l4oim4iitntm1vouj8uikjp@4ax.com>
Source record: 150576
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.swap

Hi folks. I'm looking to purchase an Ameritron RCS-8 remote coax switch and a Comet GP-15 triband vertical plus their triplexer. I would also consider a Diamond V2000A plus triplexer.

Please email price and condition to NeilR@innermedia.com or call:

Neil Rosenberg
(603) 465-2788
or
(800) 962-2949

Thanks and regards;
Neil

1189. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 21:25:35 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c489989_3@news1.prserv.net>
Source record: 150577

If this was discussed last fall, I sure missed it. I was doing a lot of traveling at the time, and it may have rolled off the server before I saw it. Another point that was made in the paper is that this configuration is unfortunately named, which has caused considerable confusion.
--
Crazy George
Remove NO and SPAM from return address

1190. Re: Is enamel wire needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 21:29:52 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c48998d_3@news1.prserv.net>
Source record: 150578

Like Ralph says, shorted turns are the problem. Over the years there have been many techniques presented for winding coils with bare wire, using cord between the turns, for instance, so that is the only difficulty you will have, other than bending hard drawn copper (ugh!).

--
Crazy George
Remove NO and SPAM from return address

1191. Re: ISOTRON 160 meter Antenna? How well does it work?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-18 23:33:07 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C48B0B3.9070305@europa.com>
Source record: 150579

Hi Dick,

>
> Mike, several years ago, with winter close at hand and me wanting to use
> 160 during cold weather and with no 160 antenna for it up, I decided to
> put up an ALpha Delta DX-A Sloper, a shortened antenna of the approximate
> size, length and configuration of a 75 meter dipole, that works on 160,
> 75/80 and 40 meters. I figured it would be a minimal antenna but better
> than nothing. In short it turned out to work quite well, and I still have
> it in the air today as a backup, though a few years later I finally got a

I tried an Alpha Delta. I can't remember if it was the DX-DD or
the DX-CC but I think it was the DX-DD because HRO was out of the CC
model and I know I paid about $90 for it. It didn't work worth
beans. I had it up about 25' and I tried it straight and in a L
shape. I had tuning up on it. I even took it up to my dad's place
where he has 3 acres. We hosted it up about 40' clear except for
the 60' tower it was hooked to on one end and the 40' pole on the
other. It still wouldn't tune up very well. I took it home and
rolled it up and stuck it away. I did try it again several months
later during the summer but it still didn't do very well on 80,
either turning up or signal wise. I finally put up some old dipole
that my dad gave me and also I made my own 1/2 wave 10,15 and 20
dipoles that I put up. I put up a couple of 10 meter dipoles so I
could look at two different directions. I've since taken down
everything except the 80 meter and a 10 meter and 15 meter dipole
that I've got using the same center connection. The experience I
had with the one Alpha Delta keeps me from buying another.

> full size 160 meter dipole put up. It does require either a grounded
> metal mast of 30 or more feet, or an existing tower (which I have, 60 ft
> with a tribander and 2meter yagis up top).

I can't quit get up 30 feet. I've got two poles up about 22 feet
on each end of the 75' wood fence we have along the back but I can't
get much higher without being able to guy them. And I can't guy in
two directions (it would go into two neighbors yards). I've thought
a few times of putting in a 6' high 6x6 post buried in concrete and
attaching a mast to it so I wouldn't need the guys, but I've not
done that.

> The shield side of the coax feedline attaches to the mast/tower and the
> center conductor attaches to both the "dipole" elements, of which one is
> an approximate 1/4 wave on 75/80 and the other leg is a 40 meter element
> with an added loading inductor and an additional length of wire ,both
> totaling shorter than the

> 80 meter element. I don't know how much the use of a tower improves its
> operation over a simple mast, it may be considerable, but I have had
> very good results from it.

Another poster gave some suggestions to on how to put a pig-tail
on my 80 meter dipole. I can't quit visualize all of it, but I'm
going to do some more looking into that. I don't have a as much
time to experiment as I use too and now that we are in our rainy
season here in the Northwest, I'm less inclined to install antennas
in bad weather like I once was. <grin>

Thanks, Dick. I appreciate the info. I'll did out my antenna books
and see what I can find in there.

Mike
KJ4TX

--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1192. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 00:45:28 UTC
From: dbagley@mindspring.com
Message-ID: <a2aj3u$r5p$1@nntp9.atl.mindspring.net>
Source record: 150580

I would use a tee on the top instead of a cap and drill a 1/8" weep hole in
the bottom cap to allow moisture to get out. I have built several of these
and they work pretty good
DE KE4JII

"Andrew C. Ohnstad" <spam.sux@die.spammers.com> wrote in message
news:MPG.16b234a580f69cbf989699@news.rcn.com...
> Hello all.
>
> I am building a "copper cactus" J-Pole for 2 meter use. My mounting
> options are limited to a number of very tall trees in my back yard. My
> plan is to use a slingshot or something to get a piece of rope or strong
> fishing line over a high branch. Then I'd like to tie the J-Pole to the
> line and hoist it up, dangling it from the tree branch.
>
> What I don't know is if I can drill holes in the antenna to tie off the
> line to. My options are to drill a small hole in both the 1/2 and 1/4
> wave sections at the top, or drill one hole in the bottom part (which is
> commonly shown mounted to a mast) and hanging the thing "upside down."
> I'm going to try my hand at some basic ascii art here...
>
>
> |<----------add hole here
> |
> | |<-------add hole here
> | |
> |--|
> |
> |
>
>
> OR hang it upside down in the tree like so...
>
> |<--------add hole here
> |
> |--|
> | |
> | |
> |
> |
>
> This is my first homebrew antenna project and I really don't want to
> screw it up! Thanks!
>

> --
> Andrew C. Ohnstad
> "Arguing on The Internet is like running in the Special Olympics. Even
> when you win you're retarded."
> To reply by e-mail: Replace everything before the at sign with livitup
> followed by the numeral one. Then remove everything after the at sign
> and add yahoo followed by dot com at the end. Simple!

1193. Ham Radio University 2002 for Long Island

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 01:55:13 UTC
From: GSBARC <info@gsbarc.org>
Message-ID: <5m428.9140$8P3.2811222@news02.optonline.net>
Source record: 150581
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

Ham Radio University 2002/ARRL New York City-Long Island Section Convention

North Babylon, New York - On Sunday, January 20, 2002 at 8AM, the doors of the Babylon Town Hall Annex on Phelps Lane will open for the third annual Ham Radio University. Ham Radio University 2002 is a day of education about Amateur Radio.

This year the forums have been expanded and new forums have been added. There will be twenty, one-hour presentations with special forums geared to the non-ham as well as the experienced ham radio operator. The focus will be "hands on" with many demonstrations.

Come join us at the Babylon Town Hall Annex, Phelps Lane, North Babylon, Long Island, and learn about everything from satellite communications, low power operating using radios as small as a tuna tin, how to put up an emergency antenna, the latest information on advanced digital communications, finding and fixing radio frequency interference problems to purchasing your first station equipment or handi-talkie and a special "Ask the Experts" forum. There will also be a Special Event Station W2V set up and operational on HF. There will live SSTV pictures uploaded to the NLI WWW during the event.

TALK-IN W2GSB/r 146.685 -600 110.9 PL

HRU 2002 is sponsored by the Great South Bay ARC and is a cooperative effort between over twenty clubs and organizations in the New York City- Long Island area. It is also the American Radio Relay League, New York City-Long Island Section Convention. Besides the forums, there will be tables set up with information about the different groups, ham radio classes, exam session schedules, public service and other activities.

Join us for a day of fun and education for the whole family!
Admission is open to all - donation is $2 per person.
(complimentary refreshments available)

For more information contact:
Phil Lewis N2MUN, Chairman, n2mun@arrl.net or call 631-226-0698
George Tranos N2GA, ARRL NLI Section Manager, n2ga@arrl.org or call 631-286-7562

Additional information on the WWW at http://hudson.arrl.org/nli
NNNN

1194. RCA Receiving Tube Manual #RC-29

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 02:17:07 UTC
From: dornbos@aol.combatspam
Message-ID: <20020118211707.12198.00002144@mb-fs.aol.com>
Source record: 150583

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1503625578

$10.00 minimum bid

This 752 page paperback book is an indispensable aid to working with or experimenting with receiving tubes and was considered the "gospel" of tube reference it's day. Almost every tube known to man is covered showing typical voltages and currents for every pin. Many substitution suggestions are given. Book is in good but used condition. The corners especially and the cover in general shows wear. Binding is in good condition. There is no writing in the book. I absolutely guarantee that this item is accurately described or your $ back! I prefer payment by Paypal but will also accept eBay payments, cashiers check or money order. Inside the U.S., Media mail is $3, Priority mail is $3.95. If you are buying multiple items from me, shipping is only charged on the costliest item, everything else rides along at no extra charge. Outside the U.S., buyers pays actual charges. Note: On customs forms, I will check the "merchandise" box and fill in the final bid price for "value."

1195. Re: ultimate xxx scenez from hell

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 02:18:33 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a2aks4mbs1@bob.news.rcn.net>
Source record: 150582

<qpklxs@usa.com> wrote:

> lesbian bestality sex preeteen show...
^^^^^ ^^^^^^
Dude, you'd better go back to typing with both hands...

1196. Re: RCA Receiving Tube Manual #RC-29

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 03:33:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C48E91B.F4F0131A@eznec.com>
Source record: 150584

I was surprised to see several RCA Receiving Tube Manual's at Powell's
Technical Bookstore the other day. Anyone wanting to get an idea of a
reasonable value for this item might take a look at
http://www.powells.com/search/DTSearch/search?kw=%22rca+receiving+tube+manual%22&pokey=skeptopotamus.
(There might be line breaks in the URL when you read it, so you'll have
to paste it back together.)

Roy Lewallen, W7EL

Dornbos wrote:
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1503625578
>
> $10.00 minimum bid
>
> This 752 page paperback book is an indispensable aid to working with or
> experimenting with receiving tubes and was considered the "gospel" of tube
> reference it's day. Almost every tube known to man is covered showing typical
> voltages and currents for every pin. Many substitution suggestions are given.
> Book is in good but used condition. The corners especially and the cover in
> general shows wear. Binding is in good condition. There is no writing in the
> book. I absolutely guarantee that this item is accurately described or your $
> back! I prefer payment by Paypal but will also accept eBay payments, cashiers
> check or money order. Inside the U.S., Media mail is $3, Priority mail is
> $3.95. If you are buying multiple items from me, shipping is only charged on
> the costliest item, everything else rides along at no extra charge. Outside the
> U.S., buyers pays actual charges. Note: On customs forms, I will check the
> "merchandise" box and fill in the final bid price for "value."

1197. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 03:35:18 UTC
From: codemaan <codeman@gj.net>
Message-ID: <a2ap78027kn@enews4.newsguy.com>
Source record: 150585

Before you go to all that trouble of hanging it from a tree, have you tried it when it is at ground level? Perhaps it will hit all the repeaters and do what you want it to when it is at smack dab on the ground (that is where my homebrew copper cactus j-pole is located and works great for me) .
Don't know if you have tried it there or not but if you haven't, give it a go, you never know.

"Andrew C. Ohnstad" <spam.sux@die.spammers.com> wrote in message news:MPG.16b234a580f69cbf989699@news.rcn.com...
> Hello all.
>
> I am building a "copper cactus" J-Pole for 2 meter use. My mounting
> options are limited to a number of very tall trees in my back yard. My
> plan is to use a slingshot or something to get a piece of rope or strong
> fishing line over a high branch. Then I'd like to tie the J-Pole to the
> line and hoist it up, dangling it from the tree branch.
>
> What I don't know is if I can drill holes in the antenna to tie off the
> line to. My options are to drill a small hole in both the 1/2 and 1/4
> wave sections at the top, or drill one hole in the bottom part (which is
> commonly shown mounted to a mast) and hanging the thing "upside down."
> I'm going to try my hand at some basic ascii art here...
>
>
> |<----------add hole here
> |
> | |<-------add hole here
> | |
> |--|
> |
> |
>
>
> OR hang it upside down in the tree like so...
>
> |<--------add hole here
> |
> |--|
> | |
> | |
> |
> |
>
> This is my first homebrew antenna project and I really don't want to

> screw it up! Thanks!
>
> --
> Andrew C. Ohnstad
> "Arguing on The Internet is like running in the Special Olympics. Even
> when you win you're retarded."
> To reply by e-mail: Replace everything before the at sign with livitup
> followed by the numeral one. Then remove everything after the at sign
> and add yahoo followed by dot com at the end. Simple!

1198. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 04:09:33 UTC
From: "Andrew C. Ohnstad" <spam.sux@die.spammers.com>
Message-ID: <MPG.16b2bb87dcd418bf98969a@news.rcn.com>
Source record: 150586

In article <a2ap78027kn@enews4.newsguy.com>, codeman@gj.net says...
> Before you go to all that trouble of hanging it from a tree, have you tried
> it when it is at ground level? Perhaps it will hit all the repeaters and do
> what you want it to when it is at smack dab on the ground (that is where
> my homebrew copper cactus j-pole is located and works great for me) .
> Don't know if you have tried it there or not but if you haven't, give it a
> go, you never know.

I haven't tried that (I haven't even finished building it yet) but the
problem is that I have one of the most restrictive zoning boards around,
the XYL! She says that she doesn't want me "junking up our property"
and that there can't be any visible antennas anywhere. If it's in a
tree, facing away from the house, you won't be able to see it. :)

One other option is throwing it up in the attic, building a wood "stand
off" and attaching that to one of the rafters or something. How well
(or not) would that work?

--
Andrew C. Ohnstad
"Arguing on The Internet is like running in the Special Olympics. Even
when you win you're retarded."
'94 Mitsubishi 3000GT. Eclipse, Infinity, more to come!
To reply by e-mail: Replace everything before the at sign with livitup
followed by the numeral one. Then remove everything after the at sign
and add yahoo followed by dot com at the end. Simple!

1199. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 04:30:32 UTC
From: derswede@aol.comspam.com
Message-ID: <20020118233032.03762.00001574@mb-de.aol.com>
Source record: 150587

>One other option is throwing it up in the attic, building a wood "stand
>off" and attaching that to one of the rafters or something. How well
>(or not) would that work?

Hehehe....XYL problems....know it well. I have my 2M yagi and a G5RV in the attic, as I'm on a ridgeline I work DX (ok, 2M DX) with it. The j-pole is a bird house..took her a week to realise what it actually was! Birds don't seem to resonate at 50.125 mhz, so no exploding sparrows at present. Try the attic route, it may work well (asphalt shingled roof ok...metal roof?....try loading it up!).

Good luck!
A

1200. Re: RCA Receiving Tube Manual #RC-29

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 04:46:56 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C48FA3F.2DB5B0BF@att.net>
Source record: 150588

A little hard to understand why RCA would include in their marketing and
reference material "on almost every tube known to man."

All the RCA manuals I've had and used over years contained material on RCA
tubes only.

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Roy Lewallen wrote:
>
> I was surprised to see several RCA Receiving Tube Manual's at Powell's
> Technical Bookstore the other day. Anyone wanting to get an idea of a
> reasonable value for this item might take a look at
> http://www.powells.com/search/DTSearch/search?kw=%22rca+receiving+tube+manual%22&pokey=s
keptopotamus.

1201. Re: smartuner repair

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 04:54:42 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C48FC10.CC2BD5BE@att.net>
Source record: 150589

Loose connections have a habit of doing things like that.

My faithful little 20 MHz dual-beam scope that I use for monitoring receive and transmit audio and r-f output envelope signals had worked without incident for over 5 years.

Then, one day the power came on but no traces - just a flash of light and then nothing.

Nothing ventured - nothing gained, so even with no schematic or service manual, I took off the cover to look around before taking it to the shop or replacing it.

Seeing nothing resembling crispy critters among the thousands of tiny parts, I reached for a screwdriver and started tightening every little screw holding down the main circuit board. Every one of them was 1/4 to 1/2 turn loose!

When all were tightened, plugged her in and back to normal operation!

I know - good designs do not rely upon mechanical pressure on PCB ground pads for circuit continuity, but some evidently do.

I have found over many years that a close visual inspection and a tightening of all hardware plus a serious "nose test" for overheated or burned parts will expose and/or cure a wide range of bugs.

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

CAM wrote:
>
> Snafu wrote:
> > Does anyone have any ideas about how I can get this working for a lot less
> > than that? I can use a meter and a soldering iron, but that is about where
> > it ends.
>
> Here's a shot in the dark for you. My SGC-230 quit working and the problem
> was that the internal connection on the output post had loosened. I took the
> cover off, discovered the loose connection, and tightened it up. Worked
> like a charm after that.
> --

> cheers, CAM http://www.qsl.net/w5dxp

1202. Re: Any 6m HT antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 05:02:02 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020119000202.25127.00000500@mb-fn.aol.com>
Source record: 150590

>hey there
>a 1/4 wave on 6 is 54 inches its rather tough to get something that long on
>an HT
>something that long will cause undue stress on the antenna connection
>the best thing you can do is put up an outside antenna and use an adapter to
>connect the coax to it

It would be a bit difficult to carry my house around with me. As the original post said, I need an antenna for the HT, not for a base.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

1203. Re: RCA Receiving Tube Manual #RC-29

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 05:16:54 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C48F4F9.418FE3C1@worldnet.att.net>
Source record: 150591

"George, W5YR" wrote:

> A little hard to understand why RCA would include in their marketing and
> reference material "on almost every tube known to man."
>
> All the RCA manuals I've had and used over years contained material on RCA
> tubes only.

I wonder it that isn't a reprint of some kind. The publisher is shown as "Audio Amateur".

Dick

1204. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 05:36:44 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4905E3.E469B365@icok.net>
Source record: 150592

Andrew,
Try it in a tree. Not all that different from having
it in an attic. 'Feel out' the XYL about having a flock of
'flamingo's in the yard! Stick a 'styfoam' flamingo on hte
'J'pole, bury the coax...
'Doc

1205. Heathkit sb 220 for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 08:03:30 UTC
From: kc6lsp@hotmail.com
Message-ID: <2b727482.0201190003.7a317c10@posting.google.com>
Source record: 150593

Heathkit SB-220 Linear amplifier in good shape 80-10mtrs.
twin 3-500Z tubes, $450.00 plus shipping
contact:me at KC6LSP@hotmail.com

1206. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 09:02:58 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a2bco2$351$9@quark.scn.rain.com>
Source record: 150594

'Doc <w5lz@icok.net> wrote:

> Just as a point of information, the old saying, "CW gets
> through where voice doesn't", is a carry-over from the 'AM'
> days, when it was true. If your using SSB, the saying is
> no longer true (given the same circumstances).

That has not been my experience. I have always been able to detect
CW signals when I could not understand a SSB signal. In other words,
just having them switch to CW and continue the conversation extends
the time that the QSO may continue.

--
Bill Nelson (billn@peak.org)

1207. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 09:04:29 UTC
From: raiar@slacc.com.nospam
Message-ID: <3c4934b1.124193108@news.galilei.com>
Source record: 150595

Hi Andrew

Many years ago, when I designed the original 'fat' copper cactus, I was living in an apartment, no outdoor antennas at all allowed.

To circumvent this rule, I planted it in a standard terra cotta flower pot, used yellow pixie stix to make thorns and acid washed it to turn it green. The coax was hidden inside of a garden hose, affixed to a dummy faucet which was affixed to the wall to allow the coax to get inside.

Later, using the standard 3/4 and/or 1/2 inch copper pipe, I did the same thing to the base, only painted the pipe brown with light gray splotches and then affixed artificial leaves to it, so that it looked like a regular plastic plant. The only trick to remember is to REMOVE all the wire that is in the plastic stems so they don't interfere with the antenna. If you can get some plastic balloon sticks and some florist tape, you can do a bang up job with the leaves to make it look like a store bought artificial tree.

If you have a tree in your yard with a fork or low angle large branch, you can drill a small hole and stick it in that too, just paint it to match the bark and it will be unnoticable.

TTUL
Gary

1208. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 09:12:55 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a2bdan$351$10@quark.scn.rain.com>
Source record: 150596

Irv Finkleman <finkirv@shaw.ca> wrote:
>>
> a load problem or not. I once had a problem similar to
> yours, and it was
> because the screws connecting the AC line in the breaker box
> were loose.
> Tightening them down cured the problem.I thought it was RF!
> Long time ago!

This is usually what happens when the neutral is loose. You will frequently find this in houses that use aluminum feeders from the meter to your distribution box.

I have such flickering in my house right now. It isn't in the box, and it isn't high current load. I haven't tried hooking up my Fluke to check the voltage drops yet, but will do that soon. I suspect that it is a loose connection at the meter, the drop at the house or the drop at the pole pig.

--
Bill Nelson (billn@peak.org)

1209. Re: Any 6m HT antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 12:20:53 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <5mJJPNtDhzrLaGcl8poqzulG=O0m@4ax.com>
Source record: 150597

vhfradiobuff@aol.comspamsux (VHFRadioBuff) wrote:

>>hey there
>>a 1/4 wave on 6 is 54 inches its rather tough to get something that long on
>>an HT
>>something that long will cause undue stress on the antenna connection
>>the best thing you can do is put up an outside antenna and use an adapter to
>>connect the coax to it
>
>It would be a bit difficult to carry my house around with me. As the original
>post said, I need an antenna for the HT, not for a base.

You're going to find a shortage of 6-meter ht whips, because 6 meters is
relatively new to ht transceivers. Maybe you need to break down and homebrew
something :-)

Bob
k5qwg
>=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
>73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
>Toms River, NJ USA! Grid FM29ww
>http://vhfradiobuff.tripod.com
>http://edfas.tripod.com

1210. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 12:38:14 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2bq14$1076vi$1@ID-124126.news.dfncis.de>
Source record: 150598

> I have one of the most restrictive zoning boards around,
> the XYL! She says that she doesn't want me "junking up our property"
==========

Have you only just noticed the wimmin, the irrational sex, have taken over
world wide ?

We have only ourselves to blame !
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

1211. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 13:04:16 UTC
From: codemaan <codeman@gj.net>
Message-ID: <a2bqi104ir@enews1.newsguy.com>
Source record: 150600

"Andrew C. Ohnstad" <spam.sux@die.spammers.com> wrote in message
news:MPG.16b2bb87dcd418bf98969a@news.rcn.com...
> In article <a2ap78027kn@enews4.newsguy.com>, codeman@gj.net says...
> > Before you go to all that trouble of hanging it from a tree, have you
tried
> > it when it is at ground level? Perhaps it will hit all the repeaters
and do
> > what you want it to when it is at smack dab on the ground (that is
where
> > my homebrew copper cactus j-pole is located and works great for me) .
> > Don't know if you have tried it there or not but if you haven't, give it
a
> > go, you never know.
>
> I haven't tried that (I haven't even finished building it yet) but the
> problem is that I have one of the most restrictive zoning boards around,
> the XYL!

Ahhhhh, the aesthetics committee. Know where you are coming from.

She says that she doesn't want me "junking up our property"
> and that there can't be any visible antennas anywhere.

Not even behind a shrub, in a schrub or nicely placed against the
house/tree/fence? I have read the posts below on how to camoflage it and
they sound do able. I would think the biggest eye sore hurdle to get over
is concealing the coaxial cable to where ever you eventually place it, even
in the tree.

If it's in a
> tree, facing away from the house, you won't be able to see it. :)

Hiding the coaxial cable could be a trick thou.

>
> One other option is throwing it up in the attic, building a wood "stand
> off" and attaching that to one of the rafters or something. How well
> (or not) would that work?

Don't know, give it a try. Before permanently installing it and running the
coaxial cable downstairs and so forth, hook the attic located antenna up
to a HT and give it a try. If it works to your expectation, Bingo, you have
a home for your antenna. Same thing for outside installation, carry it
around, place it at possible locations and see if it will even work there,
before going to the aesthetics committee for approval. :) If you have
a metal roof or siding, then arggggggh, you may have a no go in the attic.

Don't know that either. Radios are the darnest things. Sometimes they work well were you don't expect them to and they perform at other times poorly when you think you have a good chance. Again, don't know until you try.

Keep in mind that the longer run of coaxial cable you make from your base radio to where ever the antenna is, makes a negative measurable difference. Keep that run as short as possible. Of course, a good low loss cable brand/type/model can negate most of this issue. On the other hand, if the aesthetics committee just will not allow a close location and you are forced to make a lonnnnng run, then so be.

>
> --
> Andrew C. Ohnstad
> "Arguing on The Internet is like running in the Special Olympics. Even
> when you win you're retarded."
> '94 Mitsubishi 3000GT. Eclipse, Infinity, more to come!
> To reply by e-mail: Replace everything before the at sign with livitup
> followed by the numeral one. Then remove everything after the at sign
> and add yahoo followed by dot com at the end. Simple!

1212. Re: Is enamel wire needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 13:09:41 UTC
From: n2ey@aol.com
Message-ID: <20020119080941.05154.00001230@mb-fm.aol.com>
Source record: 150599

In article <57d04feb.0201181252.6c0d8613@posting.google.com>,
pgardella@yahoo.com (Patrick Gardella) writes:

>Now the big question I have is do I need enamel wire for the trap?
>I've looked somewhat for #12 enamel wire, to no luck. I have a bunch
>of hard drawn #12 copper wire here. Could I build the center trap
>with bare copper? I'm guessing you need the enamel to protect the
>wire from corrosion, but I'm not that concerned about that in the
>attic. If needed, could I cover the wire with electrical tape to
>prevent it from shorting out?
>
You need to prevent the turns from shorting to each other. You also want the
maximum number of turns in a given space.

Enamel/formvar/polythermaleze insulation is the easiest solution,
but other methods will work. For example, #12 or #14 "plastic"
insulated house wire from Home Depot is one solution, but
you will probably need more turns to get the same inductance.

House wire is often on sale at Home Depot and stores of that type.
Often the "NM" style stuff (typically 2 insulated wires plus a bare ground
wire)
is cheaper than individual insulated wires (go figure). Of course you have to
pull the wire apart but it goes quickly if you have a sharp knife and a good
grip.

I would save the hard-drawn for outdoor antennas.

73 de Jim, N2EY

If it were me

1213. Re: Is enamel wire needed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 14:17:34 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2bvgc$uum73$1@ID-124126.news.dfncis.de>
Source record: 150601

Tank and trap coils used at relatively high power levels are best wound with spaced turns, the turns preferably being spaced by cooling air rather than heat-insulating plastics. An optimum wire diameter is somewhere between 0.55 and 0.75 of winding pitch. Very non-critical. Choose according to what wire gauge is available.

A construction disadvantage of spaced bare wire is that a groove or slots are needed in the coil former to provide support. Or the coil can be wound with a spacing string between turns - the string being removed after the wire has been secured in some way to the former.

Enamelled wire is ideal for low power coils. But for close wound high power coils a high voltage between adjacent turns may break down the thin enamel

There's nothing wrong with using enamelled wire for spaced windings and enamelled copper wire is much more easily obtained than the bare variety.

If using thick plastic insulation to space the turns the plastic should be of the low-loss RF variety. Take other advice on what to avoid.

Spaced windings also have a somewhat higher Q. So not only is heat better radiated there's less of it to be got rid of.

But the common-or-garden plastic-insulated wires generally have an insulation thickness the same as wire diameter. This spaces the turns TOO far between wire centers and Q will suffer.

For coil design: former diameter, length, wire diameter, number of turns, Q, power dissipated, download program SOLNOID2 from the website below. One smallish file downloads in a few seconds, run immediately. It can be run from the site without downloading.

I've just remembered. For centre-loading of short (attic) dipoles download program MIDLOAD. For a given overall dipole length, this program also designs the coil (size, number of turns) in addition to predicting antenna radiating performance.

A BIG ADVANTAGE of a center loading coil is that it can be matched into either a coax OR balanced feedline by a link winding over the main loading coil. A disadvantage is that a center-loaded dipole is a single-band antenna.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

==========
Patrick Gardella <pgardella@yahoo.com> wrote in message
news:57d04feb.0201181252.6c0d8613@posting.google.com...
> I building a Shorty Forty antenna for attic use. (Yes, I know...I'd
> much rather have a full dipole higher up, but until I can get into the
> trees, this will have to do!)
>
> Now the big question I have is do I need enamel wire for the trap?
> I've looked somewhat for #12 enamel wire, to no luck. I have a bunch
> of hard drawn #12 copper wire here. Could I build the center trap
> with bare copper? I'm guessing you need the enamel to protect the
> wire from corrosion, but I'm not that concerned about that in the
> attic. If needed, could I cover the wire with electrical tape to
> prevent it from shorting out?
>
> Thanks!
>
> Patrick
> KD4LOX

1214. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 15:00:11 UTC
From: richardharrison@webtv.net
Message-ID: <20617-3C49980B-11@storefull-114.iap.bryant.webtv.net>
Source record: 150602

Roy, W7EL wrote:
"Richard, do you not believe my analysis and the conclusion of the paper last November, or did you believe then but change your mind since?"

I don`t remember very well the previous discussions of the folded unipole.

I reasoned that the transmitter is an electrical pump motivating nearly the same number of electrons out of one of its wires as it is taking in on its other wire at the same instant. Thus, an ammeter in either wire will read the same value.

Power is the product of volts and amps. The same power can be high volts and low amps or low volts and high amps. The power lost in a resistor in series with a load is I squared R. High current produces high loss in a given resistance. That is why high-voltage is used for high-impedance power transmission on long-distance power lines.

So, at first glance, it seemed to me that high volts and low amps into a folded unipole would waste less power in a fixed earth resistance than a low-volts, high-amps, presentation of the same power to a base-insulated antenna.

If the millivolts/meter at one mile are the same from a folded unipole as from a similar base-insulated antenna, they have the same radiation resistance. They also have the same loss and efficiency.

The earth resistance is constant, so current in the earth is the same for both antennas. If feedpoint current is different as is indicated by their different drivepoint resistances, some of the earth current is coming from the non-insulated tower base in the folded unipole and adds to that supplied directly to and from the transmitter. The total must be the same as that current supplied directly by the transmitter to the base insulated antenna and ground in that case, regardless of the impedance presented to the transmitter by the folded unipole. I don`t think displacement current differences are significant, or the efficiency could change.

I can change my mind as often as required to fit the best evidence available to me, and my peculiar way of analyzing that information.

Best regards, Richard Harrison, KB5WZI

1215. Re: RCA Receiving Tube Manual #RC-29

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 16:33:01 UTC
From: richardharrison@webtv.net
Message-ID: <20615-3C499FBD-67@storefull-114.iap.bryant.webtv.net>
Source record: 150604

"Almost every tube known to man" was likely a boast that the RCA tube line was very inclusive.

Many brands competed and were carried by various suppliers. Several brands were produced by the same manufacturer, who may have also supplied his competitors with types bearing their own brands.

There was seldom a supplier response of "We only carry RCA tubes and that tube is sold only by Sylvania, Tung Sol, Raytheon, Philco, or GE", Most transmitting tubes also had several suppliers regardless of who initiated their designs.

Best regards, Richard Harrison, KB5WZI

1216. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 16:36:09 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <mah28.3984$h31.718328@e420r-atl1.usenetserver.com>
Source record: 150603

When faced with the thought of "the Aesthetics Committee" taking over the world, this is one case where ignorance might be the easiest solution:)
As for me, I've found that conflict resolution can only be achieved by giving the XYL what SHE wants. "Getting in touch with one's feminine side" (nice use of the 3rd person, impersonal is essential so as not to go native:) is a sure fire way to put a bullet straight through the forehead (comment: macho illusion counteracts submission to the feminine side) of the problem and will leave you with a sense of ingenious victory over extreme adversity.
Here are a couple examples:
1) mount the J pole in the front yard as part of a girlish ornament
a. walking stick/candy cane in the hand of a gnome, leprechaun or other fictional creature
b. potted plant hanger
2) buy her that patio set she wants and affix it to the top of the umbrella
comment: yellow fabric with flowers are universally approved of as "sun elements"
3) flagpoles
a. a mast for displaying and rendering honor & respect to our nation's flag
comment: killing two birds w/ one stone. "Do you have a problem with the flag?"
b. let the committee pick one of those decorative flags from Home Depot
4) planted above a birdhouse on a 10 - 20 ft mast.
comment: purple martins, swallows, etc divert the eye to nature vice technology
5) when strung from overhead with the feedline routed out of sight as an ornament
a. wooden windchimes
b. hummingbird feeder
6) erected in plain view, claim ignorance and deny responsibility:)

I don't know about everybody else's situation but my local committee is only knowledgeable about matters of aesthetic beauty. My XYL, though I love her to death, doesn't know what a J-pole is and would have great difficulty understanding why it's "so cool!" She's never complained about the A/C compressor beside the house and hasn't the foggiest clue why we need a breaker box either.
So, when presented with a dutiful husband who did something just for her, she's somewhat obliged to say, "That's sweet, dear". Which leaves me thinking, "Perrrrfect! My plans are almost complete! By this time tomorrow, when I power up my IC-730 combined with the MFJ-949E, I'll extend my electromagnetic forces beyond the horizon and the world will know MY POWER! HAHAHAHAHAHAHAHAHAAAAA!!!"

Good luck & 73's,
Drink, WP3JQ

"codemaan" <codeman@gj.net> wrote in message
news:a2bqi104ir@enews1.newsguy.com...
>
> "Andrew C. Ohnstad" <spam.sux@die.spammers.com> wrote in message
> news:MPG.16b2bb87dcd418bf98969a@news.rcn.com...
> > In article <a2ap78027kn@enews4.newsguy.com>, codeman@gj.net says...
> > > Before you go to all that trouble of hanging it from a tree, have you
> tried
> > > it when it is at ground level? Perhaps it will hit all the repeaters
> and do
> > > what you want it to when it is at smack dab on the ground (that is
> where
> > > my homebrew copper cactus j-pole is located and works great for me) .
> > > Don't know if you have tried it there or not but if you haven't, give
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> a
> > > go, you never know.
> >
> > I haven't tried that (I haven't even finished building it yet) but the
> > problem is that I have one of the most restrictive zoning boards around,
> > the XYL!
>
> Ahhhhh, the aesthetics committee. Know where you are coming from.
>
> She says that she doesn't want me "junking up our property"
> > and that there can't be any visible antennas anywhere.
>
> Not even behind a shrub, in a schrub or nicely placed against the
> house/tree/fence? I have read the posts below on how to camoflage it and
> they sound do able. I would think the biggest eye sore hurdle to get over
> is concealing the coaxial cable to where ever you eventually place it,
even
> in the tree.
>
>
> If it's in a
> > tree, facing away from the house, you won't be able to see it. :)
>
> Hiding the coaxial cable could be a trick thou.
>
> >
> > One other option is throwing it up in the attic, building a wood "stand
> > off" and attaching that to one of the rafters or something. How well
> > (or not) would that work?
>
> Don't know, give it a try. Before permanently installing it and running
the

> coaxial cable downstairs and so forth, hook the attic located antenna up
> to a HT and give it a try. If it works to your expectation, Bingo, you
have
> a home for your antenna. Same thing for outside installation, carry it
> around, place it at possible locations and see if it will even work there,
> before going to the aesthetics committee for approval. :) If you
have
> a metal roof or siding, then arggggggh, you may have a no go in the attic.
> Don't know that either. Radios are the darnest things. Sometimes they
work
> well were you don't expect them to and they perform at other times poorly
> when you think you have a good chance. Again, don't know until you try.
>
>
>
> Keep in mind that the longer run of coaxial cable you make from your base
> radio to where ever the antenna is, makes a negative measurable
difference.
> Keep that run as short as possible. Of course, a good low loss cable
> brand/type/model can negate most of this issue. On the other hand, if
> the aesthetics committee just will not allow a close location and you are
> forced to make a lonnnnng run, then so be.
>
>
>
> >
> > --
> > Andrew C. Ohnstad
> > "Arguing on The Internet is like running in the Special Olympics. Even
> > when you win you're retarded."
> > '94 Mitsubishi 3000GT. Eclipse, Infinity, more to come!
> > To reply by e-mail: Replace everything before the at sign with livitup
> > followed by the numeral one. Then remove everything after the at sign
> > and add yahoo followed by dot com at the end. Simple!
>
>

1217. City Lot Antenna Suuestions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 17:56:01 UTC
From: eborys <eborys@home.com>
Message-ID: <Rqi28.1082$gW4.1057159@news1.rdc1.mi.home.com>
Source record: 150605

City Lot =Ant????
Tallest tree is about 25 feet, house is two story. Arrangement makes a
dipole ??

I like to work 40 -15 CW.

I've been looking at 'no radial' verticles

Magnetic Loops - I'd probably build one for 40 to 20 and one for 15 to 30

Brilliant ideas welcome.

tnx

1218. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 18:01:06 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C49A817.4616EF1D@worldnet.att.net>
Source record: 150606

Reg Edwards wrote:

> > Reg,
> >
> > Why do I get a feeling that you are
> > setting this Yankee up? Ok, I can't resist
> > here's my answer to your question.
> >
> > I don't think it matters. The principle is the same.
> > You are matching the generator to the load.
> ==============================
>
> GW, I'm really quite harmless. ;o)
>
> You are right - it doesn't matter - because you are NOT matching the
> generator to the load.
>
> All you are doing is setting the load to some particular value such as
> 50-ohms. That occurs when the SWR meter indicates 1:1 and you can feel
> happy.
>
> You cannot match the load to the generator because you don't know what the
> generator internal resistance is. Not even the manufacturer will tell you.
> It is not included in the specification. Even the transmitter designer has
> no interest in what it might be.
>
> 50-ohms (or whatever) is the load resistance into which the PA will deliver
> rated output power without exceeding its internal voltage and current
> ratings or the maximum permitted internal dissipation. There may also be a
> specified level of signal distortion, and a specified level of harmonic
> generation.
>
> Rated power output is NOT the maximum available power.
>
> To draw the maximum available output power is likely to wreck the output
> transistors due to excessive collector current, volts, or power dissipation.

Hey, Reg, crawl off of it, willya? Who cares what the SWR is? What I want to
see if *zero reflected*, or something very near it. I couldn't care less what
the "SWR" is, and over the years I have found that measuring SWR is a very
tenuous way at best to resolve antenna problems. However the ability to minimize
the amount of reflected (voltage, power, call it what you want) is crucial to
the proper operation of any radio transmitting system.
When you see SWR running high it is almost always indicative of some problem
that will also prevent you from being able to get the reflected down to a low

level. And anyone who has worked with transmitters for long knows that what the SWR meter says is merely a relative indication, not numbers to be taken literally. A high SWR reading can mean any of a number of things.

Dick

1219. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 18:12:07 UTC
From: Your Friend Bill <"Remove The NO In The Reply To Address"@coqui.net>
Message-ID: <3C49B6F7.A233D568@coqui.net>
Source record: 150607

"Gary V. Deutschmann, Sr." wrote:
>
> Hi Andrew
>
> Many years ago, when I designed the original 'fat' copper cactus, I
> was living in an apartment, no outdoor antennas at all allowed.
>
> To circumvent this rule, I planted it in a standard terra cotta flower
> pot, used yellow pixie stix to make thorns and acid washed it to turn
> it green. The coax was hidden inside of a garden hose, affixed to a
> dummy faucet which was affixed to the wall to allow the coax to get
> inside.
>
> Later, using the standard 3/4 and/or 1/2 inch copper pipe, I did the
> same thing to the base, only painted the pipe brown with light gray
> splotches and then affixed artificial leaves to it, so that it looked
> like a regular plastic plant. The only trick to remember is to REMOVE
> all the wire that is in the plastic stems so they don't interfere with
> the antenna. If you can get some plastic balloon sticks and some
> florist tape, you can do a bang up job with the leaves to make it look
> like a store bought artificial tree.
>
> If you have a tree in your yard with a fork or low angle large branch,
> you can drill a small hole and stick it in that too, just paint it to
> match the bark and it will be unnoticable.
>
> TTUL
> Gary

Now THAT is the 'Ham Spirit'!
-Bill

1220. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 18:26:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2ci85$10c6ld$2@ID-124126.news.dfncis.de>
Source record: 150615

Confusing feedpoint resistance with radiation resistance is a fatal error made, it seems, by many professional engineers who ought to know better. Amateurs can be forgiven for allowing themselves to be led astray.

That group of so-called engineers/scientists who spent a fortune of somebody else's money to demonstrate radiating efficiency, etc., of a folded monopole is exactly the same as an ordinary monopole should have realised long before they started that use of pencil, paper and elementary analysis would be a much more economical method of ducking old wives.

But then, no-one would have paid them for 2 or 3 lines of scribbled notes ending with QED.

Just another example of the sad state to which Western engineering education has fallen in the last 1/2 century. It is now necessary to occupy the first 6 months of a 3 or 4-year engineering degree course with arithmetic lessons!

Archimedes, Pythagorus - where are you now!

1221. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 18:46:27 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u4jfnokrf57lf1@corp.supernews.com>
Source record: 150608

That's what my first wife said, too.

{;-)

Jim

> I haven't tried that (I haven't even finished building it yet) but the
> problem is that I have one of the most restrictive zoning boards around,
> the XYL! She says that she doesn't want me "junking up our property"
> and that there can't be any visible antennas anywhere.

1222. Re: RCA Receiving Tube Manual #RC-29

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 18:51:20 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c49c3e9_3@news1.prserv.net>
Source record: 150609

As far as I experienced, RCA never made any Loktals, nor have I seen any with RCA labels which were made elsewhere.

Frame grid tubes were made only by Amperex, but some wore RCA labels.

Nuvistors, on the other hand, were all made by RCA, and I have never seen any with another brand, other than a few OEM radio brands.

6907s were made only by Amperex. I know, as I tried to get a competitor to build them for GE Mobile Radio and bring the price down. Tung Sol tried, and you have never seen a sorrier set of samples than the box of "6907s" they sent us to test. No one else would bite.

There are probably many other examples, but if you want to put the lie to the statement quoted, just put any RCA tube manual next to a GE, Sylvania, or even CBS-Hytron of the same vintage. RCA included curves in theirs, but there were an awful lot of numbers which they didn't even acknowledge existed.

Perry Shankle was a master RCA distributor here, and had a retail parts counter, also. There were a number of tubes RCA didn't make or rebrand, and Shankle couldn't supply. You had to go to one of the other dealers.
--
Crazy George
Remove NO and SPAM from return address
Richard Harrison <richardharrison@webtv.net> wrote in message
news:20615-3C499FBD-67@storefull-114.iap.bryant.webtv.net...
> "Almost every tube known to man" was likely a boast that the RCA tube
> line was very inclusive.
>
> Many brands competed and were carried by various suppliers. Several
> brands were produced by the same manufacturer, who may have also
> supplied his competitors with types bearing their own brands.
>
> There was seldom a supplier response of "We only carry RCA tubes and
> that tube is sold only by Sylvania, Tung Sol, Raytheon, Philco, or GE",
> Most transmitting tubes also had several suppliers regardless of who
> initiated their designs.
>
> Best regards, Richard Harrison, KB5WZI
>

1223. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 19:01:12 UTC
From: raiar@slacc.com.nospam
Message-ID: <3c49c1fb.160368897@news.galilei.com>
Source record: 150610

Hi Bill

>Now THAT is the 'Ham Spirit'!
>-Bill

I thought of it more as self-preservation and keeping out of the
doghouse with the landlord and the XYL, hi hi.....

Where there is a will, there is a way!

TTUL
Gary

1224. Re: smartuner repair update

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 19:03:43 UTC
From: Snafu <snafu@starband.net>
Message-ID: <Fqj28.484$0K4.182632485@twister1.starband.net>
Source record: 150611

I checked the unit for obvious loose connections and found that the
porcelain insulator on the output terminal has a crack in it on the inside.
It doesn't go all the way through. It surely isn't a good thing but I don't
think it is causing the tuner to refuse to tune at all. I also made sure I
had 13 volts+ to the tuner.

I pulled all the removable eeproms and gave them a shot of contact cleaner
with no improvement.

As for the led lights, some of them do light up like the "tuned" light and
+5V light when 13V power is applied.
When I transmit, ALL the LED's come on......and stay on while transmitting.
The tuning relays don't "chatter" at all when I transmit but they all
chatter briefly when 13V is turned off.

I downloaded the latest manual from SGC and did the "lightbulb test".
The lightbulb does NOT come on at all, indicating that there is definitely a
problem in the tuner. I know my HF radio is working fine.
I guess the tuner is going back to SGC for rehab!

Thanks for all the help in the newsgroup.

--
Remove (nospam) from reply e-mail address

1225. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 19:05:29 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C49C379.795C5BD6@IEEE.org>
Source record: 150612

Dick Carroll wrote:
> However the ability to minimize
> the amount of reflected (voltage, power, call it what you want) is crucial to
> the proper operation of any radio transmitting system.

Not exactly true. Minimizing the losses is the important thing. For instance, open-wire line feeding a 1/2WL dipole has an SWR of about 12:1 yet that open-wire line will have less loss than RG-8x, RG213, or 9913 with an SWR of 1:1.

> When you see SWR running high it is almost always indicative of some problem
> that will also prevent you from being able to get the reflected down to a low
> level.

My antenna system is designed to run a "high" SWR. If the SWR drops below 4.5:1 on my 450 ohm ladder-line, my matching system won't work. My matching system works for any SWR between 4.5:1 and 18:1. It *depends* on the SWR being higher than 4.5:1 for the impedance transformations.

Assume a 50 ohm antenna on 21MHz fed with 100ft of transmission line. The total losses using RG-8x with no reflected power are 200% higher than open-wire line carrying an SWR of 12:1. The total losses using RG-213 with no reflected power are 100% higher than open wire line carrying an SWR of 12:1. The total losses using 9913 are 60% higher than open-wire line carrying an SWR of 12:1.

It might help to review, "Low SWR for the Wrong Reasons", in "Reflections".
--
cheers, CAM http://www.qsl.net/w5dxp

1226. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 19:18:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2ci86$10c6ld$3@ID-124126.news.dfncis.de>
Source record: 150616

Dick Carroll wrote -

> Hey, Reg, crawl off of it, willya?
> Who cares what the SWR is?
==========
Hello Dick,

What are we arguing about? We are in complete agreement.
==========
> What I want to see is *zero reflected*,
> or something very near it.
==========
Hello again Dick,

You may imagine you are seeing reflected power but you are not. What line do you have in mind? But again, don't worry about it, it doesn't matter. Who cares what the 'reflected' is anyway?

What you SHOULD care about (and I am sure you do) is whether or not the transmitter is seeing its designated load resistance, usually 50 ohms. And for an hour or two that's the end of the matter. The station shift-duty engineer can go back to reading the comics about CFAs.

Yours, Reg.

1227. Re: MW Folded Unipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 19:39:12 UTC
From: alevand@yahoo.com
Message-ID: <e52e470e.0201191139.5f64cc52@posting.google.com>
Source record: 150613

The best way to increase the radiation resitance and thus reduce
ground losses, where efficiency is defined by the antenna radiation
reistance /total resistance (antenna plus ground resistance). Folding
the monopole increases feed impedance but not radiation reistance,
since the same current is flowing in the sum of all the conductors to
ground. So to increase the effective length of the antenna and thus
radiation resistace, we want to pit the current node at the top of the
monopole. This and will reduce current losses in the ground. An
inverted L with the horizontal length equal to a quarter wave or a T
antenna will do this as well as a capacitace hat. The inverted L will
have some directivity along the wire and some horizontal polorization.
The T will cancel much of this. Elevated counterpoise radials are also
effective in reducing ground losses without having to bury a hundred
radials. For 160 the have to be pretty high, but 10-15 feet may
suffice.

Tony
AA9CC

Roy Lewallen <w7el@eznec.com> wrote in message news:<3C48866B.D36F2873@eznec.com>...
> You can gain a small amount of efficiency due to the reduced conductor
> loss in two wires rather than one. Also, the larger effective wire
> diameter reduces the reactance of a short antenna, which can reduce
> tuner loss. Exactly the same amount of improvement can be made by simply
> connecting the same two wires in parallel as an unfolded monopole. In
> almost all cases, these improvements are inconsequential, and much less
> than the ground resistance, which isn't improved.
>
> For anyone who believes that folding an antenna reduces the fraction of
> applied power lost in the ground, do a search at
> http://groups.google.com for my posting in this newsgroup on November 2,
> 2001. The subject was "Re: Elevated Feed Vertical Antenna". It shows
> where the error is in Richard's argument.
>
> Roy Lewallen, W7EL
>
> Richard Harrison wrote:
> >
> > Roy Lewallen, W7EL wrote:
> > "Folding the antenna will multiply the radiation resistance ---as seen
> > at ther feedpoint--- by a factor of four. It`ll also multiply the
> > reactance by four, and the loss resistance as seen at the feedpoint by
> > the same factor. So it won`t do anything to improve efficiency."
> >
> > I think efficiency improves.

> >
> >. . .

1228. Re: City Lot Antenna Suuestions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 19:40:26 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C49CBA7.6BBB3255@icok.net>
Source record: 150614

Ebory,
Information sort of sparse. Dimensions other than height?
'Doc

1229. Ferrite Core Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 19:47:23 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <f3k28.109713$fe1.1850782@bgtnsc06-news.ops.worldnet.att.net>
Source record: 150617

how do i determine if the frrite cores that i have are #43 material?

1230. Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:01:12 UTC
From: googlyelmo@earthlink.net
Message-ID: <3C49D08A.538FC947@earthlink.net>
Source record: 150618

I have a 70' inverted-V at 50 feet [ends at 20], fed with 450-ohm ladderline for 40-10. The antenna is mounted atop a 20' galvanized mast on the roof of a wood frame house, with the line dressed away from the mast >20 degrees its entire length. The included angle of the antenna is about 95 degrees. I use an MFJ-901B tuner to match my Ten-Tec Scout to the line. It is a 2nd-storey installation, with DC-ground to the ground pin of an outlet (checks good, all new wiring in the house).

On 40, everything is fine. But on 10 and 15, I can't get a match, or anything like it (off the scale SWR). 20 tunes sharply, and barely, and sometimes "warbles" when it is really rainy, i.e. the sidetone rises/falls, following along with a quick (<1 sec.) swing of the SWR meter needle. I also sometimes get a little bit of a bite when I touch a metal switch on the rig while all this is going on, so there is some RF feedback going on here. I had a virtually identical set up when I lived in dry Arizona, and it worked very well on 40-20-15-10. But now I live in Seattle, and it looks like I am up against one of the most serious drawbacks ladderline presents, i.e. wetness.

I just put this antenna up 10 days ago, and it has been rainy/foggy/misty (all of the above!) every day since (and likely to be for quite a while yet), so I don't know how this installation will perform dry. Is there anything I can do to bring down the SWR/losses on wet ladderline? I had the idea of treating the line with silicone, but have been advised that may negatively and seriously alter the characteristic-Z of the line, or otherwise degrade performance permanently. Both the line and the antenna radiator check out fine for opens and shorts, and the rig puts out its rated 50W at flat SWR into a dummy.

I have preferred ladderline fed multi-band dipoles up to this point for their versatility and basic decent performance, and I'd hate to go to coax now. I'd like to hear any suggestions and comments, and especially like to hear from anyone who has successfully used ladderline in a wet and rainy climate. Gratefully,

Will, KD7BFX

1231. What does the so-called SWR mtwer tell us

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:20:27 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2ckml$10bm6m$1@ID-124126.news.dfncis.de>
Source record: 150470

The SWR-meter is located in the transmission system immediately at the output of the transmitter. It is often housed in the transmitter case itself.

Immediately following the meter is an adjustable impedance transforming/matching network sometimes referred to as an antenna tuner. The SWR meter can also be housed in the tuner case. But compared to a wavelength, the transmitter and tuner are always extremely near to each other with the SWR meter in between.

A transmission line of either coaxial or balanced-pair construction runs between the tuner output and the antenna.

From one frequency band to another, from one end of a band to the other, the antenna input impedance changes greatly from one complex value to another. These large impedance swings are reflected by the antenna back to the transmitter end of the transmission line sensibly unchanged in magnitude.

Transmitters are designed to work into a particular value of load resistance Ro.

Ro is the resistive load into which the transmitter is capable of developing its maximum, undistorted peak output power without exceeding any internal voltage, current or power rating. It is desirable, therefore, for the load on the transmitter to be set to the design value at the start of a transmission and continuously monitored during normal operation.

The tuner's purpose is to transform the wide range of impedances vs frequency, seen looking into the transmission line towards the antenna, to the constant resistive value of Ro required by the transmitter. In modern equipment this operation is often performed automatically, the tuner coils and capacitors being switched by relays or driven by electric motors.

The SWR meter is essentially a 4-arm, RF resistance bridge. Three of the bridge arms are integral to the meter and are fixed in value. The 4th, variable arm is the input impedance of the tuner. The bridge circuit is arranged such that the transmitter is the signal source and the values of the bridge ratio arms are chosen such that the 4th variable arm, the input impedance of the tuner, provides the principal load on the transmitter. The values of the other 3 bridge arms are chosen to minimise power loss within the bridge itself consistent with adequate unbalance detection sensitivity.

Inside the meter the bridge RF unbalance voltage is rectified and displayed on a sensitive (100 uA fsd?) moving coil meter. When the input resistance of the tuner is equal to Ro the bridge is balanced, meter deflection is zero (a null) and the transmitter is then operating with its design value of load resistance. The purpose of the SWR meter, therefore, is to indicate that

this important condition has been or has not been satisfied.

It should be noted, when the bridge is NOT at balance, the meter deflection gives very little information about what the actual load on the transmitter is. There is an infinite number of resistance and reactance combibations which will give a particular off-zero meter deflection and this is further confused by the uncertainty in transmitter RF output volts.

So the meter indicates only whether or not the transmitter load is Ro. But this is all that's required of it. Brightness of a pea lamp would provide the same information just as well if the meter movement and scales were not used for other transmitter monitoring purposes (and sometimes for indicating received signal strength in transceivers).

It should now be clear an automatic tuner must make use of both magnitude and phase of the bridge unbalance voltage to maintain the bridge in a state of balance and so provide the transmitter with its correct load resistance. This conforms to the fact that any impedance matching/transforming device must contain at least two variable components.

Note that the meter movement indicates only the magnitude of the rectified unbalance voltage. Phase information is discarded by rectification.

Also note, for the meter to indicate correctly, it must be designed around the same value of Ro as is required by the transmitter it is to be used with. The resistance standard universely adopted to allow interchngeability of SWR meters is Ro = 50 ohms. So meters generally differ from each other only by their through-power handling capability and operating frequency range. Internal circuitry and physical construction vary widely with frequency range but the basic mode of operation is always that of an RF resistance bridge.

So the SWR meter doesn't actually measure anything. It is a null detector. One thing is certain - there are no standing waves to be measured on the very short connection between transmitter and the meter. However, the meter movement is almost always scaled to indicate the SWR, between 1.0 and infinity, which would occur on a long transmission line of impedance Ro if such a line greater than 1/4-wavelength should actually exist.

By definition, the voltage standing wave ratio, VSWR, on a transmission lne can be determined only by measuring the RF voltage at two different places, spaced 1/4-wavelength apart, corresponding to the maximum and and minimum steady-state voltages which exist on the line. Line impedance Zo and Ro are not involved with direct measurements of VSWR. Only a voltmeter is needed.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

1232. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:25:16 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C49D623.DF03B5F@icok.net>
Source record: 150471

Will,
What your running in to is just 'normal' for ladder-line
in wet weather. There are a few things you can do, as you've
been told, to 'help', I don't think theres a total 'cure' for
it though. Using something to make the ladder-line shed water
quicker will help. As long as it's applied evenly, and doesn't
attack the dialectric of the ladder-line, whatever it is should
be okay.
The getting 'bit' by RF is another story, I'd think. Changing
either the length of the feed line, or the length of the antenna
will probably take care of that. Something you also might try is
not using the convenience outlet center screw for ground. That
can cause the 'bite' too (depends on the house wiring).
Anyway, it really doesn't 'hurt' to experiment (within
reason),
so give it a 'shot' and see what happens...
'Doc

1233. Re: Ferrite Core Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:25:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C49D641.DAA31F6@eznec.com>
Source record: 150469

What kind of test equipment do you have? Could the cores be any type, or are they likely to be just one or two different types? What size(s) are they?

If all you have is an ohmmeter, you can run one simple test. Put the probes firmly on the core. If you get any reading at all on the highest scale, it's a low-frequency high permeability ferrite like Fair-Rite 70 series or Magnetics J, and not type 43.

If you have other test equipment, let me know what they are and I'll suggest some other tests.

Roy Lewallen, W7EL

marvin rosen wrote:
>
> how do i determine if the frrite cores that i have are #43 material?

1234. Re: conjugate matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:31:33 UTC
From: richardharrison@webtv.net
Message-ID: <10810-3C49D7A5-240@storefull-117.iap.bryant.webtv.net>
Source record: 150475

Cecil A. Moore wrote:
"If we were using a class-A amplifier, would we want to tune for maximum power transfer?"

Depends on the desirability of maximum output, minimum dissipation within the amplifier, and what maximum output does to the signal.

Maximum output could be too much.

Power to a class-A amplifier is the same at zero output or maximum output. So, dissipation in the amplifier is input minus output. It runs coolest at maximum output.

Distortion may be a function of output, so you may limit output to limit distortion.

Best regards, Richard Harrison, KB5WZI

1235. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:33:20 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <6rlj4u8739vlnjunm3qemk8veb99h4bmri@4ax.com>
Source record: 150472

On Sat, 19 Jan 2002 20:01:12 GMT, googlyelmo@earthlink.net wrote:

>I have preferred ladderline fed multi-band dipoles up to this point for
>their versatility and basic decent performance, and I'd hate to go to
>coax now. I'd like to hear any suggestions and comments, and especially
>like to hear from anyone who has successfully used ladderline in a wet
>and rainy climate. Gratefully,
>
>Will, KD7BFX

Hi Will,

Welcome to Rain City (Sept - June and sometimes July and August).

73's
Richard Clark, KB7QHC

1236. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:34:50 UTC
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com>
Message-ID: <mfr7kqe5bbp.fsf@panix1.panix.com>
Source record: 150473

jim.bolinger@lintek.aeroflex.com (JLB) writes:

> Doug Faunt N6TQS +1-510-655-8604 <faunt@panix.com> wrote in message
news:<mfr1ygvp7wz.fsf@panix1.panix.com>...
> > Hi,
> > I'm trying to locate some 500 ohm non-inductive termination
> > resistors. The recipient wants 2 watt or 1 watt units, and I'm having
> > no luck locally. He says "film" resistors are a problem, and one
> > question is if carbon-film resistors are a problem, or is he conflating
> > them with metal film resistors?
> >
> > Ohmite OY series seem as if they might do, being ceramic composition
> > resistors, but they're not listed as being non-inductive.
> >
> > I need these by the first days of February, and would like to have as
> > many as 5. Any suggestions about what will work, and where I can find
> > them?
> >
> > 73, doug
>
> Last time I saw one, the Mouser Electronics catalog had carbon
> compisition resistors. They're on the web, too.
>

Their max for carbon composition is 1/2w. They have OY series ceramic
composition resistors listed, but I can't locate information on using
them in RF circuits, and Ohmite hasn't been responsive.

It looks as if no one here has useful information.
73, doug

1237. Take this project.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:42:51 UTC
From: mreletricus@yahoo.com
Message-ID: <ad83d6a2.0201191242.473d25d5@posting.google.com>
Source record: 150474

Hi all...

I recently bougth a Handlheld Garmin Etrex GPS. Details at :
http://www.garmin.com/products/etrex/

Studing the manual, i discovered that i could receive my global position trough a serial port of my garmin. And so, as a computer scientist, i though in transmit this information to my web server so i could do whatever i want. But at this point, appears the question...
How its the best way to transmit this information?
Supose i would take it in my car, and i will use a radio, what are the maximum range that i could get?
In case of stoping the car by a remote command, could this (in car radio) receive information too?
The relief of my city is not plan. That are some places that Etrex be "out of service". I have to amplify its signal too.
Considering that i didn't have any infomation about radios, i started to think in my Nokia 6120i celular phone. It has an internal fax/modem and comunicates with the computer trough a serial port.I though it would be easy to use serial comunication bettween the system and the phone but i discovered that Nokia do not publish articles about the protocols. The solution to transmit information could be design a way to make the system "press the buttons" and send messages as emails.
But, how could i stop the car? You can say:
call the phone and the system will detect a phone ring and will stop the car.
Not secure...
Phone ring only four times...
Not secure too...
A good way would be send a cryptographed message to the phone, read it and stop or not the car. But how?
Another way i though, was call the phone, and using it as a modem, send a cryptographed message to the system. Perhaps, this second way would compel the system to have and control a modem what i don't have experience direct with hardware.

And so, the project is based on the steps below...

1 . Choose the best way to transmit the global position or implement one.
2 . Project the main board (I think this step could be done with a litle modification at the minimum 8051 schematics).
3. Write the assembly software.
4 . Amplify GPS antenna.
5 . Project the power suply for all the system.

If you feel yourself able to the job, please mail me at
mreletricus@yahoo.com with your plans and your price.
If you consider this project so easy that you could make it in a few
hours just for fun, send me the project or post it here, you know.
If you have any contributions, please, post it.

Thanks.

mreletricus@yahoo.com

1238. Re: RCA Receiving Tube Manual #RC-29

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:53:19 UTC
From: richardharrison@webtv.net
Message-ID: <10811-3C49DCBF-113@storefull-117.iap.bryant.webtv.net>
Source record: 150478

Crazy George wrote:
"As far as I experienced, RCA never made any Loktals, nor have I seen any with RCA labels which were made elsewhere."

As far as I know, George is right, and that is to RCA`s everlasting credit despite their checkered reputation. Please note, I said "seldom" rejected with a "not sold here" reply.

Best regards, Richard Harrison, KB5WZI

1239. Re: Take this project.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:54:30 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C49DD02.B4E7FE92@icok.net>
Source record: 150476

Eletronics,
Do a search for "APRS" in connection with amateur
rado. I think someone beat you to it...
'Doc

1240. Re: Ferrite Core Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 20:57:49 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2cmrn$vlsgs$1@ID-124126.news.dfncis.de>
Source record: 150477

Wind on a dozen turns spread around the core and measure inductance with your Autek analyser.

Compare with maufacturer's specification of inductance for that number of turns. If within +/- 20 percent then that's the right stuff.

If you havn't an Autek then determine inductance by resonating with a known value capacitor.

Even if the material is not what you hoped it might be, you can still wind the inductance you want by calculating the number of turns from the value you have just measured with a known number of turns.

Inductance is proportional to the square of the number of turns. Double N and the inductance quadruples.

1241. FS: 58' Tri-Ex SkyNeedle in SoCal

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 21:21:23 UTC
From: Paul Lonnquist <paul@dock.net>
Message-ID: <nrl28.436$5d.10490@newshog.newsread.com>
Source record: 150479
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.swap

For sale...

Tri-Ex TM-358 Sky Needle tower. Includes 58' three section tubular tower, newly recabled with SS cable, 10' thickwall mast, complete motor assembly for controlled extension and retraction, CDR sized rotator cage assembly, new hinged base, instruction manuals, a 1997 UBC stress analysis, blueprints, and even the side mounted ladder!!!...the whole enchilada ready to
grace your property.

Tower is down and next to my home. It is HEAVY (on the order of 1500#), so it will take a wrecker (I will provide this service) to lift it out of the yard and
onto your car trailer.
To install you will need to (1) manufacture or purchase the re-bar assembly that
goes into
the hole (having it made is recommended due to weight and cost), (2) gather up the 2 necessary gears and thrust bearings for the rotator assembly, and (3)
and lots of labor!! This is not one of those lightweight and flimsy tubular towers!

This is the cadillac of tubular towers. Very strong and rated at 12.4 square feet at 60mph, 7.2
square feet at 78mph, and 3.6 square feet at 95mph while fully extended!! Dead weight capability is 400# including rotor and rotor cage.

Start your new year with a REAL tower that can actually handle realistic antenna loads
yet still be asthetically pleasing to your neighbors.

Pictures available upon request. Email your questions or interest to paul@dock.net

$2495.00 cash, cashiers check, postal money orders all OK.

Located in Thousand Oaks, CA (45 miles NW of LAX).

1242. Half Wave Matching 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 21:33:07 UTC
From: Bob G4VGO <rmread@attglobal.net>
Message-ID: <3c49e874_4@news2.prserv.net>
Source record: 150480

I have a half wave antenna I float under a balloon when the weather is right. (About 250 feet of wire at about a 15 degree off of vertical slant)

It is a pig to tune, and I feed it against my normal ground system of about 170 radials of various lenghts (about 2km all together.

What I am wondering is if I should use an elevated counterpoise above the earth system that is shorter than a quarter wave or what does the NG suggest as the impedence is very high and very reactive, making it a real b***h to match.

Thanks

Bob G4VGO

1243. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 22:48:01 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <0OR28.1537$9t.791177@monolith.news.easynet.net>
Source record: 150450

Close eyes when sending. It aids concentration and helps spell big words
Bryan ;-)

Martin <mab@delete-this.capita.nildram.co.uk> wrote in message
news:u4d8mcqtsgpa43@corp.supernews.com...
>
> "stnapgaf" <jh@bnhnet.com> wrote in message
> news:3BFFFF7B.22518FA7@bnhnet.com...
> > I have the normal 15 amp service in the radio room.
> > How much light dimming do others experience in the
> > room where you do CW. I'm just doing 100 watts CW
> > and the flicker is very annoying.
> > I hate the idea of running a whole new circuit to the radio
> > room just for the radio.
> > I wonder if a flourescent bult would flicker less?
> >
> >
>
> The fluorescent tube may flicker more - I'll always remember a trip
> round a high power government radio station during which the party
> piece in the main transmitter room was to switch off the lights just to
> show that they stayed on!
>
> Martin (M3ABL)
>
>

1244. Re: Antenna Restrictions: Seeking General Ham Radio Info for Townhome Association BOD

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 22:51:22 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <5OR28.1538$9t.791110@monolith.news.easynet.net>
Source record: 150451

It is ruled in UK planning laws that a tower mounted on a trailer is not
affected because it is not part of the land and buildings.

G3GVB

Martin <mab@delete-this.capita.nildram.co.uk> wrote in message
news:u4d84oh5805u87@corp.supernews.com...
>
> "Jake Brodsky" <frussle@erols.com> wrote in message
> news:g9mp0uora4b846srrte9t23ait4anvbvlu@4ax.com...
> > Scott, I would handle the issue this way: First, examine the exact
> > wording of the agreement you signed (and any amendments the HOA made
> > since you moved there). You may find a loophole big enough to drive a
> > truck through.
> >
> ...
> >
> > Finally, if you can't do that, go mobile. If you're doomed to a lousy
> > signal, you might as well make it mobile and have fun another way.
> >
>
> the most creative solution to restrictive covenants that I have seen
> recently is
> to buy an old pick-up truck, mount the biggest mobile antenna you can find
> on it, park it outside your house and run a feeder into the shack - bet
your
> covenants don't mention car aerials!
>
> >
> > Jake Brodsky, AB3A mailto:frussle@erols.com
> > "Beware of the massive impossible!"
>
> Martin (M3ABL)
>
>
> --
> ==
> No, I am not paranoid and I'm sure that you are not going to
> send me anything particularly sensitive but, since it seems
> to annoy all sorts of official busy-bodies, you may like to encrypt
> any mail you send me. You can get my public key from the
> following URL :
>

>
<http://keyserver.pgp.com/pks/lookup?op=get&exact=off&search=Martin+Arthur+B
> radford>
>
>
>
>

1245. QST contra-wound inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 22:52:01 UTC
From: amdx <amdx@att.net>
Message-ID: <IMm28.109885$fe1.1867622@bgtnsc06-news.ops.worldnet.att.net>
Source record: 150481

In the Feb 2002 QST the article on matching short antennas
refers to a contra-wound toroidal air core inductor as being
a method to get very high Q. I've looked for more info, all
I can find is the CTHA antenna.
Is the CTHA the same winding method the author refers
to (contra-wound)?
Wouldn't a contra-wound inductor have zero inductance?

1246. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 23:01:24 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C49FAC4.89BAB32C@IEEE.org>
Source record: 150482

googlyelmo@earthlink.net wrote:
> Is there anything I can do to bring down the SWR/losses on
> wet ladderline?

What is the length of your ladder-line?
--
cheers, CAM http://www.qsl.net/w5dxp

1247. Re: Half Wave Matching 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-19 23:43:17 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2d0jh$10jqkn$1@ID-124126.news.dfncis.de>
Source record: 150483

Bob,

A 15-degree departure from vertical has no measurable effect. Your 2km of radials are probably an overkill for a half-wave vertical.

If you insist on using something near 1/2-wave just decrease or preferably increase height (length) by 30 feet and try again. Changing height by a few feet will not affect performance.

But the ideal height for really low angle stuff is 5/8-wave = 320 feet. So fly it as high as you can subject to that limit. As height increases above 1/2-wave it will become progressively easier to match to 50 ohms.

You might then be able to work the antipodes on 400 watts at dawn or dusk in March/April and September/October, ie., when the sun is over the equator.

For Heaven's sake, don't even dream about a counterpoise - you will ruin everything.

At night place a neon warning light at the top.

Download program ENDFEED to predict performance and tuner L and C values above a system of radials.

For simple bottom-coil-loading use program BOTLOAD. It will also design the loading coil (length, diameter, turns) for heights up to 1/4-wave and between 1/2 and 3/4-wave. For other heights a series capacitor is needed.

Program L-TUNER calculates L and C values of an L-network to match any pair of complex impedances.

Program SOLNOID designs any single-layer solenoid coil for a required inductance and predicts various performance characteristics such as Q and self-capacitance.

What size balloon, sort of gas, antenna wire ?

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

Bob G4VGO wrote -

> I have a half wave antenna I float under a balloon when the weather is
> right. (About 250 feet of wire at about a 15 degree off of vertical slant)
>

> It is a pig to tune, and I feed it against my normal ground system of
about
> 170 radials of various lenghts (about 2km all together.
>
> What I am wondering is if I should use an elevated counterpoise above the
> earth system that is shorter than a quarter wave or what does the NG
suggest
> as the impedence is very high and very reactive, making it a real b***h to
> match.
>
> Thanks
>
> Bob G4VGO
>
>

1248. Re: City Lot Antenna Suuestions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 00:23:10 UTC
From: eborys <eborys@home.com>
Message-ID: <O5o28.1423$gW4.1241923@news1.rdc1.mi.home.com>
Source record: 150484

Doc,
The lot is 80' x 100' deep. the back of the house is at '60 deep and pretty
much the entire width. Small front yard.
Thanks, Emil
"'Doc" <w5lz@icok.net> wrote in message news:3C49CBA7.6BBB3255@icok.net...
> Ebory,
> Information sort of sparse. Dimensions other than height?
> 'Doc

1249. Re: What does the so-called SWR mtwer tell us

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 01:52:47 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2d87q$10krkr$1@ID-124126.news.dfncis.de>
Source record: 150485

> "A transmission line of either coaxial or
> balanced-pair construction runs
> between the tuner output and the antenna."
==========

It could be added -

"This is NOT the transmission line on which the so-called SWR meter purports to measure the SWR."

All those who think it DOES indicate SWR on that line should consider themselves to be amongst the weakest of Anne Robinson's weakest links.
Goodbye! ;o)

1250. 10m Extended Double Zepp?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 02:18:16 UTC
From: kc2hmn@cs.comnospam
Message-ID: <20020119211816.00766.00001912@mb-ck.news.cs.com>
Source record: 150486

Hi all,

I'm building an EDZ for 28.4 MHz and I need some advice. All the research I've done agrees that each element should be 0.64l, but they appear to vary on the length of the section of ladder line between the elements and the 1:1 balun. To add to my confusion, I'm using the 600 ohm w7fg ladder line as opposed to the 450 ohm twin-lead all the plans show. I want to use a Quarter Wave Matching Stub made from 75 ohm coax. A unun (Nothing like a little convenient feedline isolation.) will connect the QWMS to the 50 ohm feedline. I don't want to use a tuner for this antenna. Any suggestions based on previous experience would be greatly appreciated. Thanks in advance. :-)

73 de Bert
KC2HMN

BTW, both the balun and unun are Radio Works products. (B1-5K current balun and T-4 line isolator.

1251. how to construct a matching circut for a ramdom wire for 40 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 02:28:42 UTC
From: Ralph Blach <rblach@intrex.net>
Message-ID: <3C4A2B5A.2040802@intrex.net>
Source record: 150487
Cross-posted to: rec.radio.amateur.antenna,rec.radio.homebrew

I need to match a long 40 foot random wire antenna for 40 meters.
This will be used only on 40 meters novice bands.
The redio will be a emtech nw 40 qrp radio.

1) will I need an antenna analyzer?
2) is there a program to tell me the location and value of the
inductor values which I will need.

3)the antenna will be withing feet of the radio

thanks and 73's

kf4wbk

Chip

1252. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 02:32:36 UTC
From: codemaan <codeman@gj.net>
Message-ID: <a2d9tm0qol@enews3.newsguy.com>
Source record: 150489

My five antennas (basically antenna farm) are still in the *experimental*
,,, *testing*,,,,*evaluation* location mode. As soon as I figure out if
that location(s) is/are good, I will make it more permanent to please
the aesthetic committee. Until then, it may be a little ugly. <smile>

"Jim Weir" <jim@rst-engr.com> wrote in message
news:u4jfnokrf57lf1@corp.supernews.com...
> That's what my first wife said, too.
>
> {;-)
>
> Jim
>
> > I haven't tried that (I haven't even finished building it yet) but the
> > problem is that I have one of the most restrictive zoning boards around,
> > the XYL! She says that she doesn't want me "junking up our property"
> > and that there can't be any visible antennas anywhere.
>
>

1253. Audio Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 02:44:03 UTC
From: Robert Fulton <robfult@carolina.rr.com>
Message-ID: <T9q28.73452$6L1.17069230@typhoon.southeast.rr.com>
Source record: 150488

I went back in looked in my General and Technician's books and haven't been able to recall what type of interference causes the "hum" in sub woofers and the like. Lower frequencies... Can someone refresh my memory and offer any suggestions? My antenna farm sits in my attic, running 100w, so I'm in a precarious situation to begin with. Thanks!

- Rob
KG4RAG

1254. FS 6 Meter Antenna, KLM 50-52-11

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 03:36:58 UTC
From: Eric Schumacher <WB6KCN@pacbell.net>
Message-ID: <uXq28.35161$gg4.1654472816@newssvr14.news.prodigy.com>
Source record: 150492

For Sale: 6 Meter Antenna. KLM 50-52-11. Eleven elements on a 30 foot boom. Gain 14.0 dbd, 3db points 21 degrees, weight 27 lbs. Removed from service in sunny SO CA and carefully dissasembled. Includes doccumentation, all stainless hardware and three new spare insulators to replace two cracked ones.
Includes balun made from RG-142. Pictures available. $150 Eric wb6kcn@pacbell.net

1255. Mixing 160 Dipole and 80-10 Dipole on same mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 04:05:24 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C4A4204.6010100@europa.com>
Source record: 150490

I'm looking at getting a 80-10 82 foot dipole (the Alpha Delta DX-CC) and a 160 meter 125' inverted V (although it will be run more as a flat top than a inverted V). I have one corner of my yard that is good to put up a 25' mast and then run two legs of a dipole at 90 degrees to each other. What I would like to do is use the mast for both antennas and run them the same direction. What kind of interaction can I expect from a configuration like this? And what is the closest the two legs can come to each other (as long as they don't touch)? I have built multi-band dipoles before that used the same feed line and plastic spacers that seem to work just fine, so I'm thinking that this will be like those except I'll have two feed lines, one to each antenna center insulator.

As a second part of this question, the inside of the L will be pointing at my two story house that is about 35 to 40' away. That will put the antennas about level with the upper story and my wife's office in the spare bedroom on that side of the house. Is the signal going to be directed in that direction and possibly have a better chance of causing RFI?

Thanks for any help.

Mike

--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1256. Re: 10m Extended Double Zepp?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 04:47:40 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4A4BE9.813FBAE@icok.net>
Source record: 150491

Bert,
I don't think I've ever seen an EDZ with a balun in
the feed line. Sounds more like a G5RV...
'Doc

1257. Re: 10m Extended Double Zepp?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 05:01:51 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C4A4F3F.8000B9BD@IEEE.org>
Source record: 150493

Bert Craig wrote:
> I'm building an EDZ for 28.4 MHz and I need some advice. All the research I've
> done agrees that each element should be 0.64l, but they appear to vary on the
> length of the section of ladder line between the elements and the 1:1 balun. To
> add to my confusion, I'm using the 600 ohm w7fg ladder line as opposed to the
> 450 ohm twin-lead all the plans show. I want to use a Quarter Wave Matching
> Stub made from 75 ohm coax.

Forget the quarter wave matching stub. I just modeled it with EZNEC. The
dipole should be 41.2 ft long and the 600 ohm matching section should
be 5.7 ft long. I would start with about 6.5 ft for the matching section
and trim it down until system resonance is achieved.

XMTR-------coax------1:1 choke====5.7ft open-wire line====41.2ft dipole
--
cheers, CAM http://www.qsl.net/w5dxp

1258. Re: 10m Extended Double Zepp?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 05:03:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C4A4FA7.1919CE31@IEEE.org>
Source record: 150494

'Doc wrote:
>
> Bert,
> I don't think I've ever seen an EDZ with a balun in
> the feed line. Sounds more like a G5RV...
> 'Doc

An EDZ works well with a 0.2 wavelength matching section of
ladder-line or open-wire line. It's a good idea to use a
1:1 choke between the coax and the balanced line.
--
cheers, CAM http://www.qsl.net/w5dxp

1259. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 05:08:09 UTC
From: Carl <Carl@nospam.com>
Message-ID: <3C4A50D8.25FBDE8B@nospam.com>
Source record: 150495

Yes, this happened to me this past summer, took a hit during storm and
lost a/c compressor and color tv. Had electric co. come and check my
meter socket just to be sure (no charge for this) and tech found ground
loose
and not connected to lug (lawn guy must have hit it with tools)
and the hot and neutrals were slightly loose (Al feeds)
tech tightened all up and I used the service report to file claim with
homeowners
insurance.

Call the electric co. and let them check or fix it to be safe !

73 carl

Bill wrote:

> This is usually what happens when the neutral is loose. You will
> frequently find this in houses that use aluminum feeders from the
> meter to your distribution box.
>
> I have such flickering in my house right now. It isn't in the box,
> and it isn't high current load. I haven't tried hooking up my Fluke
> to check the voltage drops yet, but will do that soon. I suspect
> that it is a loose connection at the meter, the drop at the house
> or the drop at the pole pig.
>
> --
> Bill Nelson (billn@peak.org)

1260. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 05:12:42 UTC
From: Carl <Carl@nospam.com>
Message-ID: <3C4A51E9.A7016FE9@nospam.com>
Source record: 150496

Now this idea I like ! Can I copy it ?
The ccr's have no clause about garden hoses !

73 carl

"Gary " wrote:

> ..... I planted it in a standard terra cotta flower
> pot, used yellow pixie stix to make thorns and acid washed it to turn
> it green. The coax was hidden inside of a garden hose, affixed to a
> dummy faucet which was affixed to the wall to allow the coax to get
> inside.....
>

1261. Re: Half Wave Matching 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 05:25:58 UTC
From: kn4lf@hotmail.com
Message-ID: <b98267c2.0201192125.7df00c3e@posting.google.com>
Source record: 150497

Bob,
All you have to do is use a parallel matching network instead of an
L or T network and the antenna will load up easily.

73,
Thomas Giella, KN4LF
Plant City, FL
http://www.kn4lf.com

"Bob G4VGO" <rmread@attglobal.net> wrote in message news:<3c49e874_4@news2.prserv.net>...
> I have a half wave antenna I float under a balloon when the weather is
> right. (About 250 feet of wire at about a 15 degree off of vertical slant)
>
> It is a pig to tune, and I feed it against my normal ground system of about
> 170 radials of various lenghts (about 2km all together.
>
> What I am wondering is if I should use an elevated counterpoise above the
> earth system that is shorter than a quarter wave or what does the NG suggest
> as the impedence is very high and very reactive, making it a real b***h to
> match.
>
> Thanks
>
> Bob G4VGO

1262. For Sale Dentron MLA-2500

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 05:31:47 UTC
From: Kc6Lsp@hotmail.com
Message-ID: <5dc8e882.0201192131.71ba9289@posting.google.com>
Source record: 150498

Dentron MLA-2500 2KW linear amplifier,
160-10 Meters. Unit operates on all bands, with low hours on finals. Final tube compliment are (2) 8875 Ceramic Triodes from Eimac. Finals will be pulled, and packed separate from Amplifier to prevent damage. Shipped insured.
500.00 plus shipping in US.
Thanks for your time!

1263. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 07:23:56 UTC
From: Charles Hutton <chutton1@qwest.net>
Message-ID: <6gu28.101$TI3.359698@news.uswest.net>
Source record: 150499

Perhaps I don't understand your words properly, but......

(1) it is indeed a shortcoming of the program. NEC2 does not understand the concept of non-homogenous ground.

(2) the uniform ground assumption will indeed affect results. I would refer you to some papers of J.R. Wait where he compared results with homogenous / non-homogenous ground assumptions.

Chuck

Reg Edwards <g4fgq.regp@btinternet.com> wrote in message news:a1uuv9$tf5da$1@ID-124126.news.dfncis.de...

> But that's not a shortcoming of the program and does not detract from the
> value of the results. It is the understandable ignorance about the antenna's
> environment on the part of the user.
>
> It causes just as much uncertainty in all other predictions, including
> radiation patterns.
>
> Thanks very much for your efforts and time expended in obtaining the data.
>
> Can we finally cease worshipping BL&E ?
> ---
> Reg.
>
>
>

1264. Re: What does the so-called SWR mtwer tell us

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 07:55:46 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a2dtd3uum1@slb4.atl.mindspring.net>
Source record: 150500

Reg:

I used to have a school marm like Anne. She's wonderful!

I wonder if Anne knows the difference between SWR and VSWR? Heh, heh...

Best,

--Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a2d87q$10krkr$1@ID-124126.news.dfncis.de...
>
> > "A transmission line of either coaxial or
> > balanced-pair construction runs
> > between the tuner output and the antenna."
> ==========
>
> It could be added -
>
> "This is NOT the transmission line on which the so-called SWR meter
purports
> to measure the SWR."
>
> All those who think it DOES indicate SWR on that line should consider
> themselves to be amongst the weakest of Anne Robinson's weakest links.
> Goodbye! ;o)
>
>

1265. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 08:51:59 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2e0ns$1099ab$2@ID-124126.news.dfncis.de>
Source record: 150501

Charles Hutton wrote

> Perhaps I don't understand your words properly, but......
>
> (1) it is indeed a shortcoming of the program. NEC2 does not understand
the
> concept of non-homogenous ground.
==========

If NEC2 understood the concept the program user would still not know what soil values to enter for the various depths. Most people have no ideas even about the top soil. What's the state of *your* back yard? ;o)

A guess by the user of average values for G and K vs depth is good enough for propagation prediction purposes. It is done all the time with EZNEC.

Variations in top-soil properties have only a secondary effect compared with other sources of uncertainty between Tx and Rx. At depths greater than "skin depth" the effects are entirely negligible.

Reg, G4FGQ

1266. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 09:39:29 UTC
From: Frank Valdor <Frank@nospam.valdor.de>
Message-ID: <3C4A9051.912DA7E@nospam.valdor.de>
Source record: 150502

Will,

recently I found an advice regarding your problem.

Someone in a packet radio BBS recommened cutting away some
of the plastic spacer material or drilling a hole into the
spacer.

I have no experience with ladder lines so I haven't verified this.

Just my $0.02.

73,
Frank
DH5JG
KC8RNL

googlyelmo@earthlink.net schrieb:
>
> I have a 70' inverted-V at 50 feet [ends at 20], fed with 450-ohm
> ladderline for 40-10. The antenna is mounted atop a 20' galvanized mast
> on the roof of a wood frame house, with the line dressed away from the
> mast >20 degrees its entire length. The included angle of the antenna is
> about 95 degrees. I use an MFJ-901B tuner to match my Ten-Tec Scout to
> the line. It is a 2nd-storey installation, with DC-ground to the ground
> pin of an outlet (checks good, all new wiring in the house).
>
> On 40, everything is fine. But on 10 and 15, I can't get a match, or
> anything like it (off the scale SWR). 20 tunes sharply, and barely, and
> sometimes "warbles" when it is really rainy, i.e. the sidetone
> rises/falls, following along with a quick (<1 sec.) swing of the SWR
> meter needle. I also sometimes get a little bit of a bite when I touch
> a metal switch on the rig while all this is going on, so there is some
> RF feedback going on here. I had a virtually identical set up when I
> lived in dry Arizona, and it worked very well on 40-20-15-10. But now I
> live in Seattle, and it looks like I am up against one of the most
> serious drawbacks ladderline presents, i.e. wetness.
>
> I just put this antenna up 10 days ago, and it has been
> rainy/foggy/misty (all of the above!) every day since (and likely to be
> for quite a while yet), so I don't know how this installation will
> perform dry. Is there anything I can do to bring down the SWR/losses on
> wet ladderline? I had the idea of treating the line with silicone, but
> have been advised that may negatively and seriously alter the
> characteristic-Z of the line, or otherwise degrade performance
> permanently. Both the line and the antenna radiator check out fine for

> opens and shorts, and the rig puts out its rated 50W at flat SWR into a
> dummy.
>
> I have preferred ladderline fed multi-band dipoles up to this point for
> their versatility and basic decent performance, and I'd hate to go to
> coax now. I'd like to hear any suggestions and comments, and especially
> like to hear from anyone who has successfully used ladderline in a wet
> and rainy climate. Gratefully,
>
> Will, KD7BFX

1267. cavity filters?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 11:06:43 UTC
From: Robert Bukowski <robert.61@gmx.at>
Message-ID: <3c4aa462$0$30448$3b214f66@news.univie.ac.at>
Source record: 150503

Please, can someone tell me what is the German translation
for "cavity filter"?
Currently I can find a lot of information about that filters but only
in English. As I am a newcomer and a native German speaker
it is very difficult to understand.
Thx
Robert

1268. Re: 10m Extended Double Zepp?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 13:03:53 UTC
From: kc2hmn@cs.comnospam
Message-ID: <20020120080353.19385.00000706@mb-bk.news.cs.com>
Source record: 150504

>Bert Craig wrote:
>> I'm building an EDZ for 28.4 MHz and I need some advice. All the research
>I've
>> done agrees that each element should be 0.64l, but they appear to vary on
>the
>> length of the section of ladder line between the elements and the 1:1
>balun. To
>> add to my confusion, I'm using the 600 ohm w7fg ladder line as opposed to
>the
>> 450 ohm twin-lead all the plans show. I want to use a Quarter Wave Matching
>> Stub made from 75 ohm coax.
>
>Forget the quarter wave matching stub. I just modeled it with EZNEC. The
>dipole should be 41.2 ft long and the 600 ohm matching section should
>be 5.7 ft long. I would start with about 6.5 ft for the matching section
>and trim it down until system resonance is achieved.
>
>XMTR-------coax------1:1 choke====5.7ft open-wire line====41.2ft dipole
>--
>cheers, CAM http://www.qsl.net/w5dxp

You have my gratitude, Cecil. I will also try to perform an EZNEC model. Thanks again. :-)

73 de Bert
KC2HMN

1269. Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 16:12:59 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C4AEC8B.8080200@europa.com>
Source record: 150505

How well does galvanized electric fence wire do as dipole wire?
Specifically for 160 meters. How well does it hold up?

Thanks

Mike
--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1270. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 16:47:45 UTC
From: la8ak.xnd@online.no
Message-ID: <3c4add52.511193817@news.online.no>
Source record: 150506

On Sun, 20 Jan 2002 08:51:59 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Charles Hutton wrote
>
>> Perhaps I don't understand your words properly, but......
>>
>> (1) it is indeed a shortcoming of the program. NEC2 does not understand
>the
>> concept of non-homogenous ground.
>==========================
>
>If NEC2 understood the concept the program user would still not know what
>soil values to enter for the various depths. Most people have no ideas even
>about the top soil. What's the state of *your* back yard? ;o)
>

Rock - covered with not more than 20cm sand, mostly none, few trees,
so is it worth trying a vertical?

73
LA8AK
--
remove ,xnd to reply

1271. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 16:54:59 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4AF65C.945AA71F@icok.net>
Source record: 150507

Mike,
Scrape of the galvanization where you make solder connections
and it'll work fine (although, you'll get an argument about using
'steel' wire rather than copper).
'Doc

PS - Do those 'Bouvier's from Flanders fit on a plate like
the domestic versions?

1272. WTB-BELT CLIP

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 16:56:18 UTC
From: n2ion@aol.com
Message-ID: <20020120115618.23494.00004170@mb-md.aol.com>
Source record: 150508

I'M LOOKING FOR AN ORIGINAL BELT CLIP FOR AN ICOM IC-32AT RADIO.
EMAIL IF YOU HAVE ONE.

THANKS IN ADVANCE

1273. ft1000

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 17:00:40 UTC
From: Ghislain Maquet <gh.maquet@wanadoo.be>
Message-ID: <a2et26$12pt$1@scavenger.euro.net>
Source record: 150509

Je cherche le manuel de l'utilisateur du ft 1000 en francais.
Qui peut m'aider?
Merci d'avance et 73' a tous.ON1MHS

gh.maquet@wanadoo.be

1274. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 18:27:43 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4B0C1A.8E8394B7@icok.net>
Source record: 150510

Reg,
I think the "rule of thumb" people had a good idea!
Then again, with some of them, that 'thumb' would have
to be the size of an arm...
'Doc

1275. Re: Vertical Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 18:32:07 UTC
From: M Kolber <mkolber@bellatlanictNS.net>
Message-ID: <H2E28.4118$hp6.1518@nwrddc01.gnilink.net>
Source record: 150511

Beware that coax buried in the ground IS susceptible to lightning. If
lighting hits a nearby tree or the ground, it can conduct to the coax and in
to your shack. I thought that buried coax doesn't need to be grounded. I
found out the hard way that it does.

Mark
WB2WHC

Pastor-KC1DI wrote in message +ADw-3c4873a2+AF8-3+AEA-corp.newsgroups.com+AD4-...
+AD4-
+AD4AIg-Ace+AF8-On+AF8-Par3+ACI- +ADw-pwhelton+AEA-hal-pcNOSPAM.org+AD4- wrote in message
+AD4-news:a25e0f+ACQ-7fh+ACQ-1+AEA-news.hal-pc.org...
+AD4APg- When feeding a ground mounted vertical with coax what is the standard
+AD4-method
+AD4APg- of routing the feedline to the shack? I would think you would have to
+AD4-bury
+AD4APg- it or be very careful when you mow the lawn. If you do have to bury it
+AD4-does
+AD4APg- it have to be in conduit or PVC? Could be they make some super coax
these
+AD4APg- days that can be buried without the need for conduit. Seems like conduit
+AD4APg- could fill up with moisture if you are not careful.
+AD4APg-
+AD4-There are several direct bury types of coax Here's one of my favorites.
+AD4- http://www.davisrf.com/ham1/coax.htm+ACM-buryflex
+AD4-Happy Haming,
+AD4-73 Dave KC1DI always qrp
+AD4-
+AD4-
+AD4-
+AD4----
+AD4-Outgoing mail is certified Virus Free.
+AD4-Checked by AVG anti-virus system (http://www.grisoft.com).
+AD4-Version: 6.0.314 / Virus Database: 175 - Release Date: 1/11/02
+AD4-
+AD4-
+AD4-
+AD4-
+AD4------+AD0- Posted via Newsfeeds.Com, Uncensored Usenet News +AD0------
+AD4-http://www.newsfeeds.com - The +ACM-1 Newsgroup Service in the World+ACE-
+AD4------+AD0APQ- Over 80,000 Newsgroups - 16 Different Servers+ACE- +AD0------

1276. WTB-KENWOOD

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 18:43:11 UTC
From: n2ion@aol.com
Message-ID: <20020120134311.12919.00000373@mb-mv.aol.com>
Source record: 150512

HI,
I'M IN NEED OF A KENWOOD DFK-4 SEPARATION KIT FOR THE TM-742A. IF YOU HAVE ONE
PLEASE EMAIL ME WITH THE APPROPRIATE DETAILS.

THANKS IN ADVANCE

1277. EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 18:51:28 UTC
From: eborys <eborys@home.com>
Message-ID: <QkE28.1963$gW4.1623654@news1.rdc1.mi.home.com>
Source record: 150513

Does anyone the NG have experience with these type of antennas. For every article/paper, that I've found in the good column, there is another in the bad column?
Thanks,
ak9i

1278. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 19:23:07 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C4B191B.8DB60576@IEEE.org>
Source record: 150514

Reg Edwards wrote:
> What's the state of *your* back yard? ;o)

Texas :-)
--
cheers, CAM http://www.qsl.net/w5dxp

1279. Re: 10m Extended Double Zepp?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 19:25:50 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C4B19BE.78445DBC@IEEE.org>
Source record: 150516

Bert Craig wrote:
> >XMTR-------coax------1:1 choke====5.7ft open-wire line====41.2ft dipole
>
> You have my gratitude, Cecil. I will also try to perform an EZNEC model. Thanks
> again. :-)

Glad I could help, Bert. The BASIC program on my web page will give optimum
lengths for matching sections for any number of dipoles.
--
cheers, CAM http://www.qsl.net/w5dxp

1280. Re: Audio Interference

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 19:27:53 UTC
From: N/A <AC3L@Attbi.com>
Message-ID: <ZSE28.4305$CW3.51750@rwcrnsc52.ops.asp.att.net>
Source record: 150515

I've seen hums when not using shielded audio cable connections and also when there are bad ground connecions.

"Robert Fulton" <robfult@carolina.rr.com> wrote in message news:T9q28.73452$6L1.17069230@typhoon.southeast.rr.com...
> I went back in looked in my General and Technician's books and haven't been
> able to recall what type of interference causes the "hum" in sub woofers and
> the like. Lower frequencies... Can someone refresh my memory and offer any
> suggestions? My antenna farm sits in my attic, running 100w, so I'm in a
> precarious situation to begin with. Thanks!
>
> - Rob
> KG4RAG
>
>
>

1281. radio works windom

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 20:04:52 UTC
From: rb <rbigg@seii.net>
Message-ID: <a2fb8q$u84$1@news.chatlink.com>
Source record: 150518

I'm curious about an aspect of the Radio Works Carolina Windom (approx 136' length) for 160 ops. It seems to me that the vertical downlead from center feedpoint to the lower choke balun (seems like it's around 32' or so of cable) is what is doing the radiating on 160m. Is this the primary radiating element when used on 160m? If so, what we're really dealing with is a top loaded vertical. I guess there is some horizontal radiation too, but more soup probably goes out on the vertical component. Which isn't really a bad thing for 160m work. Many of the commercial verticals with 160m capability aren't a lot longer than 32'.

1282. Re: Copper J Pole in tree for 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 20:12:13 UTC
From: raiar@slacc.com.nospam
Message-ID: <3c4b245d.1234872@news.galilei.com>
Source record: 150517

Hi Carl

Have it at! Wish I still had pix of the original copper cactus to
show you.

TTUL
Gary

1283. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 21:09:35 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C4B320F.9080604@europa.com>
Source record: 150419

Hi Doc,

'Doc wrote:

> Mike,
> Scrape of the galvanization where you make solder connections
> and it'll work fine (although, you'll get an argument about using
> 'steel' wire rather than copper).

Actually, it's a 160 antenna that's already put together by a guy
in Texas. He builds them with the electric fence wire with coils
that put the whole thing at about 125' long. I'm thinking of
getting one to give it a try.

>
> PS - Do those 'Bouvier's from Flanders fit on a plate like
> the domestic versions?

No, these are big guys. Originally they were Belgium cattle
herding dogs but like a lot of dog breeds do a lot of different
things now. They still do a good job of herding; cattle, sheep,
ducks, kids, adults, each other... etc. <grin> My other hobby
besides Ham Radio is photographing them. They are highly
intelligent dogs and for a long time I've wanted to do a QSL card of
one gal we have that will sit at a table with her elbows up on it
and have her sitting at my radio like she's doing the transmission.
I think it would be a hoot and a unique QSL card. If I could
ever get my ham table cleaned up I'd do it. <grin>

Thanks for the info, Doc.

Mike

--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1284. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 21:18:02 UTC
From: cooperjim@aol.com
Message-ID: <20020120161802.08112.00000128@mb-bg.aol.com>
Source record: 150420

I built the cardboard covered with aluminum foil CFA that was described in Antennex a couple of years ago. It did not work well. It is now in a box in the garage.

I would like the CFA to work, but it appears that the claims can not be repeated.

For more information look at the on-line Antennex journal. They have some sample articles on CFA and also look at the Stone Throw column. The editor Jack Stone has been following the lack of results over the last couple years.

www.antennex.com

The Magnetic Loop antenneas do work and I would recommend trying one. Remember that you need really low losses in the loop and tuning capacitor to get good performance.

73
Jim Cooper NE6O
CooperJim@aol.com

>Subject: EH / Crossfield Antennas
>From: "eborys" eborys@home.com
>Date: 1/20/02 6:51 PM !!!First Boot!!!
>Message-id: <QkE28.1963$gW4.1623654@news1.rdc1.mi.home.com>
>
>Does anyone the NG have experience with these type of antennas. For every
>article/paper, that I've found in the good column, there is another in the
>bad column?
>Thanks,
>ak9i
>

1285. WTB: hotstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 21:52:56 UTC
From: k9sqg@aol.com
Message-ID: <20020120165256.11656.00002250@mb-mo.aol.com>
Source record: 150421

Anybody have any hotsticks available as used in the power distribution industry for woking on HV lines?

Thanks.

Evan

1286. Re: Mixing 160 Dipole and 80-10 Dipole on same mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 22:12:13 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <1hH28.35972$n81.10233357@typhoon.southeast.rr.com>
Source record: 150422

Keep the two antennas at 90 deg. from each other and you should be able to
feed them with the same piece of coax.

73, Bill, W4WNT

Mike Jordan <mjordan@europa.com> wrote in message
news:3C4A4204.6010100@europa.com...
>
>
> I'm looking at getting a 80-10 82 foot dipole (the Alpha Delta
> DX-CC) and a 160 meter 125' inverted V (although it will be run more
> as a flat top than a inverted V). I have one corner of my yard that
> is good to put up a 25' mast and then run two legs of a dipole at
> 90 degrees to each other. What I would like to do is use the mast
> for both antennas and run them the same direction. What kind of
> interaction can I expect from a configuration like this? And what
> is the closest the two legs can come to each other (as long as they
> don't touch)? I have built multi-band dipoles before that used the
> same feed line and plastic spacers that seem to work just fine, so
> I'm thinking that this will be like those except I'll have two feed
> lines, one to each antenna center insulator.
>
> As a second part of this question, the inside of the L will be
> pointing at my two story house that is about 35 to 40' away. That
> will put the antennas about level with the upper story and my wife's
> office in the spare bedroom on that side of the house. Is the
> signal going to be directed in that direction and possibly have a
> better chance of causing RFI?
>
> Thanks for any help.
>
> Mike
>
> --
> Hillsboro, Oregon
> Bouvier des Flandres - Herding & Working Dogs
> http://www.europa.com/~mjordan - Pictures & Info on Bouviers
>
>

1287. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-20 23:47:00 UTC
From: Charles Hutton <chutton1@qwest.net>
Message-ID: <UFI28.8643$I23.127449@news.uswest.net>
Source record: 150423

There were suppsoed to be tests of the CFA at the Isle of Man and other locations last year to settle the CFA debate. I've not seen results anywhere - does anyone know whether these tests have concluded?

Chuck

CooperJim <cooperjim@aol.com> wrote in message news:20020120161802.08112.00000128@mb-bg.aol.com...
> I built the cardboard covered with aluminum foil CFA that was described in
> Antennex a couple of years ago. It did not work well. It is now in a box in
> the garage.
>
> I would like the CFA to work, but it appears that the claims can not be
> repeated.
>
> For more information look at the on-line Antennex journal. They have some
> sample articles on CFA and also look at the Stone Throw column. The editor
> Jack Stone has been following the lack of results over the last couple years.
>
> www.antennex.com
>
> The Magnetic Loop antenneas do work and I would recommend trying one. Remember
> that you need really low losses in the loop and tuning capacitor to get good
> performance.
>
> 73
> Jim Cooper NE6O
> CooperJim@aol.com
>
> >Subject: EH / Crossfield Antennas
> >From: "eborys" eborys@home.com
> >Date: 1/20/02 6:51 PM !!!First Boot!!!
> >Message-id: <QkE28.1963$gW4.1623654@news1.rdc1.mi.home.com>
> >
> >Does anyone the NG have experience with these type of antennas. For every
> >article/paper, that I've found in the good column, there is another in the
> >bad column?
> >Thanks,

> >ak9i
> >
>
>

1288. A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 00:16:42 UTC
From: "Keven R. Matthews" <mail@keven.worldonline.co.uk>
Message-ID: <3c4b5de4_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 150424

Antron 99 (Solarcon A-99)

OK I know its heritage is as a CB antenna.. However as I just got HF privledges last week I was VERY keen to get on the air! (10 years on VHF) I already had this antenna up for listening on 10 metres and it says in the booklet that with an ATU it would be OK down to 40 metres.
It is currently about 10 metres off the ground and has the standard A-99 radials (for 10 / 11metres). With the ATU I can easily get a good impedance match indicated by a low vswr reading for 15 metres and had immediate good results with 5 countries in 2 hours, I was happy. However 40 metres is a different story and whilst I can hear plenty and with some difficulty obtain a 'match' for a low vswr reading I have yet to work anyone at all either daytime or nightime. Has anyone any experience of this antenna on HF and 40 metres in particular? Would it help if I was to remove a couple of those 3/8" fitting screw in radials and replace them with some wire radials of different lengths or perhaps increase or decrease the height . Any recommedations / advice welcome (other than get or make another aerial!)

Thanks &

73 de keven
G7UUD / M3UUD

(M3=uk foundation licence 10watts)

1289. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 01:03:23 UTC
From: eborys <eborys@home.com>
Message-ID: <vNJ28.2375$gW4.1796368@news1.rdc1.mi.home.com>
Source record: 150425

I've read the stuff on Antennex. It seems that the only people that say EH
and CFA works are the the people that write the articles or papers about
them.

Thanks for giving me the results of project.

73
ak9i

"CooperJim" <cooperjim@aol.com> wrote in message
news:20020120161802.08112.00000128@mb-bg.aol.com...
> I built the cardboard covered with aluminum foil CFA that was described in
> Antennex a couple of years ago. It did not work well. It is now in a box
in
> the garage.
>
> I would like the CFA to work, but it appears that the claims can not be
> repeated.
>
> For more information look at the on-line Antennex journal. They have some
> sample articles on CFA and also look at the Stone Throw column. The
editor
> Jack Stone has been following the lack of results over the last couple
years.
>
> www.antennex.com
>
> The Magnetic Loop antenneas do work and I would recommend trying one.
Remember
> that you need really low losses in the loop and tuning capacitor to get
good
> performance.
>
> 73
> Jim Cooper NE6O
> CooperJim@aol.com
>
> >Subject: EH / Crossfield Antennas
> >From: "eborys" eborys@home.com
> >Date: 1/20/02 6:51 PM !!!First Boot!!!
> >Message-id: <QkE28.1963$gW4.1623654@news1.rdc1.mi.home.com>
> >
> >Does anyone the NG have experience with these type of antennas. For
every
> >article/paper, that I've found in the good column, there is another in

the
> >bad column?
> >Thanks,
> >ak9i
> >
>
>

1290. Re: A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 01:19:41 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4B6CA6.3D2FED1A@icok.net>
Source record: 150426

Keven,
The further you go 'under' the design frequency of an antenna, the less well it will work. If your ATU is 'good' enough, you can make a 6 foot wire work on 160 meters, but it will NOT be a very 'good' antenna. The 'A-99' was never meant to work on 40 meter, and will do a terrible job even with a 'Super' ATU. Never believe antenna manufacturer's claims with out a large dose of salt (you can substitute castor-oil for the salt at times)...
'Doc

1291. Re: WTB: hotstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 01:30:52 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4B6F45.622F838C@icok.net>
Source record: 150427

Evan,
If your going to use a 'hot stick' for what it was
meant to be used, I would be very, very hesitant about
anything except a new one. A 'used' hot-stick is asking
for a reservation at the funeral home! They aren't cheap
and no one throws one away just because a new model comes
out. Try your local fire department, or power company,
they'll have catalogs, or make one. Just be sure the
material you make it out of has a very large 'safety'
factor built in...
'Doc

1292. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 01:32:53 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4B6FBF.3DAEC818@icok.net>
Source record: 150428

Charles,
The last I'd heard is that the whole thing was canceled.
that's been a few months ago, so isn't exactly current.
'Doc

1293. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 01:37:10 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4B70BE.1E98691C@icok.net>
Source record: 150429

AK9I,
To date, there has been no verifiable testing of the CFA
antenna. None. All the tests have been flawed in some way,
most notably by false measurements (which ~was~ verified).
It would be 'nice' for it to work, but don't hold your breath.
'Doc

1294. Re: City Lot Antenna Suuestions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 01:54:15 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4B74BF.CB8725D8@icok.net>
Source record: 150430

Emil,
You have lots of room to play with so getting an antenna
up shouldn't be too much of a problem, depending on where
the supports are localed. The length of a 40 meter dipole
would be something on the order of 62-66 feet, so it would
probably work 'best' running from one corner to the opposite
corner, but could be 'fit' into your area in other ways too.
While the 25 feet height isn't ideal, it will certainly be
'enough' (more is better) to work okay. I'm sure you can
think of a few ways to make things fit better than I can since
you know what you can and can't 'get away' with. 15 meters
should be even easier to make 'fit' (or use the 40 meter
antenna on it too?).
So, good luck with it! I'd be interested in what you
finally do...
'Doc

1295. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 02:19:14 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <EUK28.3206$KC1.600170@news20.bellglobal.com>
Source record: 150431

"eborys" asked:
> Does anyone the NG have experience with these type of antennas.
> For every article/paper, that I've found in the good column, there is
> another in the bad column?
> Thanks,
> ak9i

For a Cross Field Antenna, it can be proven that the field strength is about +3dB what can be obtained from a 'normal' antenna. You just need to remember to feed 100% of the applied RF power into the 'E' feed point and another 100% into the 'H' feed point.

Voila.

1296. High SWRs w/ FT8100, HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 02:23:53 UTC
From: Danny Morris <dbmorris@mediaone.net>
Message-ID: <ZYK28.367$YT5.122305@typhoon.jacksonville.mediaone.net>
Source record: 150432

I was having probs with my Yeasu FT8100 so I returned it to them for repair (non-swr related-see below if interested). I got it back and reinstalled it. The best I could get was 1.8:1 on 2m and 3:1 on 440. I tried adjusting the Diamond SG7900 to no avail.

So after a couple days when I got around to trying to fix it, I retested and 2m was at 7.5:1, 440 was still 3:1, hummm. I have a second ant mounted just in case and switched to it, same thing to a tee. That is w/ separate coax all the way to the radio pig tail. Any idea what could have happened?

It took them 6 wks to fix it the first time so this time I am not sure I won't just but a different radio (Kenwood TM-V7A most likely).

Help, ideas? I use this in K9 Search and Rescue and need it back in operation.

Thanks,
Danny
http://www.k9alert.org

Problems:
*440 side vol. did not work
*Would not receive distant signals (compared side by side w/ same radio in another vehicle)
*XMIT would hang for no apparent reason
*Display would flash and 'go nuts' or radio would just die
Had several other things but can't recall them all now. Would never buy another Yaesu, their service leaves allot to be desired, to say the least.

1297. JIM-Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 02:50:17 UTC
From: N4ZN <nevermind@all.com>
Message-ID: <750n4usjon6fq5rcljd6q5np2e8m39jcpq@4ax.com>
Source record: 150433

>
>The Magnetic Loop antenneas do work and I would recommend trying one. Remember
>that you need really low losses in the loop and tuning capacitor to get good
>performance.
>
Be interested in the tuning cap you are speaking of. Haven't tried one
of those yet.
-AND-
Mag loops work best when multiples of their design freq in length, and
at least 1/2 wave above the ground.

1298. Re: EH / Crossfield Antennas hey Jim

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 02:51:15 UTC
From: N4ZN <nevermind@all.com>
Message-ID: <va0n4u4u6c2a087u0bmqgvocctpmie17lp@4ax.com>
Source record: 150434

>
>The Magnetic Loop antenneas do work and I would recommend trying one. Remember
>that you need really low losses in the loop and tuning capacitor to get good
>performance.
>
Be interested in the tuning cap you are speaking of. Haven't tried one
of those yet.
-AND-
Mag loops work best when multiples of their design freq in length, and
at least 1/2 wave above the ground.

1299. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 02:53:08 UTC
From: N4ZN <nevermind@all.com>
Message-ID: <oc0n4u06cm1unbcp464ed5o4e43o4r5v6n@4ax.com>
Source record: 150435

On Sun, 20 Jan 2002 18:51:28 GMT, "eborys" <eborys@home.com> wrote:

>Does anyone the NG have experience with these type of antennas. For every
>article/paper, that I've found in the good column, there is another in the
>bad column?
>Thanks,
>ak9i
>
>>
>>The Magnetic Loop antenneas do work and I would recommend trying one. Remember
>>that you need really low losses in the loop and tuning capacitor to get good
>>performance.
>>
>

Be interested in the tuning cap you are speaking of. Haven't tried one
of those yet.
-AND-
Mag loops work best when multiples of their design freq in length, and
at least 1/2 wave above the ground.

1300. Re: Mixing 160 Dipole and 80-10 Dipole on same mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 03:32:59 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C4B8BEB.9090007@europa.com>
Source record: 150436

W4WNT wrote:

> Keep the two antennas at 90 deg. from each other and you should be able to
> feed them with the same piece of coax.
>
> 73, Bill, W4WNT

Hmmm, I guess I go to plan B then. I've got to install both
antennas in a L shape with one half going South from the center and
the other half going West from the center. I can put one a bit
higher than the other or slope the ends of one down a bit and use
separate feed lines. I was just hoping to be able to eliminate one
of the feed lines I have coming into my house now.

Thanks Bill.

Mike

>
> Mike Jordan <mjordan@europa.com> wrote in message
> news:3C4A4204.6010100@europa.com...
>
>>
>>I'm looking at getting a 80-10 82 foot dipole (the Alpha Delta
>>DX-CC) and a 160 meter 125' inverted V (although it will be run more
>>as a flat top than a inverted V). I have one corner of my yard that
>> is good to put up a 25' mast and then run two legs of a dipole at
>>90 degrees to each other. What I would like to do is use the mast
>>for both antennas and run them the same direction. What kind of
>>interaction can I expect from a configuration like this? And what
>>is the closest the two legs can come to each other (as long as they
>>don't touch)? I have built multi-band dipoles before that used the
>>same feed line and plastic spacers that seem to work just fine, so
>>I'm thinking that this will be like those except I'll have two feed
>>lines, one to each antenna center insulator.
>>
>>As a second part of this question, the inside of the L will be
>>pointing at my two story house that is about 35 to 40' away. That
>>will put the antennas about level with the upper story and my wife's
>>office in the spare bedroom on that side of the house. Is the
>>signal going to be directed in that direction and possibly have a
>>better chance of causing RFI?
>>
>>Thanks for any help.
>>
>>Mike

>>
>>--
>>Hillsboro, Oregon
>>Bouvier des Flandres - Herding & Working Dogs
>>http://www.europa.com/~mjordan - Pictures & Info on Bouviers
>>
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>>
>
>

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Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1301. Re: High SWRs w/ FT8100, HELP!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 03:39:09 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C4B8D5D.2317A44E@dialpoint.net>
Source record: 150437

Unless the radio is putting out some harmonics bigtime you may need to check the swr meter. Put it into a good dummy load and see what the swr is. Then check the antenna with a differant rig to see if it is in the antenna.

Danny Morris wrote:
>
> I was having probs with my Yeasu FT8100 so I returned it to them for repair
> (non-swr related-see below if interested). I got it back and reinstalled it.
> The best I could get was 1.8:1 on 2m and 3:1 on 440. I tried adjusting the
> Diamond SG7900 to no avail.
>
> So after a couple days when I got around to trying to fix it, I retested and
> 2m was at 7.5:1, 440 was still 3:1, hummm. I have a second ant mounted just
> in case and switched to it, same thing to a tee. That is w/ separate coax
> all the way to the radio pig tail. Any idea what could have happened?
>
> It took them 6 wks to fix it the first time so this time I am not sure I
> won't just but a different radio (Kenwood TM-V7A most likely).
>
> Help, ideas? I use this in K9 Search and Rescue and need it back in
> operation.
>

1302. Re: WTB: hotstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 03:54:14 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c4b955e_1@news1.prserv.net>
Source record: 150438

Graybar sells them. Chance, now a division of Hubbell makes several good choices. Be sure to get the silicone wiping cloths, and make arrangements with your local utility to HV test the stick each time before you use it. And, read the National Electrical Safety Code (ANSI C2- {latest revision year}) for the correct gloves to use with it. And if you have not had the 40 hour lineman's safety course recently, be sure your life insurance is fully paid up and your funeral arrangements are all in place. Electrocution is permanent.

--
Crazy George
Remove NO and SPAM from return address
K9SQG <k9sqg@aol.com> wrote in message
news:20020120165256.11656.00002250@mb-mo.aol.com...
> Anybody have any hotsticks available as used in the power distribution
industry
> for woking on HV lines?
>
> Thanks.
>
> Evan

1303. Re: Any 6m HT antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 04:30:40 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020120233040.05045.00001832@mb-ce.aol.com>
Source record: 150439

>Maybe you need to break down and homebrew
>something :-)

Ack! My mottos: Why do today what you can put off until tommorow, and Why homebrew when I can buy? :)
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

1304. Re: A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 04:42:05 UTC
From: Cliff Holloway <cholloway14@attbi.com>
Message-ID: <x_M28.39$Qs4.219@rwcrnsc53>
Source record: 150440

Hi Keven, the A-99 ($38 US) is one of the BEST deals in Ham radio. This vertical's performance is very good from 10 thru 17 meters. In fact in a lot of installations this antenna is resonant on many of these bands. Mine is trimmed for 10 meters, and is also resonant on 15 (1.6 - 1).
As far as lower bands than 17, I do not recommend it, this antenna does poorly on 20 and it is close to useless below that. I would not try any modifications (why mess with a good thing?). Put up a dipole or something like the MFJ ground mount vertical ($160 US) for the lower bands. For less than ($200 US) you would have an effective HF (10 - 80m) antenna farm.

73 Cliff N0HC
"Keven R. Matthews" <mail@keven.worldonline.co.uk> wrote in message news:3c4b5de4_1@mk-nntp-1.news.uk.worldonline.com...
> Antron 99 (Solarcon A-99)
>
> OK I know its heritage is as a CB antenna.. However as I just got HF
> privledges last week I was VERY keen to get on the air! (10 years on VHF)
I
> already had this antenna up for listening on 10 metres and it says in the
> booklet that with an ATU it would be OK down to 40 metres.
> It is currently about 10 metres off the ground and has the standard A-99
> radials (for 10 / 11metres). With the ATU I can easily get a good
impedance
> match indicated by a low vswr reading for 15 metres and had immediate
good
> results with 5 countries in 2 hours, I was happy. However 40 metres is a
> different story and whilst I can hear plenty and with some difficulty
obtain
> a 'match' for a low vswr reading I have yet to work anyone at all either
> daytime or nightime. Has anyone any experience of this antenna on HF and
40
> metres in particular? Would it help if I was to remove a couple of those
> 3/8" fitting screw in radials and replace them with some wire radials of
> different lengths or perhaps increase or decrease the height . Any
> recommedations / advice welcome (other than get or make another aerial!)
>
> Thanks &
>
> 73 de keven
> G7UUD / M3UUD
>
> (M3=uk foundation licence 10watts)
>
>

>
>

1305. ?? 6&10 mtr beams on same boom ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 05:19:59 UTC
From: jimmoci@aol.com
Message-ID: <20020121001959.26905.00002846@mb-mn.aol.com>
Source record: 150441

I would like to place a 6 and 10 meter beam on the same boom. About 24 feet long, 5 elements on 10, 7el on 6meters- Seperate coax for each band. Are these compatible with minimal interaction?
Thanks!
Jim W3ATV

1306. Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 05:32:35 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201202132.35eda53d@posting.google.com>
Source record: 150442

I live in the worst of both worlds: a ground floor apartment at a low land elevation. The QTH is so bad that there is no TV reception, and my AM/FM radio in my home gets fewer stations than the radio in my car. (I was a lowly No-Code Technician at the time I moved in. Also, I wasn't nearly as obsessed about ham radio as I am now.)

Some questions:
1. Do I need a new call sign? Would people have an easier time copying a different call sign? I noticed that people have difficulty copying my call sign not only on HF but on VHF. On the 147.3 MHz Bluemont repeater net (which I check into occasionally), net controls sometimes have difficulty copying my call sign on the first time even when I'm using my mag-mount mobile antenna (MFJ 1724B) or Pocket J-pole OUTSIDE (instead of the ADI/Premier RD-98 HT antenna). The "AG" part of my AG4DG call sign trips people up frequently. I've had people call me KG4DG. There have also been times when people caught the "AG" part but missed the "DG" part. I am in the job search process, and if I leave 4-land, I intend to get a new call sign, as I don't want to endure the bother of adding the "slash-number" every time I give out my call. IF I STAY IN 4-LAND, SHOULD I CHANGE MY CALL SIGN ANYWAY? Any guidelines on what makes a call sign easier or harder to copy?
2. How much does the vertical metal door (which only maintenance staff may open) near my antenna harm performance? This painted metal door is 3 feet wide and 8 feet tall and FACES the antenna. (My patio is an ENCLOSED volume only about 8 feet wide, 8.5 feet tall, and about 6 feet deep - moving my antenna further away would require moving it onto the grass, where it will get in the way.) There's no question that the metal door couples to the antenna - the question is HOW SIGNIFICANT this is. Would things be SUBSTANTIALLY better without so much metal parallel to and facing the antenna at close range?
3. How much does it help to be in a QTH ABOVE trees, buildings, and other clutter? (Even if performance is the same, I'd still rather be on a high floor simply because I would be able to leave my antenna outside 24/7.)
4. If my apartment had a balcony with metal railings, how much impact would they have on antenna performance? When I look for a new apartment, should I look for a place with wood or plastic railings? (I guess it would be a good idea to bring a magnet with me when apartment hunting.)
5. How do I know if my audio is distorting? Do I need a new microphone or perhaps an attenuator? I learned that I need to keep the mic gain on my Kenwood TS-430S down to 2 or less (out of 10) in order to avoid causing distortion. The microphone is an MC-60. I

don't think that the microphone or audio is a problem, as I've tried testing it on local ham friends, and they report that my audio is OK. (I guess I should invite friends over to try my radio and theirs to confirm.)
6. Is my radio broken? I thought of this possibility, but it seems unlikely. People have heard me, and it seems more logical that the QTH problems and my inexperience are more likely to be the culprits of my HF problems. (I guess I should invite friends over to try my radio and theirs to confirm.)

I intend to move as soon as I finish my job search. Even if the new job is local, I intend to move to a better QTH - an upper-floor apartment sitting on land at a high elevation. The upper-floor setting would position me for less attenuation from buildings and trees. Also, since nobody else would have access to my balcony or even close-up visibility of it, I would be able to leave my antenna outside 24/7. I guess I should bring my boombox with me when apartment hunting so I can assess the RF reception of the area and the apartment.

I am seeking employment as an antenna, RF, or microwave engineer. (Any leads would be appreciated.) I owe my future to ham radio, because I would never have been able to understand the technical concepts I studied as an electrical engineering major. Thanks to ham radio, antenna patterns and SWR mean something to me and aren't just mumbo jumbo to plow through so I can pass a class. Although I haven't been homebrewing, attending the Northern Virginia QRP group's lunch meetings has exposed me to practical circuit design, and all the RF/microwave circuit principles I studied (S parameters, oscillators, frequency response, etc.) in school. I'm still busy reviewing my stuff. IT ALL MAKES SO MUCH MORE SENSE NOW!!!

The ARRL people and the ham radio industry will be pleased to hear that I will be spending more time AND money on ham radio in the future. Ham radio will provide me some valuable informal training in my antenna, RF, or microwave engineering career. As soon as I am hired, I will shop for either the Yaesu FT-100D or Icom 706MKIIG (which provides SSB and CW on 6m, 2m, and 70cm as well as HF). I also intend to try out the microwave bands and to homebrew equipment for these bands (as there are almost NO such radios available on the market).

One final note: DON'T FEEL TOO SORRY FOR ME! The HF issues were what initially prompted me to relearn and actually understand antenna principles. If I had no HF issues, I would not have felt the need to review the technical things I studied in school or to gain a REAL understanding of RF principles. However, I do not EVER want to be in a QTH this bad again. Since ham radio is an investment in my career as well as my hobby, I am willing to pay a higher monthly rent for a less miserable QTH.

Jason Hsu, AG4DG
jason_hsu_802701@yahoo.com

1307. Re: A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 06:31:32 UTC
From: Screaming Skull <KG4IVT@hotmail.spamsucks.leaveme.alone.com>
Message-ID: <8BO28.40850$n81.11211963@typhoon.southeast.rr.com>
Source record: 150443

I guess I will throw this out. Can a A-99 be used on 6m with a tuner?
Thanks.

"Cliff Holloway" <cholloway14@attbi.com> wrote in message
news:x_M28.39$Qs4.219@rwcrnsc53...
> Hi Keven, the A-99 ($38 US) is one of the BEST deals in Ham radio. This
> vertical's performance is very good from 10 thru 17 meters. In fact in a
lot
> of installations this antenna is resonant on many of these bands. Mine is
> trimmed for 10 meters, and is also resonant on 15 (1.6 - 1).
> As far as lower bands than 17, I do not recommend it, this antenna does
> poorly on 20 and it is close to useless below that. I would not try any
> modifications (why mess with a good thing?). Put up a dipole or something
> like the MFJ ground mount vertical ($160 US) for the lower bands. For less
> than ($200 US) you would have an effective HF (10 - 80m) antenna farm.
>
> 73 Cliff N0HC
> "Keven R. Matthews" <mail@keven.worldonline.co.uk> wrote in message
> news:3c4b5de4_1@mk-nntp-1.news.uk.worldonline.com...
> > Antron 99 (Solarcon A-99)
> >
> > OK I know its heritage is as a CB antenna.. However as I just got HF
> > privledges last week I was VERY keen to get on the air! (10 years on
VHF)
> I
> > already had this antenna up for listening on 10 metres and it says in
the
> > booklet that with an ATU it would be OK down to 40 metres.
> > It is currently about 10 metres off the ground and has the standard A-99
> > radials (for 10 / 11metres). With the ATU I can easily get a good
> impedance
> > match indicated by a low vswr reading for 15 metres and had immediate
> good
> > results with 5 countries in 2 hours, I was happy. However 40 metres is
a
> > different story and whilst I can hear plenty and with some difficulty
> obtain
> > a 'match' for a low vswr reading I have yet to work anyone at all either
> > daytime or nightime. Has anyone any experience of this antenna on HF
and
> 40
> > metres in particular? Would it help if I was to remove a couple of those
> > 3/8" fitting screw in radials and replace them with some wire radials of
> > different lengths or perhaps increase or decrease the height . Any

> > recommedations / advice welcome (other than get or make another
aerial!)
> >
> > Thanks &
> >
> > 73 de keven
> > G7UUD / M3UUD
> >
> > (M3=uk foundation licence 10watts)
> >
> >
> >
> >
>
>

1308. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 07:04:40 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4BBD7F.4CE31909@icok.net>
Source record: 150444

Jason,
No, you don't really need a new call unless you just want
one. Use these phonetics, " A Guy 4 Dirty Girls ", they may
still ask what you said, but it'll be more fun when they do.
You don't have to use the "/" when you move, as long as
you change your address of record. Most people don't bother
using it anyway since any call sign can be 'from' any call
area any more.
I would imagine that the metal door does affect your
antenna's
performance. How much? Who knows! Try moving the antenna for a
little while and see what difference it makes. You'll have
something to base a comparison on then.
You really don't have to 'live' above the trees, but if you
can get your antenna up there, it will certainly make a
difference
for the better. Again, how much isn't something you can really
predict with any certainty.
What the balcony railings are made of doesn't make much
difference
unless you plan to use them as part of the antenna system
(probably
not the 'best' idea in the world). I would think they could be
used
for suport of the antenna, though, and if the antenna isn't a
monster,
it shouldn't pull the railings down (drop a counterpoise over the
railing).
You have to depend on someone telling you about your audio,
or, as
you suggested, swap places with some one to see/hear for your
self.
There are a couple of 'tricks' you can do to the MC-60 to make it
sound 'better'. Cover the 'slots' on the side of the head to
raise
the tone (get rid of some base tones). And, if you use the
built-in
audio mplifier, do so very sparingly (or better yet, turn it
off).
The MC-60 also has 'ground' problems with some radios. If they
tell
you that your 'RF'y, ground the mic case to the radio chassis
with
a jumper, see if it helps. You can do the same thing by shorting

pins 7 and 8 on the mic plug (audio ground and chassis grounds)
BUT
make sure I didn't goof on the pin numbers first!
I doubt if your TS-430 is broken since the 'locals' seem to
think
it sounds okay. Judicious use of the processor might help. You
can
have too much processing with no trouble at all, keep it off
unless
you just have to use it. Once you have the mic gain adjusted
where
it sounds good, leave it alone! Cranking it up does not make you
louder, only distorted.
Good luck with the appartment and job hunting...
'Doc

1309. Re: A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 07:07:14 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4BBE1B.497DC934@icok.net>
Source record: 150445

Screaming Skull,
For what it's worth, yes. Depends on the tuner, and how
bad you want to be on 6 meters, but sure, it'll work.
'Doc

1310. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 07:10:14 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4BBECE.62ECE7DD@icok.net>
Source record: 150446

"J. Harvey",
Yeah, that's the part that seems to be reeeal hard to
do.(LOL)
'Doc

1311. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 07:24:43 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <j4fn4u8t07b9r4pc8p0qs5df07ia842kq1@4ax.com>
Source record: 150447

On 20 Jan 2002 21:32:35 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>I live in the worst of both worlds: a ground floor apartment at a low
>land elevation. The QTH is so bad that there is no TV reception, and
>my AM/FM radio in my home gets fewer stations than the radio in my
>car. (I was a lowly No-Code Technician at the time I moved in. Also,
>I wasn't nearly as obsessed about ham radio as I am now.)
>
>Some questions:
>1. Do I need a new call sign? Would people have an easier time
>copying a different call sign? I noticed that people have difficulty
>copying my call sign not only on HF but on VHF. On the 147.3 MHz
>Bluemont repeater net (which I check into occasionally), net controls
>sometimes have difficulty copying my call sign on the first time even
>when I'm using my mag-mount mobile antenna (MFJ 1724B) or Pocket
>J-pole OUTSIDE (instead of the ADI/Premier RD-98 HT antenna). The
>"AG" part of my AG4DG call sign trips people up frequently. I've had
>people call me KG4DG. There have also been times when people caught
>the "AG" part but missed the "DG" part. I am in the job search
>process, and if I leave 4-land, I intend to get a new call sign, as I
>don't want to endure the bother of adding the "slash-number" every
>time I give out my call. IF I STAY IN 4-LAND, SHOULD I CHANGE MY CALL
>SIGN ANYWAY? Any guidelines on what makes a call sign easier or
>harder to copy?

Much of this is personal choice stuff, aside from that try using the
plain ordinary vanilla Alpha Golf 4 Delta Golf. However, for FM this
is generally considered unnecessary, which indicates deviation
problems perhaps (if not obvious signal strength issues).

>2. How much does the vertical metal door (which only maintenance
>staff may open) near my antenna harm performance? This painted metal
>door is 3 feet wide and 8 feet tall and FACES the antenna. (My patio
>is an ENCLOSED volume only about 8 feet wide, 8.5 feet tall, and about
>6 feet deep - moving my antenna further away would require moving it
>onto the grass, where it will get in the way.) There's no question
>that the metal door couples to the antenna - the question is HOW
>SIGNIFICANT this is. Would things be SUBSTANTIALLY better without so
>much metal parallel to and facing the antenna at close range?

If the metal isn't resonant, and it isn't dissipative, then it is
transparent. Since it doesn't enclose you, it cannot shield you. The
wild card here is you do not specify "near" above. Is your antenna
butt up against it, or 8 feet away?

>3. How much does it help to be in a QTH ABOVE trees, buildings, and
>other clutter? (Even if performance is the same, I'd still rather be
>on a high floor simply because I would be able to leave my antenna
>outside 24/7.)

In dB? Just think in terms of line of sight. If you cannot see any
better from the floor above, there is no material advantage. However,
the wild card here is that not all communication is line of sight and
may involve alternate paths that work quite well but are not
intuitive. I've had buddies point their beams west to talk east
simply because both parties could see the same mountain range that
served as reflector to both.

>4. If my apartment had a balcony with metal railings, how much impact
>would they have on antenna performance? When I look for a new
>apartment, should I look for a place with wood or plastic railings?
>(I guess it would be a good idea to bring a magnet with me when
>apartment hunting.)

Wouldn't do much for brass would it? Metal railings would help offer
a counterpoise for many and again if non resonant, doesn't matter
(this all presumes that it doesn't tie into a larger metal structure).

>5. How do I know if my audio is distorting? Do I need a new
>microphone or perhaps an attenuator? I learned that I need to keep
>the mic gain on my Kenwood TS-430S down to 2 or less (out of 10) in
>order to avoid causing distortion. The microphone is an MC-60. I
>don't think that the microphone or audio is a problem, as I've tried
>testing it on local ham friends, and they report that my audio is OK.
>(I guess I should invite friends over to try my radio and theirs to
>confirm.)

On extremely rare occasions it can be tones over modulating while
voice level is fine. Something you would only notice with a toned
repeater. However, it sounds like you have a hot mike or your
deviation is set too high.

>6. Is my radio broken? I thought of this possibility, but it seems
>unlikely. People have heard me, and it seems more logical that the
>QTH problems and my inexperience are more likely to be the culprits of
>my HF problems. (I guess I should invite friends over to try my radio
>and theirs to confirm.)

Your having said it twice seems to indicate a possible solution. No,
your radio is not broken (beyond the twist of the deviation pot
perhaps).

>
>I intend to move as soon as I finish my job search. Even if the new
>job is local, I intend to move to a better QTH - an upper-floor
>apartment sitting on land at a high elevation. The upper-floor
>setting would position me for less attenuation from buildings and
>trees. Also, since nobody else would have access to my balcony or
>even close-up visibility of it, I would be able to leave my antenna

>outside 24/7. I guess I should bring my boombox with me when
>apartment hunting so I can assess the RF reception of the area and the
>apartment.
>
>I am seeking employment as an antenna, RF, or microwave engineer.
>(Any leads would be appreciated.) I owe my future to ham radio,
>because I would never have been able to understand the technical
>concepts I studied as an electrical engineering major. Thanks to ham
>radio, antenna patterns and SWR mean something to me and aren't just
>mumbo jumbo to plow through so I can pass a class. Although I haven't
>been homebrewing, attending the Northern Virginia QRP group's lunch
>meetings has exposed me to practical circuit design, and all the
>RF/microwave circuit principles I studied (S parameters, oscillators,
>frequency response, etc.) in school. I'm still busy reviewing my
>stuff. IT ALL MAKES SO MUCH MORE SENSE NOW!!!

Just wait 30 years to see how much more sense it will make then!

>
>The ARRL people and the ham radio industry will be pleased to hear
>that I will be spending more time AND money on ham radio in the
>future. Ham radio will provide me some valuable informal training in
>my antenna, RF, or microwave engineering career. As soon as I am
>hired, I will shop for either the Yaesu FT-100D or Icom 706MKIIG
>(which provides SSB and CW on 6m, 2m, and 70cm as well as HF). I also
>intend to try out the microwave bands and to homebrew equipment for
>these bands (as there are almost NO such radios available on the
>market).
>
>One final note: DON'T FEEL TOO SORRY FOR ME! The HF issues were what
>initially prompted me to relearn and actually understand antenna
>principles. If I had no HF issues, I would not have felt the need to
>review the technical things I studied in school or to gain a REAL
>understanding of RF principles. However, I do not EVER want to be in
>a QTH this bad again. Since ham radio is an investment in my career
>as well as my hobby, I am willing to pay a higher monthly rent for a
>less miserable QTH.
>
>Jason Hsu, AG4DG
>jason_hsu_802701@yahoo.com

Hi Jason,

Just drive around with an HT until you hit the most repeaters and live
in that community.

For work, try www.monster.com and accept that you may have to design
loads before you design antennas (it's a long and winding road).

73's
Richard Clark, KB7QHC

1312. Re: A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 07:36:07 UTC
From: pws <p.grace@ntlworld.com>
Message-ID: <1zP28.95259$_x4.9958374@news2-win.server.ntlworld.com>
Source record: 150448

Keven R. Matthews <mail@keven.worldonline.co.uk> wrote in message
news:3c4b5de4_1@mk-nntp-1.news.uk.worldonline.com...
> Antron 99 (Solarcon A-99)
>
> OK I know its heritage is as a CB antenna.. However as I just got HF
> privledges last week I was VERY keen to get on the air! (10 years on VHF)
I
> already had this antenna up for listening on 10 metres and it says in the
> booklet that with an ATU it would be OK down to 40 metres.
> It is currently about 10 metres off the ground and has the standard A-99
> radials (for 10 / 11metres). With the ATU I can easily get a good
impedance
> match indicated by a low vswr reading for 15 metres and had immediate
good
> results with 5 countries in 2 hours, I was happy. However 40 metres is a
> different story and whilst I can hear plenty and with some difficulty
obtain
> a 'match' for a low vswr reading I have yet to work anyone at all either
> daytime or nightime. Has anyone any experience of this antenna on HF and
40
> metres in particular? Would it help if I was to remove a couple of those
> 3/8" fitting screw in radials and replace them with some wire radials of
> different lengths or perhaps increase or decrease the height . Any
> recommedations / advice welcome (other than get or make another aerial!)
>
> Thanks &
>
> 73 de keven
> G7UUD / M3UUD
>
> (M3=uk foundation licence 10watts)

hi keven
i use one for 10 down to 17.
works very well but any lower and it just becomes a dummy load.
hope this helps
paul
>
>
>
>

1313. Help with Ext Power for Yaesu VX-5R?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 07:36:31 UTC
From: US <rjhamp@pacbell.net>
Message-ID: <3yP28.33855$4Y.1236350140@newssvr21.news.prodigy.com>
Source record: 150454

Any VX-5R Owners?:

Just got myself a new Yaesu VX-5R and trying to run it with
an external Power Supply (Tripp Lite VR-7b,13.8V, Max 7 Amps).

When I connect the external plug to the radio, it shows "charging"
(connectivity to power!!!), however the radio will not let me use the
external 13.8v power supply for "Transmit" (...radio goes dead, and
resets when I pull out the ext. plug)?

Reading the Manual transmit specs (top of page 71) I should be
able to use an External 13.8v Power Supply for maximum 5 Watts
on all Bands power output!

And yes, I double checked; the red is positive at both ends, and
black is ground at both ends, with no shorts (...I even have a
fuse/holder built into the red wire for protecting itself while blowing
up the rest of the components!)!

Gotta be gremlins? Any suggestions?

Robert
KF6FGH

1314. Re: cavity filters?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 08:18:48 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a2ginc$6m6$1@bob.news.rcn.net>
Source record: 150449

"Robert Bukowski" <robert.61@gmx.at> wrote:
> Please, can someone tell me what is the German translation
> for "cavity filter"?

Ich verschte nicht, ich var ich denke im Deutschland
ingenieure sagen "cavities und filters":

http://www.decibelproducts.com/index1de.html

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

1315. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 10:11:33 UTC
From: stefano <sgalast@tin.it>
Message-ID: <pPR28.6438$Rv3.336611@news2.tin.it>
Source record: 150452

Hi,
this is stefano Galastri IK5IIR speaking.

I started my experiments on CFA antenna 4 years ago.
the main reason for disappointing results on it is the lack of informations from the inventors.
They have their reasons, probabily, but since the antenna is patented I don't understand why.
Anyway after more than 2 years of experiments I was successfull.
The CFA antenna works but is very critic , complicated, and costs enough money...

Thanks to this big experience I earned a lot of things on this new way to create the electromagnetic wave.
This drove me to the EH antenna concept, my actual interest.

we discussed a lot on this Ng about EH antenna.

I don't want be polemic at all.
I hope in the next future to proof with technical analysis and indipendent labs measurements that the EH antenna is real, works and satisfy all the claims.

In the meantime If you want spend a afternoon playing with the antenna , just experimenting... I am here available to help you to build one of it.
It costs almost nothing, is easy, fast .
In this way you could see with your eyes if works or not.I think this is in the perfect ham spirit.

Sincerly, Stefano IK5IIR

"eborys" <eborys@home.com> ha scritto nel messaggio
news:QkE28.1963$gW4.1623654@news1.rdc1.mi.home.com...
> Does anyone the NG have experience with these type of antennas. For every
> article/paper, that I've found in the good column, there is another in the
> bad column?
> Thanks,
> ak9i
>
>

1316. Re: A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 11:30:10 UTC
From: "Keven R. Matthews" <mail@keven.worldonline.co.uk>
Message-ID: <3c4bfbbb_2@mk-nntp-1.news.uk.worldonline.com>
Source record: 150453

Thanks for the helpful advice guys. I wont pursue using the antenna on 40 metres any further. The only other HF band I have at the moment is 15 metres (10 not permitted under my licence class) as I said it worked well giving me fast results but there is an awful lot of static S4 steady 24 hours a day. Without an ATU the SWR reads a unhealthy 3:1 at the moment across 15 metres as it is still at its standard 10 / 11 metre configuration. Obviously with the ATU I can acheive a 'reading' of 1:1.

Would I benefit from changing the radials or adjusting the tuning rings on the antenna?

How did those of you who use the antenna on 15 peak it up?

Thanks again for your advice

Keven G7UUD / M3UUD
mail@keven.worldonline.co.uk

"Keven R. Matthews" <mail@keven.worldonline.co.uk> wrote in message news:3c4b5de4_1@mk-nntp-1.news.uk.worldonline.com...
> Antron 99 (Solarcon A-99)
>
> OK I know its heritage is as a CB antenna.. However as I just got HF
> privledges last week I was VERY keen to get on the air! (10 years on VHF)
I
> already had this antenna up for listening on 10 metres and it says in the
> booklet that with an ATU it would be OK down to 40 metres.
> It is currently about 10 metres off the ground and has the standard A-99
> radials (for 10 / 11metres). With the ATU I can easily get a good
impedance
> match indicated by a low vswr reading for 15 metres and had immediate
good
> results with 5 countries in 2 hours, I was happy. However 40 metres is a
> different story and whilst I can hear plenty and with some difficulty
obtain
> a 'match' for a low vswr reading I have yet to work anyone at all either
> daytime or nightime. Has anyone any experience of this antenna on HF and
40
> metres in particular? Would it help if I was to remove a couple of those
> 3/8" fitting screw in radials and replace them with some wire radials of
> different lengths or perhaps increase or decrease the height . Any
> recommedations / advice welcome (other than get or make another aerial!)
>
> Thanks &
>
> 73 de keven

> G7UUD / M3UUD
>
> (M3=uk foundation licence 10watts)
>
>
>
>

1317. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 12:40:12 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a2h27e02nl4@enews3.newsguy.com>
Source record: 150457

Galvanized electric fence wire is a poor choice. In many environments it will corrode through the thin zink very quickly and then rust. It is also not a very good steel, it takes very little flexing to break it. I would not use it for antennas any place where ice or high winds were expected, nor in corrosive environments (salt air or industrial areas). For a long antenna like a 160m dipole i would invest in a decent copperweld, flexweave, or another wire meant to be used for long spans.

"Mike Jordan" <mjordan@europa.com> wrote in message news:3C4AEC8B.8080200@europa.com...
> How well does galvanized electric fence wire do as dipole wire?
> Specifically for 160 meters. How well does it hold up?
>
> Thanks
>
> Mike
> --
> Hillsboro, Oregon
> Bouvier des Flandres - Herding & Working Dogs
> http://www.europa.com/~mjordan - Pictures & Info on Bouviers
>
>

1318. Re: Help with Ext Power for Yaesu VX-5R?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 12:51:07 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <OA1MPN5I6eSskpHruDPPe0L9zis3@4ax.com>
Source record: 150455

"US" <rjhamp@pacbell.net> wrote:

>Any VX-5R Owners?:
>
>Just got myself a new Yaesu VX-5R and trying to run it with
>an external Power Supply (Tripp Lite VR-7b,13.8V, Max 7 Amps).
>
>When I connect the external plug to the radio, it shows "charging"
>(connectivity to power!!!), however the radio will not let me use the
>external 13.8v power supply for "Transmit" (...radio goes dead, and
>resets when I pull out the ext. plug)?

The radio may be configured to not allow transmitting until the battery is fully charged.

Are there not instructions in your manual on recharging the battery, as well as using an external power supply? Every brand is a little different. It should be covered in your manual.

Bob
k5qwg
>
>Reading the Manual transmit specs (top of page 71) I should be
>able to use an External 13.8v Power Supply for maximum 5 Watts
>on all Bands power output!
>
>And yes, I double checked; the red is positive at both ends, and
>black is ground at both ends, with no shorts (...I even have a
>fuse/holder built into the red wire for protecting itself while blowing
>up the rest of the components!)!
>
>Gotta be gremlins? Any suggestions?
>
>Robert
>KF6FGH
>

1319. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 12:53:34 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <mbU28.1252$li5.802298@news20.bellglobal.com>
Source record: 150456

"stefano" reported:
> the lack of informations from the inventors.
> the antenna is patented

Patents are available on the Internet.

Patents must provide sufficient information to allow a person "skilled in the art" to reproduce the invention. But...

The Patent Office doesn't bother to check if the invention actually works. The only garbage that they throw out are the perpetual motion machines.

A simple dipole (for example) can be very nearly 100% efficient. Can the CFA beat this ? If we have a CFA installed inside a large metal sphere, will the reflections build up energy (being a "better" antenna than a dipole) inside the reflecting sphere until it explodes ? Perhaps you could tap-off sufficient energy at the feed point, by adjusting the mismatch, to power a small city.

A modicum of logic can save a great deal of effort...

1320. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 13:09:13 UTC
From: Billy Echols <b_echols@bellsouth.net>
Message-ID: <XnU28.30251$Y17.2357639@e3500-atl2.usenetserver.com>
Source record: 150458

"accept that you may have to design loads before you design antennas"

What's the difference? :)

be, WA2NYR/QRP

> Just drive around with an HT until you hit the most repeaters and live
> in that community.
>
> For work, try www.monster.com and accept that you may have to design
> loads before you design antennas (it's a long and winding road).
>
> 73's
> Richard Clark, KB7QHC

1321. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 13:24:34 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201210524.45f8b64a@posting.google.com>
Source record: 150459

Mike Jordan <mjordan@europa.com> wrote in message news:<3C4AEC8B.8080200@europa.com>...
> How well does galvanized electric fence wire do as dipole wire?
> Specifically for 160 meters. How well does it hold up?
>
> Thanks
>
> Mike

I have also used aluminum electric fence wire. It is remarkably
durable.

If you want to buy new wire, I think electric fence wire is the
cheapest you can get (excluding 'new surplus', that is)

Jim
N8EE

P.S. Personally, I prefer American Cocker Spaniels. They fit on your
lap a lot better. I can even get two at once if I try ;-)

1322. Re: A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 13:37:49 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <bhdMPHAELk9bB+QzSiLgmyMue+Wb@4ax.com>
Source record: 150460

"Keven R. Matthews" <mail@keven.worldonline.co.uk> wrote:

>Antron 99 (Solarcon A-99)
> Any
>recommedations / advice welcome (other than get or make another aerial!)

Since you already have an antenna tuner, why not construct a small wire dipole, possibly mount it in an inverted-v manner if you're cramped for space, and feed it with tv twin-lead to your tuner? Wouldn't cost much, you could get the materials at a hardware store, and might do a little better in regard to multi-band coverage.

Bob
k5qwg
>
>Thanks &
>
>73 de keven
>G7UUD / M3UUD
>
> (M3=uk foundation licence 10watts)
>
>
>

1323. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 13:52:15 UTC
From: K7SAM <2smoore@nemontel.net>
Message-ID: <IZU28.13672$h31.1422262@e420r-atl1.usenetserver.com>
Source record: 150461

Check with your local telephone company and see if they have any "field wire". This is laid down for temp use when a new line can not be buried or put in place. The stuff is plastic coated and has seven strands of steel wire inside. It is darn near strong enough to tow a car with and of course that makes it hard to work with. Really tough to solder and when wound tight almost acts like a spring. Once you get it up and working however it will last just about forever. Have had 40 and 80 dipoles up for years made from this stuff and have never had a problem. Also make sure to waterproof all connections REAL good.

Sam

1324. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $350.00(REDUCED!)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 13:59:37 UTC
From: dothetime@hotmail.com
Message-ID: <141e2b2a.0201210559.5c20669b@posting.google.com>
Source record: 150462

dothetime@hotmail.com (David Krakowsky) wrote in message
news:<141e2b2a.0201081435.3773f8f2@posting.google.com>...
> I have a NEW never installed Hy-Gain 18 HTB 10-80 Meter Hy-Tower that
> has the Manual, original box (slightly tattered), all parts and a
> Stainless Steel Hardware kit in addition to the original hardware. The
> tower sections are still banded together. Base insulators are there
> too, it's complete! The only catch is I don't want to ship it, so
> please don't ask, it's a pickup only. I am 30 miles north of NYC,
> Pomona, NY. I may deliver it for expenses locally (30 miles) if you
> can't pick it up. It will go on a roof rack or in a van or pickup.
> Hy-Gain is selling them now for $739.00
> $400.00 gets it.
> Dave K2DHK dothetime@hotmail.com

No Takers! Price now $350.00

1325. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 13:59:59 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <z9V28.314651$WW.14292547@bgtnsc05-news.ops.worldnet.att.net>
Source record: 150463

"eborys" <eborys@home.com> wrote in message
news:QkE28.1963$gW4.1623654@news1.rdc1.mi.home.com...
> Does anyone the NG have experience with these type of antennas. For every
> article/paper, that I've found in the good column, there is another in the
> bad column?
> Thanks,
> ak9i
>
>

The CFA and EH antennas are electrically small antennas that perform similar to most other electrically small antennas of the same size. There is no magic or new physics associated with either of these two antenna designs. Before you believe any "measurements" on these antennas consider the following and ask as many questions about the measurements and measurement setup as possible.

These antennas have virtually no ground plane and they are mounted some very small distance above ground. As a result of this, the feedpoint impedance measurements will be "contaminated" with the effects of ground loss and common mode currents. Anyone measuring the performance of these antennas needs to deal with these issues before they can make any claims about the antenna performance. If they claim that ground loss and common mode currents are not an issue, stop talking to them. A small monopole with virtually no ground plane will suffer from the same problems.

Second, a matching network located at the feedpoint of an antenna does not change the fundamental characteristics of the antenna itself. A matching network does not change the antenna's radiation resistance nor does it change the antenna's efficiency. A matching network allows you to change the amount of power delivered to the antenna system. This antenna system now includes the matching network. Recognize that at a single frequency you can theoretically match any antenna to 50 ohms. A small monopole, the same height as the CFA or the EH antenna can also be matched to 50 ohms with a simple matching network. However, all three of these antennas will still suffer from the same problems. The Q of the antenna itself is very high, which makes it very difficult to match. Small changes in the matching component values will change the measured impedance significantly. That's why all these guys supporting the CFA and EH antenna continue to have problems coming up with measurements supporting their claims.

I'd like to see these guys build one of these antennas at around 500 MHz - 1000 MHz and measure its feedpoint impedance when the antenna is mounted over a large metallic ground plane.

Steve VE9SRB

1326. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 14:36:41 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201210636.169aab20@posting.google.com>
Source record: 150464

'Doc <w5lz@icok.net> wrote in message news:<3C4BBD7F.4CE31909@icok.net>...
> Jason,
> No, you don't really need a new call unless you just want
> one. Use these phonetics, " A Guy 4 Dirty Girls ", they may
> still ask what you said, but it'll be more fun when they do.
> You don't have to use the "/" when you move, as long as
> you change your address of record. Most people don't bother
> using it anyway since any call sign can be 'from' any call
> area any more.

I thought that it is common courtesy (for those vying for WAS) to use the "/-number" after one's call sign. Personally, if I leave 4-land, I'd rather apply for a new call sign so I don't need to use the "/" to be courteous.

< I would think they could be used for suport of the antenna, though, and if the antenna isn't a monster, it shouldn't pull the railings down (drop a counterpoise over the railing). >

My antenna is rather heavy - it is the DK3 Screwdriver. If I had a balcony with metal railings, I would connect the railings to the ground plane I use (aluminum foil attic insulation).

< There are a couple of 'tricks' you can do to the MC-60 to make it sound 'better'. Cover the 'slots' on the side of the head to raise the tone (get rid of some base tones).>

I'll try covering those slots with masking tape. How exactly does this help? I'm curious.

< And, if you use the built-in audio mplifier, do so very sparingly (or better yet, turn it off). >

Are you referring to the speech processor? I rarely use it. The mic gain controls the output power. I learned that a mic gain of 2 or higher can cause distortion. Yes, I need to keep the mic gain in the 9:00 position or less. I know now why the "all-the-knobs-to-the-right" crowd is regarded as dorky. Still, I feel that the full power shouldn't kick in until about a mic gain of 8 (the 3:00 position). Adjusting the mic gain is too delicate - too low and I'm QRP, too high and I overmodulate.

< The MC-60 also has 'ground' problems with some radios. If they tell you that your 'RF'y, ground the mic case to the radio chassis with a jumper, see if it helps. You can do the same thing by shorting pins 7 and 8 on the mic plug (audio ground and chassis grounds) BUT make sure I didn't goof on the pin numbers first! >

I might as well give this a try.

Jason Hsu, AG4DG
jason_hsu_802701@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

1327. Re: New Old Stock- Hy-Gain 18HTB Hy-Tower For Sale $350.00(REDUCED!)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 14:42:31 UTC
From: k3bu@aol.com
Message-ID: <20020121094231.23498.00004336@mb-md.aol.com>
Source record: 150465

>> I have a NEW never installed Hy-Gain 18 HTB 10-80 Meter Hy-Tower that
>> has the Manual, original box (slightly tattered), all parts and a
>> Stainless Steel Hardware kit in addition to the original hardware. The
>> tower sections are still banded together. Base insulators are there
>> too, it's complete! The only catch is I don't want to ship it, so
>> please don't ask, it's a pickup only. I am 30 miles north of NYC,
>> Pomona, NY. I may deliver it for expenses locally (30 miles) if you
>> can't pick it up. It will go on a roof rack or in a van or pickup.
>> Hy-Gain is selling them now for $739.00
>> $400.00 gets it.
>> Dave K2DHK dothetime@hotmail.com
>
>No Takers! Price now $350.00
>

Hi Dave,
I will take it if still available. I can pick it up.

Yuri Blanarovich, K3BU@aol.com

1328. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 14:49:43 UTC
From: richardharrison@webtv.net
Message-ID: <10535-3C4C2A87-10@storefull-113.iap.bryant.webtv.net>
Source record: 150467

"stnapgal" wrote:
"I`m just doing 100 watts CW and the flicker is annoying."

Switching a couple of hundred watts on a circuit of 10X that capability shouldn`t produce annoying flicker. The transmitter power supply has some energy storage to take the edge off sudden demand. The ham with flicker needs to check for a poor circuit or connections.

It makes little sense to use CW in the age of satellites, but AM and SSB can produce flicker too, just not so much. In a SW broadcast plant where I worked, we put a dozen or more high-powered broadcast transmitters on the same program late nights. We skewed the programs to the various transmitters slightly with tape machines to avoid flicker. There was a remnant flicker because our demand was varying by more than a megawatt on a 60-kv powerliine 50 miles long.

Best regards, Richard Harrison, KB5WZI

1329. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 14:49:56 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201210649.56684625@posting.google.com>
Source record: 150466

Richard Clark <kb7qhc@attbi.com> wrote in message
news:<j4fn4u8t07b9r4pc8p0qs5df07ia842kq1@4ax.com>...
>
> Much of this is personal choice stuff, aside from that try using the
> plain ordinary vanilla Alpha Golf 4 Delta Golf. However, for FM this
> is generally considered unnecessary, which indicates deviation
> problems perhaps (if not obvious signal strength issues).
>
People seem to have difficulty with "Alpha Golf 4 Delta Golf". When I
ID, I say "AG4DG Alpha Golf 4 Delta Golf".
>
> If the metal isn't resonant, and it isn't dissipative, then it is
> transparent. Since it doesn't enclose you, it cannot shield you. The
> wild card here is you do not specify "near" above. Is your antenna
> butt up against it, or 8 feet away?
>
This metal door is about 5-6 feet from the antenna. It's as tall as
the antenna and MUCH wider.
>
> In dB? Just think in terms of line of sight. If you cannot see any
> better from the floor above, there is no material advantage. However,
> the wild card here is that not all communication is line of sight and
> may involve alternate paths that work quite well but are not
> intuitive. I've had buddies point their beams west to talk east
> simply because both parties could see the same mountain range that
> served as reflector to both.
>
The line of sight from my apartment is TERRIBLE! I'm on the ground
floor at a location that is some 50 feet lower than most surrounding
areas, and there are many trees around.

> For work, try www.monster.com and accept that you may have to design
> loads before you design antennas (it's a long and winding road).
>
Actually, I only use monster.com to determine who is hiring. I don't
respond directly to the ads, because the mailbox probably gets flooded
with resumes from hundreds or thousands of mass-mailing morons. I
have discovered ways to find people working at a particular company.
I am open to working on RF/microwave circuits as well as antennas.

Jason Hsu, AG4DG
jason_hsu_802701@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

1330. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 15:37:04 UTC
From: richardharrison@webtv.net
Message-ID: <13043-3C4C35A0-5@storefull-116.iap.bryant.webtv.net>
Source record: 150468

Sam, K7SAM wrote:
"Check with your local telephone company and see if they have any "field wire". This is laid down for temp use when a new line can not be buried or put in place."

I bought a mile of field wire on a reel about 50 years ago. It was WW-2 signal corps surplus. It was tough stuff.

About the same time, the broadcast plant where I then worked lost its last mile of open-wire program line in an ice storm. Within an hour or so, Southwestern Bell had replaced the downed open-wire with parallel-wire drop cable laid directly on the ground. We were back in business as normal.

That parallel-wire drop cable is really tough stuff. Of the millions of those coated with ice in the area, very few were brought down.

When the open-wire program line was replaced, the installers asked me if I would like to have the parallel-wire cable they had temporarily used. They said it would otherwise be discarded. I accepted. It obviously makes good antenna wire except for its high visibility.

Best regards, Richard Harrison, KB5WZI

1331. saturn 6 meter 3-ring halo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 16:25:03 UTC
From: "john b. hinds" <pophinds@prodigy.net>
Message-ID: <zhX28.8137$Eh.1360129039@newssvr16.news.prodigy.com>
Source record: 150529

Need instructions for making coax length matching network for this old
antenna that has been in my basement for 40 years.
Thanks
John Hinds
PopHinds@Prodigy.net

1332. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 16:28:25 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201210828.6b5c7ba6@posting.google.com>
Source record: 150519

"eborys" <eborys@home.com> wrote in message
news:<QkE28.1963$gW4.1623654@news1.rdc1.mi.home.com>...
> Does anyone the NG have experience with these type of antennas. For every
> article/paper, that I've found in the good column, there is another in the
> bad column?
> Thanks,
> ak9i

If the EH/CFA antennas could deliver that much performance in that
little space, they would make the Texas Bugcatcher, Screwdriver,
Isotron, and magnetic loop antennas all obsolete.

If this new type of antenna really were so good, it would have taken
the world by storm long ago.

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com

1333. Origins of Log Periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 16:39:46 UTC
From: fractenna@aol.com
Message-ID: <20020121113946.09758.00002229@mb-cq.aol.com>
Source record: 150520

I'm having fun sleuthing the origins of the log periodic approach to antenna design. I have a pretty good sense of the design origins in the US (at Collins a la Isbell, DuHamel and others) but have been trying to get some details on WWII era efforts in England (which, if true, pre-date the stateside work).

Anyone know details? If so, kindly e-mail, and thanks!

73,
Chip N1IR

1334. Re: A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 16:42:03 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <TNX28.30556$Y17.2471913@e3500-atl2.usenetserver.com>
Source record: 150522

Doc,

I've loaded up my A-99 on 6 and worked *some* DX with it. It actually did
fairly well.
I have also run it down as low as 20 meters, and, yes, it isn't the best for
either band (no-
thing beats a resonant antenna, of course). The "ideal" bands are 10-12-15
meters--the
best being 10 as expected. Like you said, it ain't impossible to work lower
with it, but
it shines on 10.

73

Jerry
K4KWH
www.qsl.net/k4kwh

'Doc <w5lz@icok.net> wrote in message news:3C4BBE1B.497DC934@icok.net...
>
>
> Screaming Skull,
> For what it's worth, yes. Depends on the tuner, and how
> bad you want to be on 6 meters, but sure, it'll work.
> 'Doc

1335. Re: ?? 6&10 mtr beams on same boom ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 16:44:27 UTC
From: AB7RS <ab7rs@arrl.net>
Message-ID: <u4ohc04jnng9d1@corp.supernews.com>
Source record: 150521

You didn't mention what type of antenna,if it's a quad NO PROBLEM! TG

"Jim Moci" <jimmoci@aol.com> wrote in message
news:20020121001959.26905.00002846@mb-mn.aol.com...
> I would like to place a 6 and 10 meter beam on the same boom. About 24
feet
> long, 5 elements on 10, 7el on 6meters- Seperate coax for each band. Are
these
> compatible with minimal interaction?
> Thanks!
> Jim W3ATV

1336. Re: Help with Ext Power for Yaesu VX-5R?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 17:07:46 UTC
From: Screaming Skull <KG4IVT@hotmail.spamsucks.leaveme.alone.com>
Message-ID: <CVX28.83947$6L1.20458060@typhoon.southeast.rr.com>
Source record: 150524

Are you using the little cheapie adapter that does not have any filtering on it? It's just two pieces of wire and a connector on the end? If so, that may be your problem. I had similar results with mine when using it on a power supply. I wrapped the wire around one of those snap-on cores you can get from Radio Shack and it stopped the problem. Before I did this the exact same thing would happen to me when I transmitted.

"Bob Miller" <bamiller@texas.net> wrote in message news:OA1MPN5I6eSskpHruDPPe0L9zis3@4ax.com...
> "US" <rjhamp@pacbell.net> wrote:
>
> >Any VX-5R Owners?:
> >
> >Just got myself a new Yaesu VX-5R and trying to run it with
> >an external Power Supply (Tripp Lite VR-7b,13.8V, Max 7 Amps).
> >
> >When I connect the external plug to the radio, it shows "charging"
> >(connectivity to power!!!), however the radio will not let me use the
> >external 13.8v power supply for "Transmit" (...radio goes dead, and
> >resets when I pull out the ext. plug)?

>

1337. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 17:22:32 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C4C4E57.6D6FE082@shaw.ca>
Source record: 150523

Bob G4VGO wrote:
>
> "Martin" <mab@delete-this.capita.nildram.co.uk> wrote in message
> news:u4d8mcqtsgpa43@corp.supernews.com...
> >
> > "stnapgaf" <jh@bnhnet.com> wrote in message
> > news:3BFFFF7B.22518FA7@bnhnet.com...
> > > I have the normal 15 amp service in the radio room.
> > > How much light dimming do others experience in the
> > > room where you do CW. I'm just doing 100 watts CW
> > > and the flicker is very annoying.
> > > I hate the idea of running a whole new circuit to the radio
> > > room just for the radio.
> > > I wonder if a flourescent bult would flicker less?
> > >
> > >
> >
> > The fluorescent tube may flicker more - I'll always remember a trip
> > round a high power government radio station during which the party
> > piece in the main transmitter room was to switch off the lights just to
> > show that they stayed on!
> >
> > Martin (M3ABL)
> >
> >
> Probaly RF to the mains wiring, or if it goes dim when you key, you have
> very poor regulation on the incoming power line to the shack.
>
> Bob G4VGO

The AC mains in the house should be easily capable of
handling
the load -- I doubt that regulation is the problem, and feel
that
it is either RF or a resistive connection (at the breaker
box or
somewhere along the line) due to a connection which has
become
loose -- and hence the IR drop.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1338. Re: EH / Crossfield Antennas hey Jim

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 17:25:58 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C4C4F25.C7D3EC9C@shaw.ca>
Source record: 150525

N4ZN wrote:
>
> >
> >The Magnetic Loop antenneas do work and I would recommend trying one. Remember
> >that you need really low losses in the loop and tuning capacitor to get good
> >performance.
> >
> Be interested in the tuning cap you are speaking of. Haven't tried one
> of those yet.
> -AND-
> Mag loops work best when multiples of their design freq in length, and
> at least 1/2 wave above the ground.

Go to the AA5TB website -- there is a pretty comprehensive
set of
articles and links on small loops -- and some good
information on
the capacitors. The loops are simple. but the real secret is
in
the capacitor used.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1339. Re: WTB: hotstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 17:28:27 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C4C4FBA.EDAE1C4D@shaw.ca>
Source record: 150526

'Doc wrote:
>
> Evan,
> If your going to use a 'hot stick' for what it was
> meant to be used, I would be very, very hesitant about
> anything except a new one. A 'used' hot-stick is asking
> for a reservation at the funeral home! They aren't cheap
> and no one throws one away just because a new model comes
> out. Try your local fire department, or power company,
> they'll have catalogs, or make one. Just be sure the
> material you make it out of has a very large 'safety'
> factor built in...
> 'Doc

I would almost wager that the reason why any ham would want
a hotstick would be as an antenna support.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1340. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 18:20:56 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C4C5C08.AB69664A@IEEE.org>
Source record: 150527

Jason Hsu wrote:
> People seem to have difficulty with "Alpha Golf 4 Delta Golf". When I
> ID, I say "AG4DG Alpha Golf 4 Delta Golf".

I was once KG7BK. Hams had trouble copying the "Golf" in my call.
The problem went away when I started using "Germany" instead of
"Golf". Single syllable phonetics were just a poor choice.
I also use "Mexico" when "Mike" cannot be understood.
--
cheers, CAM http://www.qsl.net/w5dxp

1341. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 18:27:22 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <64lo4u4l7jgtt3fg4ic0tcae25o2ppn7v4@4ax.com>
Source record: 150528

On 21 Jan 2002 06:49:56 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>Richard Clark <kb7qhc@attbi.com> wrote in message
news:<j4fn4u8t07b9r4pc8p0qs5df07ia842kq1@4ax.com>...
>>
>> Much of this is personal choice stuff, aside from that try using the
>> plain ordinary vanilla Alpha Golf 4 Delta Golf. However, for FM this
>> is generally considered unnecessary, which indicates deviation
>> problems perhaps (if not obvious signal strength issues).
>>
>People seem to have difficulty with "Alpha Golf 4 Delta Golf". When I
>ID, I say "AG4DG Alpha Golf 4 Delta Golf".

As I said, this is generally not necessary and indicative of either a
problem with the gear - or the operator. The mistaking of an A for a
K is found in the 'k-k-katie' of the sound which may not be pronounced
enough when you speak it. Record your voice and play it back, can you
copy your call?

>>
>> If the metal isn't resonant, and it isn't dissipative, then it is
>> transparent. Since it doesn't enclose you, it cannot shield you. The
>> wild card here is you do not specify "near" above. Is your antenna
>> butt up against it, or 8 feet away?
>>
>This metal door is about 5-6 feet from the antenna. It's as tall as
>the antenna and MUCH wider.

Well at 5 - 6 feet, it is roughly halfwave away. That is enough to
disturb the feedpoint Z, but the dynamics of shielding are not total
(at least not like the effect of the standard reflector element).
This should be simply resolved by moving the antenna in experiments
(your being at ground level should offer you enough variation to do
that). Remember to separate the feedpoint perturbation from radiation
coverage problems, they are two loosely related issues.

>>
>> In dB? Just think in terms of line of sight. If you cannot see any
>> better from the floor above, there is no material advantage. However,
>> the wild card here is that not all communication is line of sight and
>> may involve alternate paths that work quite well but are not
>> intuitive. I've had buddies point their beams west to talk east
>> simply because both parties could see the same mountain range that
>> served as reflector to both.
>>

>The line of sight from my apartment is TERRIBLE! I'm on the ground
>floor at a location that is some 50 feet lower than most surrounding
>areas, and there are many trees around.

You've missed the point. Almost everyone's got a line of sight problem. I live in the forest! Trees? I cannot see the horizon nor more than 1000 yards (in one opportunistic direction) without trees in the way, and yet I can hit my buddy's garage based 70cM repeater miles away - with my HT. His antenna is below my horizon! And behind trees, and buildings, and the brow of a hill. Albeit, the HT is iffy and the external antenna solid (or even a ground plane vertical set up in the window).

You and I both can appreciate more gain with higher antennas, but trees and interposing visual blockage of line of sight is not necessarily the end of life. Research knife edge refraction to understand the mechanics of how waves bend around such objects. There are many such edges in life.

If you are 50 feet lower than the surrounding terrain, that says nothing really without context. If 50 feet down a well, yes, you are in deep trouble. If that 50 foot rise is found with a 5% slope, it's more trouble to walk (not much) than to talk over.

>
>> For work, try www.monster.com and accept that you may have to design
>> loads before you design antennas (it's a long and winding road).
>>
>Actually, I only use monster.com to determine who is hiring. I don't
>respond directly to the ads, because the mailbox probably gets flooded
>with resumes from hundreds or thousands of mass-mailing morons. I
>have discovered ways to find people working at a particular company.
>I am open to working on RF/microwave circuits as well as antennas.
>
>Jason Hsu, AG4DG
>jason_hsu_802701@@@yahoo.com
>http://www.jasonhsu.com/ham_radio-technical.html

Hi Jason,

What with the dot.com failures, many of those RF opportunities were buried in the collapse. Seattle had many RF offerings over the end of the 90's MANY! This is in comparison to 10 years earlier when RF engineering in this region was found only in the big corporations (like Boeing) and maybe one independent research house. I know, because I was part of a spread spectrum design back then. Nearly every one of the recent activity was driven with cellular telephone (AT&T Wireless, this is the home of Craig McCaw's cellular empire after all), or cellular internet connectivity (like Ricochet).

Good luck and 73's
Richard Clark, KB7QHC

1342. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 19:39:33 UTC
From: richardharrison@webtv.net
Message-ID: <19597-3C4C6E75-174@storefull-117.iap.bryant.webtv.net>
Source record: 150530

Doug finds 1/2-watt carbon composition resistors but needs 2-watt resistors with a value of 500 ohms,

Why not parallel 4 resistors which have a value of 2000 ohms each?

Best regards, Richard Harrison, KB5WZI

1343. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 20:14:44 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4C769F.D9B4A989@icok.net>
Source record: 150531

Jason,
Your preference of a call sign is exactly that, your
preference. If your dissatisfied with your present one,
by all means change it.
It's been my experience that few people working for WAS
depend on the number in the call sign to determine where
a station is. Most, after making the mistake of assuming
a particular station is 'where' his call sign 'says' he is,
always ask. To be strictly legal, after changing your
address of record, there's no need for the "/". There again,
it's your choice.
The microphone's enclosure, just like a speaker's enclosure,
determines the 'tone' of the audio. By covering the 'slots'
you are decreasing the volume of the enclosure and raising it's
'audio resonance' (it's been almost 40 years since my last
physics class so if the terminology isn't correct, blame it
on CRS). Big enclosures mean 'bassy' sound, small ones are
'tinny'. (If you remove the end-cap of the mic, you can cut
an index card to size, slip it inside the cap and don't need
the 'kloodgy' tape on the outside.)
I didn't mean the processor, but the audio amplifier built
into the MC-60. In most cases it isn't needed, so disable it.
That would result in a need for higher mic-gain, but does away
with the 'processor' type sound. And, as you implied, the
processor on the '430 isn't required most of the time. Since
it isn't adjustable except inside the '430, don't use it unless
you want to adjust it inside.
Good luck...
'Doc
PS - As always, correct spelling is optional...

1344. Re: WTB: hotstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 20:24:25 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4C78F2.8A7F7DEB@icok.net>
Source record: 150532

Irv,
I don't think I'd take either side of that bet! But,
having used hot-sticks at work, and knowing how 'delicate'
they are, why take the chance of someone using one as it's
supposed to be used, and ending up with 'steak fingers'?
The power company has some that extend to over 50 feet, I
hope I never find one that just 'happens' to be laying
around... (I could use another antenna pole!)
'Doc

1345. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 21:07:22 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a2hvud0198h@enews3.newsguy.com>
Source record: 150534

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0201210828.6b5c7ba6@posting.google.com...
> "eborys" <eborys@home.com> wrote in message
news:<QkE28.1963$gW4.1623654@news1.rdc1.mi.home.com>...
> > Does anyone the NG have experience with these type of antennas. For
every
> > article/paper, that I've found in the good column, there is another in
the
> > bad column?
> > Thanks,
> > ak9i
>
> If the EH/CFA antennas could deliver that much performance in that
> little space, they would make the Texas Bugcatcher, Screwdriver,
> Isotron, and magnetic loop antennas all obsolete.
>
> If this new type of antenna really were so good, it would have taken
> the world by storm long ago.
>

that is the best reason not to bother with most of these great inventions,
if they really were as good as they claim they would be on the front cover
of major magazines and would be selling like hot cakes, not being debated in
this news group and being sold at ham flea markets.

1346. Re: City Lot Antenna Suuestions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 21:13:20 UTC
From: k7mem@myrealbox.com
Message-ID: <270a577d.0201211313.63f39cae@posting.google.com>
Source record: 150533

"eborys" <eborys@home.com> wrote in message
news:<Rqi28.1082$gW4.1057159@news1.rdc1.mi.home.com>...
> City Lot =Ant????
> Tallest tree is about 25 feet, house is two story. Arrangement makes a
> dipole ??
>
> I like to work 40 -15 CW.
>

"eborys" <eborys@home.com> also wrote in another mesage:
> The lot is 80' x 100' deep. the back of the house is at '60 deep and pretty
> much the entire width. Small front yard.
>

A dipole is a good first choice but that all depends on what bands you wish to operate and how far the tree is away from the house. It also some what depends on what you neighbors think and if you have neighborhood restrictions.

Assuming you don't have any neighbor problems, and you want to put up something just for 40 and 15, a simple dipole is a good choice. A normal 40 meter dipole, approximately 65 feet split in the middle, will also work quite good on the third harmonic, 15 meters. The SWR may be a little high on 15 but it still works.

If you don't have quite that much space, try a trap dipole. Traps on a dipole tend to shorten the required lengths. I have a trap dipole that works great on 40, 20, 15, and 10 Meters. If you want other bands, like 30 meters, it's not to difficult to add it. The overall length required is reduced by about 20% from the required 65 feet. The nice part about the trap dipole is the SWR is < 2:1 across all of it's bands and doesn't require a tuner.

If you don't mind using a tuner and want all-band coverage you might want to try a G5RV. Lots of information on the net covering this antenna. There is even a shorty version for smaller lots.

> I've been looking at 'no radial' verticles

Look before you leap on this one. Many hams swear by vertical antennas and many just swear at them. So a google search on some of the more popular vertical antennas available and see what the users are saying about them.

> Magnetic Loops - I'd probably build one for 40 to 20 and one for 15 to 30

Like the vertical antenna research this carefully. Many hams use magnetic loop antennas very effectively but they can pose some tough problems.

> Brilliant ideas welcome.

Brilliant ideas? Sure we have lots of them.

1. Buy a book on antennas. A good one to start off with the the ARRL Antenna Handbook. Lots of information on all of the antennas mentioned above.

2. Buy another book on antennas. Actuall several editions. The ARRL also publishes the Antenna Compendium series of books. These are usually article reprints from QST magazine covering various antenna installations.

3. Buy more books on antennas. Yes, again from the ARRL is the Wire Antenna Classics book and Wire Antenna Classics - Volume 2.

4. And last, but not least, ask lots of questions on this news group. There are a lot of very knowledgable hams lurking on this news group. But, before you ask a question, do a search on the google archives. You may find that your question has been already answered several times already.

--
Martin E. Meserve, K7MEM

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

1347. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 21:40:17 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201211340.5d530636@posting.google.com>
Source record: 150535

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<10535-3C4C2A87-10@storefull-113.iap.bryant.webtv.net>...
> "stnapgal" wrote:
> "I`m just doing 100 watts CW and the flicker is annoying."
>
> Switching a couple of hundred watts on a circuit of 10X that capability
> shouldn`t produce annoying flicker. The transmitter power supply has
> some energy storage to take the edge off sudden demand. The ham with
> flicker needs to check for a poor circuit or connections.

Not only to stop dimming , but radio's don't like big voltage drops.
Could even cause chirp and other problems in a worst case scenario.
I'd be more worried about the radio performance than lights
flickering. Big amps don't need that problem either. A 100w radio
should not noticeably dim lights on average 15 amp service. I used to
run a pair of drake twins doing 100-120 watts, and an SB-200 all on
the same 15 amp service and had very little dimming at all that I
could notice. I'm sure I had loads of other lower current draw stuff
plugged in also. Thats about 600-700 watts depending... And the
breakers we have are old also. It would be even better with fresh
clean breakers. Running 1300-1400w on 240v , I have no dimming. Thats
about equal to 500-600w on a 117v line I would think. Another thing to
worry about is if the faulty line powers motor run gear like A/C's,
refrigerators, etc, it's hard on the motors, compressors, etc. And
being the current draw is high, where ever the high resistance
connection is , is going to be getting quite hot. MK

1348. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 21:53:40 UTC
From: ac6v <ac6v@amsat.org>
Message-ID: <3C4C8DE3.14FA4AD5@amsat.org>
Source record: 150536

Jason here is my spin on things.

Call sign --- the shorter the call sign the easier DX will pick up on it.
I used to be WA6WTO now AC6V.
Noticed a vast improvement when I got my new call in 1977. Next the calls with sharp S sounds punch thru the Pileups ---- K, S,C,T --- worst in my opinion is W ----- da bull you ----- oh spare me. For repeaters, vhf audio restrictions on the repeater or various HT audio may make it difficult for listeners to catch you call. Use standard NATO phonetics until folks get to know you. Avoid funny phonetics at first i.e, Alternating Current Six Volts
Later it may be OK depending on the formality of the repeater.

About the metal door -- get a field strength meter and that may help analyze it.

About audio distrortion on your Kenwood -- most have a MONITOR button -- with earphones listen to your audio here. Some Hams wouldn't know good SSB packed audio if they heard it. get a top notch DXer near by --- they are experts at "good DX Audio" the average ham will tell you to turn off the speech processor, but you ain't gonna break the pileup easily without it. Many hams undermodulate afraid of overmodulating. Get a pro to check you out mic gaun 2, mic gaun 3 etc --- he will tell where you should e. Or use the ALC reading but be aware this might be conservative. Also get some high tones in your audio --- the YL's and kids punch right thru.

If you are interested in DX I have a book on the sbject --- see URL:
http://ac6v.com/DXSAMPLE.htm
Its 266 pages of solid advice with no brag tapes

It covers all of the above in detail. Sorry for the shameless promo but you nay be interested in reading some of the samples. See URL:
http://ac6v.com/DXSAMPLE.htm

Take care and good DX

Jason Hsu wrote:

> I live in the worst of both worlds: a ground floor apartment at a low
> land elevation. The QTH is so bad that there is no TV reception, and
> my AM/FM radio in my home gets fewer stations than the radio in my
> car. (I was a lowly No-Code Technician at the time I moved in. Also,
> I wasn't nearly as obsessed about ham radio as I am now.)
>
> Some questions:
> 1. Do I need a new call sign? Would people have an easier time
> copying a different call sign? I noticed that people have difficulty

> copying my call sign not only on HF but on VHF. On the 147.3 MHz
> Bluemont repeater net (which I check into occasionally), net controls
> sometimes have difficulty copying my call sign on the first time even
> when I'm using my mag-mount mobile antenna (MFJ 1724B) or Pocket
> J-pole OUTSIDE (instead of the ADI/Premier RD-98 HT antenna). The
> "AG" part of my AG4DG call sign trips people up frequently. I've had
> people call me KG4DG. There have also been times when people caught
> the "AG" part but missed the "DG" part. I am in the job search
> process, and if I leave 4-land, I intend to get a new call sign, as I
> don't want to endure the bother of adding the "slash-number" every
> time I give out my call. IF I STAY IN 4-LAND, SHOULD I CHANGE MY CALL
> SIGN ANYWAY? Any guidelines on what makes a call sign easier or
> harder to copy?
> 2. How much does the vertical metal door (which only maintenance
> staff may open) near my antenna harm performance? This painted metal
> door is 3 feet wide and 8 feet tall and FACES the antenna. (My patio
> is an ENCLOSED volume only about 8 feet wide, 8.5 feet tall, and about
> 6 feet deep - moving my antenna further away would require moving it
> onto the grass, where it will get in the way.) There's no question
> that the metal door couples to the antenna - the question is HOW
> SIGNIFICANT this is. Would things be SUBSTANTIALLY better without so
> much metal parallel to and facing the antenna at close range?
> 3. How much does it help to be in a QTH ABOVE trees, buildings, and
> other clutter? (Even if performance is the same, I'd still rather be
> on a high floor simply because I would be able to leave my antenna
> outside 24/7.)
> 4. If my apartment had a balcony with metal railings, how much impact
> would they have on antenna performance? When I look for a new
> apartment, should I look for a place with wood or plastic railings?
> (I guess it would be a good idea to bring a magnet with me when
> apartment hunting.)
> 5. How do I know if my audio is distorting? Do I need a new
> microphone or perhaps an attenuator? I learned that I need to keep
> the mic gain on my Kenwood TS-430S down to 2 or less (out of 10) in
> order to avoid causing distortion. The microphone is an MC-60. I
> don't think that the microphone or audio is a problem, as I've tried
> testing it on local ham friends, and they report that my audio is OK.
> (I guess I should invite friends over to try my radio and theirs to
> confirm.)
> 6. Is my radio broken? I thought of this possibility, but it seems
> unlikely. People have heard me, and it seems more logical that the
> QTH problems and my inexperience are more likely to be the culprits of
> my HF problems. (I guess I should invite friends over to try my radio
> and theirs to confirm.)
>
> I intend to move as soon as I finish my job search. Even if the new
> job is local, I intend to move to a better QTH - an upper-floor
> apartment sitting on land at a high elevation. The upper-floor
> setting would position me for less attenuation from buildings and
> trees. Also, since nobody else would have access to my balcony or

> even close-up visibility of it, I would be able to leave my antenna
> outside 24/7. I guess I should bring my boombox with me when
> apartment hunting so I can assess the RF reception of the area and the
> apartment.
>
> I am seeking employment as an antenna, RF, or microwave engineer.
> (Any leads would be appreciated.) I owe my future to ham radio,
> because I would never have been able to understand the technical
> concepts I studied as an electrical engineering major. Thanks to ham
> radio, antenna patterns and SWR mean something to me and aren't just
> mumbo jumbo to plow through so I can pass a class. Although I haven't
> been homebrewing, attending the Northern Virginia QRP group's lunch
> meetings has exposed me to practical circuit design, and all the
> RF/microwave circuit principles I studied (S parameters, oscillators,
> frequency response, etc.) in school. I'm still busy reviewing my
> stuff. IT ALL MAKES SO MUCH MORE SENSE NOW!!!
>
> The ARRL people and the ham radio industry will be pleased to hear
> that I will be spending more time AND money on ham radio in the
> future. Ham radio will provide me some valuable informal training in
> my antenna, RF, or microwave engineering career. As soon as I am
> hired, I will shop for either the Yaesu FT-100D or Icom 706MKIIG
> (which provides SSB and CW on 6m, 2m, and 70cm as well as HF). I also
> intend to try out the microwave bands and to homebrew equipment for
> these bands (as there are almost NO such radios available on the
> market).
>
> One final note: DON'T FEEL TOO SORRY FOR ME! The HF issues were what
> initially prompted me to relearn and actually understand antenna
> principles. If I had no HF issues, I would not have felt the need to
> review the technical things I studied in school or to gain a REAL
> understanding of RF principles. However, I do not EVER want to be in
> a QTH this bad again. Since ham radio is an investment in my career
> as well as my hobby, I am willing to pay a higher monthly rent for a
> less miserable QTH.
>
> Jason Hsu, AG4DG
> jason_hsu_802701@yahoo.com

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm

1349. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 22:10:54 UTC
From: stefano <sgalast@tin.it>
Message-ID: <Ol038.10122$Rv3.435190@news2.tin.it>
Source record: 150537

Hi dear friends,
Yes I understand all and I am agree with all of your objections...
simply you don't have the needed data to judge.

please, I am speaking for the EH antenna only.
This antenna was announced for the first time at the world last
september....is just a baby now.
We are working very hard to start a production, lab tests, indipendent
measurements.

very soon everybody will know about. Please is not an excuse, we just need
some more time.
At the moment is almost unknown...
In the mean time we decided to reveal all about his building
instructions...just for the curious ham loving experimenting.

Thanks, 73 Ik5IIR

"David Robbins" <k1ttt@arrl.net> ha scritto nel messaggio
news:a2hvud0198h@enews3.newsguy.com...
>
> "Jason Hsu" <jason_hsu@my-deja.com> wrote in message
> news:f7d9a152.0201210828.6b5c7ba6@posting.google.com...
> > "eborys" <eborys@home.com> wrote in message
> news:<QkE28.1963$gW4.1623654@news1.rdc1.mi.home.com>...
> > > Does anyone the NG have experience with these type of antennas. For
> every
> > > article/paper, that I've found in the good column, there is another in
> the
> > > bad column?
> > > Thanks,
> > > ak9i
> >
> > If the EH/CFA antennas could deliver that much performance in that
> > little space, they would make the Texas Bugcatcher, Screwdriver,
> > Isotron, and magnetic loop antennas all obsolete.
> >
> > If this new type of antenna really were so good, it would have taken
> > the world by storm long ago.
> >
>
> that is the best reason not to bother with most of these great inventions,
> if they really were as good as they claim they would be on the front cover
> of major magazines and would be selling like hot cakes, not being debated
in

> this news group and being sold at ham flea markets.
>
>

1350. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 22:12:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2i78n$10r8mq$1@ID-124126.news.dfncis.de>
Source record: 150542

> Why not parallel 4 resistors which have a value of 2000 ohms each?
>
> Best regards, Richard Harrison, KB5WI, resistor disndaion esrvices
==========

Because at HF and VHF, the inductance of the number of spiral track turns on the resistors needed to make a combination of such resistors purely non-resistive, must be quite small. ie., they are of low resisance values.

It is much better to use a number of series/parallel-connected low value resistors, each individual resistor with a few low-inductance spiral turns, when the objective is to obtain a purely resistive high-power impedance near to 50 ohms.

I do hope I have made myself clear.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
>

1351. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 22:22:24 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C4C949D.2939460@shaw.ca>
Source record: 150538

Mark Keith wrote:
>
> richardharrison@webtv.net (Richard Harrison) wrote in message
news:<10535-3C4C2A87-10@storefull-113.iap.bryant.webtv.net>...
> > "stnapgal" wrote:
> > "I`m just doing 100 watts CW and the flicker is annoying."
> >
> > Switching a couple of hundred watts on a circuit of 10X that capability
> > shouldn`t produce annoying flicker. The transmitter power supply has
> > some energy storage to take the edge off sudden demand. The ham with
> > flicker needs to check for a poor circuit or connections.
>
> Not only to stop dimming , but radio's don't like big voltage drops.
> Could even cause chirp and other problems in a worst case scenario.
> I'd be more worried about the radio performance than lights
> flickering. Big amps don't need that problem either. A 100w radio
> should not noticeably dim lights on average 15 amp service. I used to
> run a pair of drake twins doing 100-120 watts, and an SB-200 all on
> the same 15 amp service and had very little dimming at all that I
> could notice. I'm sure I had loads of other lower current draw stuff
> plugged in also. Thats about 600-700 watts depending... And the
> breakers we have are old also. It would be even better with fresh
> clean breakers. Running 1300-1400w on 240v , I have no dimming. Thats
> about equal to 500-600w on a 117v line I would think. Another thing to
> worry about is if the faulty line powers motor run gear like A/C's,
> refrigerators, etc, it's hard on the motors, compressors, etc. And
> being the current draw is high, where ever the high resistance
> connection is , is going to be getting quite hot. MK

Hot! Hell! I noticed smoke from my breaker box -- that's
how
I found the problem!!! In this case it was a clothes dryer!
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1352. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 22:26:51 UTC
From: ac6v <ac6v@amsat.org>
Message-ID: <3C4C95AB.ECC86875@amsat.org>
Source record: 150539

I had an FCC rep tell me that was aconsideration --- so argue with FCC --- not me

StarGazer wrote:

> Thanks for making my point. Since their are so many US hams
> all the more reason to have a much bigger phone band like
> Canada (Phone being more popular of a mode and much
> more practical) And I do a lot more CW than phone.
> The fact that ham radio is more popular in the US than Canada
> is irrelevant.
>
> ac6v wrote:
>
> > Guess it is because the FCC sez so. And it might have something to do
> > with the fact there are
> > 700,000 hams in the USA and about 65,000 in Canada. On 20 Meters - USA
> > allotment is now 150 kHz for CW/Data and 200 kHz for CW phone/image --
> > seems fair. One can operate CW in the "phone band" but few do.
> >
> > I seem to recall the USA phone privileges were expanded a few years
> > back. About 1987
> > --
> > 73 From AC6V, Rod In Oceanside, CA
> > I doubt, therefore I might be!
> > AC6V Mega Ham Index at http://ac6v.com
> > AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
> > AC6V Brag Tape at http://ac6v.com/brag.htm
> > ==========
> > StarGazer wrote:
> >
> > > .

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm

1353. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 22:30:34 UTC
From: ac6v <ac6v@amsat.org>
Message-ID: <3C4C968A.49F76879@amsat.org>
Source record: 150540

And why is yur e_mail address no good --- bounced twice now!!

ac6v wrote:

> I had an FCC rep tell me that was aconsideration --- so argue with FCC ---
> not me
>
> StarGazer wrote:
>
> > Thanks for making my point. Since their are so many US hams
> > all the more reason to have a much bigger phone band like
> > Canada (Phone being more popular of a mode and much
> > more practical) And I do a lot more CW than phone.
> > The fact that ham radio is more popular in the US than Canada
> > is irrelevant.
> >
> > ac6v wrote:
> >
> > > Guess it is because the FCC sez so. And it might have something to do
> > > with the fact there are
> > > 700,000 hams in the USA and about 65,000 in Canada. On 20 Meters - USA
> > > allotment is now 150 kHz for CW/Data and 200 kHz for CW phone/image --
> > > seems fair. One can operate CW in the "phone band" but few do.
> > >
> > > I seem to recall the USA phone privileges were expanded a few years
> > > back. About 1987
> > > --
> > > 73 From AC6V, Rod In Oceanside, CA
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> > > AC6V Brag Tape at http://ac6v.com/brag.htm
> > > ==========
> > > StarGazer wrote:
> > >
> > > > .
>
> --
> 73 From AC6V, Rod In Oceanside, CA
> I doubt, therefore I might be!
>
> AC6V Mega Ham Index at http://ac6v.com
> AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

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AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm

1354. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 22:57:44 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2i78p$10r8mq$3@ID-124126.news.dfncis.de>
Source record: 150543

A few calculations on the back of a cigarette packet, using the antenna's overall dimensions, will show up or disprove any extravagent performance claims.

Let's have some figures or give up smoking !

Otherwise you fall into the category of applicants for patents of perpetual motion machines.

1355. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 23:02:11 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201211502.1adf9345@posting.google.com>
Source record: 150541

Richard Clark <kb7qhc@attbi.com> wrote in message
news:<64lo4u4l7jgtt3fg4ic0tcae25o2ppn7v4@4ax.com>...
>
> >>
> >> If the metal isn't resonant, and it isn't dissipative, then it is
> >> transparent. Since it doesn't enclose you, it cannot shield you. The
> >> wild card here is you do not specify "near" above. Is your antenna
> >> butt up against it, or 8 feet away?
> >>
> >This metal door is about 5-6 feet from the antenna. It's as tall as
> >the antenna and MUCH wider.
>
> Well at 5 - 6 feet, it is roughly halfwave away. That is enough to
> disturb the feedpoint Z, but the dynamics of shielding are not total
> (at least not like the effect of the standard reflector element).
> This should be simply resolved by moving the antenna in experiments
> (your being at ground level should offer you enough variation to do
> that). Remember to separate the feedpoint perturbation from radiation
> coverage problems, they are two loosely related issues.
>
5-6 feet is MUCH less than a half wavelength on HF. I'm wondering if
having this much metal at such close range on HF is a major problem.
>
> What with the dot.com failures, many of those RF opportunities were
> buried in the collapse. Seattle had many RF offerings over the end of
> the 90's MANY! This is in comparison to 10 years earlier when RF
> engineering in this region was found only in the big corporations
> (like Boeing) and maybe one independent research house. I know,
> because I was part of a spread spectrum design back then. Nearly
> every one of the recent activity was driven with cellular telephone
> (AT&T Wireless, this is the home of Craig McCaw's cellular empire
> after all), or cellular internet connectivity (like Ricochet).
>
I am only placing minimal emphasis on telecommunications companies.
I'm putting most of my efforts into defense-related companies and
companies that could supply defense companies (components). I know
there will always be demand for antenna, RF, and microwave engineers
in multiple industries. (Fiber optic engineering, my old area, is
primarily used in telecommunications.)

Jason Hsu, AG4DG
jason_hsu_802701@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

1356. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-21 23:39:40 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C4CA6BC.EF87884B@IEEE.org>
Source record: 150544

Richard Harrison wrote:
>
> Doug finds 1/2-watt carbon composition resistors but needs 2-watt
> resistors with a value of 500 ohms,
>
> Why not parallel 4 resistors which have a value of 2000 ohms each?

Or (two 1/2W 500 ohm resistors in parallel) in series with (two 1/2W
500 ohm resistors in parallel)?
--
cheers, CAM http://www.qsl.net/w5dxp

1357. Re: Problems operating HF: How much would these improvements help?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 00:29:34 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <2t8p4u0je9098op1cn013fftl44oenafe4@4ax.com>
Source record: 150545

On 21 Jan 2002 15:02:11 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>Richard Clark <kb7qhc@attbi.com> wrote in message
news:<64lo4u4l7jgtt3fg4ic0tcae25o2ppn7v4@4ax.com>...
>>
>> >>
>> >> If the metal isn't resonant, and it isn't dissipative, then it is
>> >> transparent. Since it doesn't enclose you, it cannot shield you. The
>> >> wild card here is you do not specify "near" above. Is your antenna
>> >> butt up against it, or 8 feet away?
>> >>
>> >This metal door is about 5-6 feet from the antenna. It's as tall as
>> >the antenna and MUCH wider.
>>
>> Well at 5 - 6 feet, it is roughly halfwave away. That is enough to
>> disturb the feedpoint Z, but the dynamics of shielding are not total
>> (at least not like the effect of the standard reflector element).
>> This should be simply resolved by moving the antenna in experiments
>> (your being at ground level should offer you enough variation to do
>> that). Remember to separate the feedpoint perturbation from radiation
>> coverage problems, they are two loosely related issues.
>>
>5-6 feet is MUCH less than a half wavelength on HF. I'm wondering if
>having this much metal at such close range on HF is a major problem.

Only if you cannot tune it out. As far as the radiation pattern goes,
it doesn't matter a whit to the other guy. It probably wouldn't
matter if you couldn't tune it out (except for the foldback). If it
is that strong an influence, use IT as the antenna (or at least as a
counterpoise).

You shouldn't mix your discussion of problems so indiscriminately.
The only frequency you've offered was for 2M and tied that very
strongly to line of sight and repeaters - the mention of HF has been
unspecified beyond phonetics and even there in the context of repeater
operation. The voice circuits are wholly separate and different for
VHF/UHF and HF in a mutliband rig. About the only thing you can
confirm is you are talking into the right side of the mike.
Similarly, the antennas mentioned were a mag mount, HT antenna, and
pocket J-Pole (any suggestion of HF?). You call it an antenna farm,
and then later qualify with
>Also, since nobody else would have access to my balcony or
>even close-up visibility of it, I would be able to leave my antenna
>outside 24/7.

One antenna?

>Since ham radio is an investment in my career
>as well as my hobby, I am willing to pay a higher monthly rent for a
>less miserable QTH.
You have written nothing to suggest any miserable characteristics for HF (other than phonetics), but you have pined away about line of sight (hardly a useful topic for HF). Without considerable investment in a tower, vertical with ground field, and/or finding lakefront property, talk of elevation hardly matters at HF and then only if the land rises 20 degrees above the horizon. You aren't going to launch much power below this angle without that aforementioned investment.

Jason, the first lesson of engineering is specification - especially for problems. You seriously need to brush up on this fundamental. When I taught HF systems in the Navy, the six step troubleshooting method (a formal specification of the problem) was drilled into every tech. Critical missions could not afford for problems to persist through browsing circuit points with an O'scope or meter in the hope of discovering the problem. In this hiring environment, you cannot afford to be without the skill of a tech. No successful engineer (unless you aspire to sales or marketing of fractals, EH's, or CFA's) lacks this skill because the commercial world is more cut-throat than the battlefield - the only difference is the red that flows is on the ledger. This difference glares in discussion of those same fractals, EH's and CFA's in other threads where fantasy, hopes, and wishes dominate experiance. Any of my shipborn students (excellant techs, all) would've found a way to stumble and lose these dummy loads overboard during installation.

73's
Richard Clark, KB7QHC

1358. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 01:12:41 UTC
From: Zoran Brlecic <WA7AA@attbi.com>
Message-ID: <3C4CBC88.EACF3B6C@attbi.com>
Source record: 150546

Richard Harrison wrote:

> It makes little sense to use CW in the age of satellites

????????

So when the S/N ratio on the bands drop down to the level where it's not possible to receive SSB anymore, we should all switch to satellites, is that what you're saying? Or maybe we should all turn in our licenses and use cellphones and Internet?

I don't follow your logic.

73 ..... Zoran WA7AA

1359. Re: antenna termination resistors?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 01:27:41 UTC
From: richardharrison@webtv.net
Message-ID: <28164-3C4CC00D-32@storefull-114.iap.bryant.webtv.net>
Source record: 150547

The type of carbon resistor I usually find is a cylindrical carbon composition with an electrode at each end. As the size of resistors of a given wattage doesn`t vary much with the resistance value, I suppose the resistivity of the carbon composition varies with the resistance val;ue.

I suspect inductance increases with length of a lossy conductor and decreases with the conductor`s cross-section. That`s why I suggested resistors in parallel rather than in series to get the dissipation needed for the application.

If we were concerned with voltage breakdown, we might want to place resistors in series to get the maximum power needed.

Best regards, Richard Hsarrison, KB5WZI

1360. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 01:44:27 UTC
From: richardharrison@webtv.net
Message-ID: <28163-3C4CC3FB-73@storefull-114.iap.bryant.webtv.net>
Source record: 150548

Zoran, WA7AA wrote:
"I don`t follow your logic."

Of course not. Zoran obviously chooses CW as his mode of last resort, if not his mode of first resort. So, he may as well mount his horse and head out for the freeway.

Best regards, Richard Harrison, KB5WZI

1361. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 03:04:18 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C4CD6B2.7060107@europa.com>
Source record: 150549

Hi David,

David Robbins wrote:

> Galvanized electric fence wire is a poor choice. In many environments it
> will corrode through the thin zink very quickly and then rust. It is also
> not a very good steel, it takes very little flexing to break it. I would
> not use it for antennas any place where ice or high winds were expected, nor
> in corrosive environments (salt air or industrial areas). For a long
> antenna like a 160m dipole i would invest in a decent copperweld, flexweave,
> or another wire meant to be used for long spans.

I've already bought the antenna that is made of the wire, but
that's good to know. I'm not in a corrosive environment, although
being in the Northwest, we do get our share of rain. I'll keep an
eye on it and if it kinks and breaks or starts to corrode (and
assuming the antenna works ok) I'll replace the wire parts with
copper clad or something a little more durable. I got it fairly
cheap and at 125' I'll just be able to get it up. I'm not sure how
much I'll be working 160 meters so it's a cheap experiment.

Thanks for the info.

Mike

--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1362. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 03:10:27 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C4CD823.2080606@europa.com>
Source record: 150550

Hi Jim,

JLB wrote:

>
> I have also used aluminum electric fence wire. It is remarkably
> durable.

As I said to David, I got it fairly cheaply and if I have any problems with it over time I can replace the wire part with better material. Assuming the antenna works decent and I find I work 160 meters enough to keep it up.

>
> If you want to buy new wire, I think electric fence wire is the
> cheapest you can get (excluding 'new surplus', that is)

If the coils work, I don't mind buying some good quality copper weld or something like that. I just hate buying a Alpha Delta or something else like that at the price they go for and find out it doesn't work very well or 160 isn't as interesting as I thought it would be. Mostly I'm getting on 160 so I can talk to my dad, who is about 250 miles East of me. He likes 160 and it's a lot less congested than some of the other bands we can talk on at night.

Thanks for the info, Jim.

>
> P.S. Personally, I prefer American Cocker Spaniels. They fit on your

> lap a lot better. I can even get two at once if I try ;-)

Our Bouviers think they are lap dogs. We have them lining up to get their backs scratched and they think they have to be in our laps for the best scratching. We've got 7 of them and it's when 2 or 3 of them think they have to be in your lap at the same time that it gets interesting. ;D

Mike
--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1363. Condo Isoloop RFI problems - advice? *see web page photos*

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 03:37:16 UTC
From: tegwilym@hotmail.com
Message-ID: <efb6d1ef.0201211937.26e97907@posting.google.com>
Source record: 150551

Hello,
I have been experimenting with an isoloop on HF on my townhouse patio.
I was told that if I put the antenna in the vertical position that
the RFI would be reduced. I tried that, but didn't notice much
change.
See this web page for some photos and description of the setup:

http://www.geocities.com/tegwilym/ham/

The loop seems to tune up pretty good with a low SWR, but once I hit
that point (even with just 20 watts) it gets into everything. I want
to clean this up so I'm not blasting the neighbors and screwing up
their phone, TV, radio...etc. then risk getting caught! Of course
being in a condo, I have to deal with all the usual rules.

I just realized that I can probably ground the station pretty easily
since it is next to the water heater pipes. I haven't tried that yet.

Any ideas?

Thanks!

Tom KA7VIK

1364. Re: A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 03:43:28 UTC
From: Cliff Holloway <cholloway14@attbi.com>
Message-ID: <Ad538.14701$CW3.132357@rwcrnsc52.ops.asp.att.net>
Source record: 150552

Kevin, ditch the radials and trim the top down to resonate the antenna to around 28.5 (center) (depending on your installation), while watching 15m for the best match.
73 Cliff N0HC
"Keven R. Matthews" <mail@keven.worldonline.co.uk> wrote in message news:3c4bfbbb_2@mk-nntp-1.news.uk.worldonline.com...
> Thanks for the helpful advice guys. I wont pursue using the antenna on 40
> metres any further. The only other HF band I have at the moment is 15
> metres (10 not permitted under my licence class) as I said it worked well
> giving me fast results but there is an awful lot of static S4 steady 24
> hours a day. Without an ATU the SWR reads a unhealthy 3:1 at the moment
> across 15 metres as it is still at its standard 10 / 11 metre configuration.
> Obviously with the ATU I can acheive a 'reading' of 1:1.
>
> Would I benefit from changing the radials or adjusting the tuning rings on
> the antenna?
>
> How did those of you who use the antenna on 15 peak it up?
>
> Thanks again for your advice
>
> Keven G7UUD / M3UUD
> mail@keven.worldonline.co.uk
>
>
>
>
>
>
> "Keven R. Matthews" <mail@keven.worldonline.co.uk> wrote in message
> news:3c4b5de4_1@mk-nntp-1.news.uk.worldonline.com...
> > Antron 99 (Solarcon A-99)
> >
> > OK I know its heritage is as a CB antenna.. However as I just got HF
> > privledges last week I was VERY keen to get on the air! (10 years on VHF)
> I
> > already had this antenna up for listening on 10 metres and it says in the
> > booklet that with an ATU it would be OK down to 40 metres.
> > It is currently about 10 metres off the ground and has the standard A-99
> > radials (for 10 / 11metres). With the ATU I can easily get a good
> impedance

> > match indicated by a low vswr reading for 15 metres and had immediate
> good
> > results with 5 countries in 2 hours, I was happy. However 40 metres is
a
> > different story and whilst I can hear plenty and with some difficulty
> obtain
> > a 'match' for a low vswr reading I have yet to work anyone at all either
> > daytime or nightime. Has anyone any experience of this antenna on HF
and
> 40
> > metres in particular? Would it help if I was to remove a couple of those
> > 3/8" fitting screw in radials and replace them with some wire radials of
> > different lengths or perhaps increase or decrease the height . Any
> > recommedations / advice welcome (other than get or make another
aerial!)
> >
> > Thanks &
> >
> > 73 de keven
> > G7UUD / M3UUD
> >
> > (M3=uk foundation licence 10watts)
> >
> >
> >
> >
>
>

1365. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 04:12:12 UTC
From: loloken <loloken@worldnet.att.net>
Message-ID: <wE538.113073$fe1.2104164@bgtnsc06-news.ops.worldnet.att.net>
Source record: 150553

"Crt4239" <crt4239@aol.com> wrote in message
news:20020121223458.22658.00002903@mb-mi.aol.com...
> In honor of Dr. Martin Luther King Day, I am reposting my brief honest
> editorial in his honor. Any THOUGHTFUL (yes, that means non-racist)
replies
> are certainly welcome.
> *******
You have to be joking. Dumbing down exams to admit an unqualified person
will cause serious, possibly irreparable harm to the hobby. If any person
really wants to get their ticket, trust me they will study and get it. Ideas
such as yours do minorities a great disservice since you apparently feel
they are not intelligent enough to do anything on their own. People such as
yourself feel you must intervene on their behalf. People such as yourself
have caused untold damage to innumerable American institutions. People such
as yourself should MIND YOUR OWN BUSINESS.

1366. Re: cavity filters?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 04:29:08 UTC
From: richardharrison@webtv.net
Message-ID: <19598-3C4CEA94-105@storefull-117.iap.bryant.webtv.net>
Source record: 150555

Robert Bukowski wrote:
"Please, can someone tell me what is the translation for "cavity filter"?

In any language, you are likely to find practical information on cavity filters in VHF/UHF repeater books.

Best regards, Richard Harrison, KB5WZI

1367. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 04:30:48 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <6nqp4u0a01m4kftgll4o2j259rtu2k1h3f@4ax.com>
Source record: 150554

On Mon, 21 Jan 2002 19:44:27 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Zoran, WA7AA wrote:
>"I don`t follow your logic."
>
>Of course not. Zoran obviously chooses CW as his mode of last resort, if
>not his mode of first resort. So, he may as well mount his horse and
>head out for the freeway.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Obviously you haven't driven in Seattle traffic. A horse would get
you anywhere quicker in a walk.

73's
Richard Clark, KB7QHC

1368. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 04:42:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2iqt1$11sg3r$1@ID-124126.news.dfncis.de>
Source record: 150556

Dear Mike, do stop worrying. You won't have the slightest difficulty talking to your dad at a distance of 250 miles on the 160m band, in darkness, at any time of the sunspot cycle, using 50 to 100 watts into any reasonable length of any sort of junk wire. 250 miles is one bounce, up and down, off the good old night-time F-layer. With a bit of luck you might even catch the E-layer just before sunset and just after sunrise. Fascinating at dawn listening to the F changing to the E and then dropping out altogether.

Use a dipole, length = 210 feet or more, or an inverted-L, overall length = 110 feet or more with a dozen shallow buried radials in an average sort of ground.

In full sunlight don't bother switching on the rig unless, perhaps, you can run a kilowatt or more and your local noise level is better than S1 or S2. In full sunlight the E-layer is doing its job at full strength but the D-layer absorbs 160m waves on their way up to the E-layer and again absorbs what's left of the waves on their way down. And 160m groundwaves never get as far 250 miles unless over sea water.

My regards to your dad.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Mike Jordan <mjordan@europa.com> wrote in message
news:3C4CD823.2080606@europa.com...
> Hi Jim,
>
> JLB wrote:
>
> >
> > I have also used aluminum electric fence wire. It is remarkably
> > durable.
>
>
> As I said to David, I got it fairly cheaply and if I have any
> problems with it over time I can replace the wire part with better
> material. Assuming the antenna works decent and I find I work 160
> meters enough to keep it up.
>
> >
> > If you want to buy new wire, I think electric fence wire is the
> > cheapest you can get (excluding 'new surplus', that is)

>
>
> If the coils work, I don't mind buying some good quality copper
> weld or something like that. I just hate buying a Alpha Delta or
> something else like that at the price they go for and find out it
> doesn't work very well or 160 isn't as interesting as I thought it
> would be. Mostly I'm getting on 160 so I can talk to my dad, who
> is about 250 miles East of me. He likes 160 and it's a lot less
> congested than some of the other bands we can talk on at night.
>
> Thanks for the info, Jim.
>
>
> >
> > P.S. Personally, I prefer American Cocker Spaniels. They fit on your
>
> > lap a lot better. I can even get two at once if I try ;-)
>
>
>
> Our Bouviers think they are lap dogs. We have them lining up to
> get their backs scratched and they think they have to be in our laps
> for the best scratching. We've got 7 of them and it's when 2 or 3
> of them think they have to be in your lap at the same time that it
> gets interesting. ;D
>
> Mike
> --
> Hillsboro, Oregon
> Bouvier des Flandres - Herding & Working Dogs
> http://www.europa.com/~mjordan - Pictures & Info on Bouviers
>
>

1369. Re: Origins of Log Periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 05:24:02 UTC
From: mike.luther@ziplog.com
Message-ID: <u4ptripr71669d@corp.supernews.com>
Source record: 150557

In <20020121113946.09758.00002229@mb-cq.aol.com>, fractenna@aol.com (Fractenna) writes:

>I'm having fun sleuthing the origins of the log periodic approach to antenna
>design. I have a pretty good sense of the design origins in the US (at Collins
>a la Isbell, DuHamel and others) but have been trying to get some details on
>WWII era efforts in England (which, if true, pre-date the stateside work).

>Anyone know details? If so, kindly e-mail, and thanks!

>73,
>Chip N1IR

Chip ..

I'm not at my bookshelf, but I think you'll find a complete little section on a fixed log-periodic horn type array in the Jasek 'bible' if I recall correctly. It's either there or in one of the other old time books on antenna engineering on the shelf. Maybe it's in or also in the little old AT&T radio engineering handbook I also have, that little gray one from very long ago and far away. I fergit.

This antenna was first used, if memory is right, as part of the old World War two efforts in the HF radar installations that used the then-new 304TL's in pulsed service to around 30 Mhz and down in frequency as part of the early experiments and initial work on radar looking toward Germany over the channel. If my memory is correct, it describes these fixed direction mast supported arrays as being installed overlooking the Cliffs of Dover. The depiction is a large lowest frequency horizontal pair of wires, two of them forming the top and bottom of a wedge shaped plane of shorter and shorter elements. The top element group of these moved downward in elevation to a point. The bottom element group of these moved upwards to that same point. It created this giant wire beam antenna which was fed from the pointed end which, obviously, was the high frequency end of the array.

If I recall correctly, another smaller version of this approach was a vertical aray which started out tall and got shorter down to a low place at the high frequency end. It, too was fed from that low height point and fire direction, as in the above array, was toward the point. I think gain and other math information was presented for them. I think the text cited that these were in somewhat common use for a few broadcasting sites.

I think it's all under the general heading of travelling wave antennas, which also included a segment or section on the Hadley Fishbone TW antennas as well. Memory says that this antenna was cited in the book as being in favored use by RCA for paths from India to the USA during

World War II and that it was favored by RCA because it had more gain per acre of ground space than the more popular rhombics of the time.

Without going back to the book(s) and being able to look as I type this, I can't cite text, page and so on for you. nor the actual facts as to date of data that is offered.

At one time I even took the times to draw up such LP horn arrays for use at the W5WQN fixed site, based on the designe of placing four such wire monstrosities on each horizontal face of a full sized four square for 80 meters as supports. As horizontally polarized devices, they would have been somewhat (?) minimally invasive into the operating characteristics of the 4 square array, or so I initially thought. Obviously, once you look at the designs, this would have been a 40 meter and upward to 10 meter technique.

Aside from the work to try it I abandoned the idea for two basic reasons. First, if the four square were in the intended fire directions, the fixed log periodic horns would have not been where we wanted to go! Secondly, the height above ground was far too low to produce the low angle radiation desired, as I learned from plotting the things on K6STI's code. My QTH is not the White Cliffs of Dover!

Obviously, I could turn the horns to vertical mode! But in doing that the real intrusion into the 80 meter four square would have been terrible as to loading effects.

Thus the idea died a probably very worthwhile death. Your question involves very worthwhile reading trip into all this for anyone really interested in antennas of all kinds. It deserves a public answer, in my hope to help others here... not a private one.

--> Sleep well; OS/2's still awake! ;)

W5WQN
Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

1370. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 05:37:04 UTC
From: mcduffie@xactcom.net
Message-ID: <hjup4uomd5obtf5au0rp9n7t7ah1q7uvqi@4ax.com>
Source record: 150560

On Tue, 22 Jan 2002 04:12:12 GMT, "loloken" <loloken@worldnet.att.net>
wrote:

> You have to be joking.

Relax...it's just a troll. Read it again.

gm
--
There is no x in my ISPs domain name.

1371. Re: Origins of Log Periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 05:44:18 UTC
From: fractenna@aol.com
Message-ID: <20020122004418.23732.00000797@mb-mk.aol.com>
Source record: 150558

>In <20020121113946.09758.00002229@mb-cq.aol.com>, fractenna@aol.com
>(Fractenna) writes:
>
>>I'm having fun sleuthing the origins of the log periodic approach to antenna
>>design. I have a pretty good sense of the design origins in the US (at
>Collins
>>a la Isbell, DuHamel and others) but have been trying to get some details on
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>>Anyone know details? If so, kindly e-mail, and thanks!
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>>73,
>>Chip N1IR
>
>Chip ..
>
>I'm not at my bookshelf, but I think you'll find a complete little
>section on a fixed log-periodic horn type array in the Jasek 'bible' if
>I recall correctly. It's either there or in one of the other old time
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>one from very long ago and far away. I fergit.
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>then-new 304TL's in pulsed service to around 30 Mhz and down in frequency
>as part of the early experiments and initial work on radar looking toward
>Germany over the channel. If my memory is correct, it describes these
>fixed direction mast supported arrays as being installed overlooking the
>Cliffs of Dover. The depiction is a large lowest frequency horizontal
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>moved downward in elevation to a point. The bottom element group of
>these moved upwards to that same point. It created this giant wire beam
>antenna which was fed from the pointed end which, obviously, was the
>high frequency end of the array.
>
>If I recall correctly, another smaller version of this approach was a
>vertical aray which started out tall and got shorter down to a low place
>at the high frequency end. It, too was fed from that low height point
>and fire direction, as in the above array, was toward the point. I
>think gain and other math information was presented for them. I think
>the text cited that these were in somewhat common use for a few
>broadcasting sites.

>
>I think it's all under the general heading of travelling wave antennas,
>which also included a segment or section on the Hadley Fishbone TW
>antennas as well. Memory says that this antenna was cited in the book
>as being in favored use by RCA for paths from India to the USA during
>World War II and that it was favored by RCA because it had more gain per
>acre of ground space than the more popular rhombics of the time.
>
>Without going back to the book(s) and being able to look as I type
>this, I can't cite text, page and so on for you. nor the actual facts as
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>
>At one time I even took the times to draw up such LP horn arrays for use
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>monstrosities on each horizontal face of a full sized four square for 80
>meters as supports. As horizontally polarized devices, they would have
>been somewhat (?) minimally invasive into the operating characteristics
>of the 4 square array, or so I initially thought. Obviously, once you
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>
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>reasons. First, if the four square were in the intended fire
>directions, the fixed log periodic horns would have not been where we
>wanted to go! Secondly, the height above ground was far too low to
>produce the low angle radiation desired, as I learned from plotting the
>things on K6STI's code. My QTH is not the White Cliffs of Dover!
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>the real intrusion into the 80 meter four square would have been
>terrible as to loading effects.
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>involves very worthwhile reading trip into all this for anyone really
>interested in antennas of all kinds. It deserves a public answer, in my
>hope to help others here... not a private one.
>
>
>--> Sleep well; OS/2's still awake! ;)
>
>W5WQN
>Mike.Luther@ziplog.com
>Mike.Luther@f3001.n117.z1.fidonet.org
>

Thanks Mike, for that wonderful description!

73,
Chip N1IR

1372. 160M on R-5 Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 06:04:21 UTC
From: Richard Valentine <rwvNOSPAM@attbi.com>
Message-ID: <Fh738.9128$Qs4.25401@rwcrnsc53>
Source record: 150559

I was wondering if anyone out there knows if I can damage the matching box on an R-5 Vertical by forcing 160Meters on the antenna? I've tried it, after getting a 1:1 SWR through an antenna tuner and I kept the power low (10Watts AM). Who knows where or how the signal radiates, but it actually worked. Made some AM contacts, albeit weak. This is strictly a temporary situation, with a long story behind it. My only concern is, In the meantime will I toast the Matching box on the antenna, or no worries? Till now I've heard varying opinions. Thanks, Rick.
N1SQJ

1373. Re: Condo Isoloop RFI problems - advice? *see web page photos*

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 06:17:30 UTC
From: Cliff Holloway <cholloway14@attbi.com>
Message-ID: <_t738.4163$l61.17449@rwcrnsc54>
Source record: 150561

Hi Tom ....a few thoughts...(not in any order)
1. Yes, ground to the cold water pipe inlet to the water heater, should be OK but a 8 ft rod in the ground would be better.
2. Build a balum, (might help, but not supposed to need one) Wind the coax at the foot of the loop (on the ground) ..8 turns x 6 - 8 inches.
3. In the middle picture the loop is positioned the wrong way, point the broadside (you should see the full loop not the edge from the TV (if you could see it)) of the loop (very fine adj..experiment) toward your TV (for testing) later towards your nearest neighbor, also experiment with different heights, the center of the loop is where the "null" comes from, widening (like a cone) as it goes farther away.
4. Close to the fence (4" or so) is fine.
5. Loop works fine 2 inches off ground if necessary (for stealth).
Also you could build a 4 ft x 4 ft decorative box (fake planter ect) with glue (no nails..screws) for the loop with no noticeable drop in efficiency.
6. Use higher quality coax (mini 8) that has much better shielding.
7. Check outside that there isn't electrical conduit or other metal for the loop to magnetically couple to and feed into you condo.
8. Try using 12 & 17 meters..very friendly bands with Very low TVI - RFI.
9. Where is your over the air TV antenna? Is it feed with RG-9? Is there a common complex TV antenna?

73 & Good Luck
Cliff N0HC
"Tom" <tegwilym@hotmail.com> wrote in message
news:efb6d1ef.0201211937.26e97907@posting.google.com...
> Hello,
> I have been experimenting with an isoloop on HF on my townhouse patio.
> I was told that if I put the antenna in the vertical position that
> the RFI would be reduced. I tried that, but didn't notice much
> change.
> See this web page for some photos and description of the setup:
>
> http://www.geocities.com/tegwilym/ham/
>
> The loop seems to tune up pretty good with a low SWR, but once I hit
> that point (even with just 20 watts) it gets into everything. I want
> to clean this up so I'm not blasting the neighbors and screwing up
> their phone, TV, radio...etc. then risk getting caught! Of course
> being in a condo, I have to deal with all the usual rules.
>
> I just realized that I can probably ground the station pretty easily
> since it is next to the water heater pipes. I haven't tried that yet.
>

> Any ideas?
>
> Thanks!
>
> Tom KA7VIK

1374. Re: cavity filters?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 06:21:08 UTC
From: Andre&#65533; Knott <andree.knott@t-online.de>
Message-ID: <24b587dc9dcbc9ad5dc18b602d1b96ae.59889@mygate.mailgate.org>
Source record: 150562

Hi Robert, the German translation for "cavity filter" is
"Topfkreisfilter".

With greetings from Germany
Andreï¿½ Knott DD3LY

"Robert Bukowski" <robert.61@gmx.at> wrote in message
news:3c4aa462$0$30448$3b214f66@news.univie.ac.at...

> Please, can someone tell me what is the German translation
> for "cavity filter"?
> Currently I can find a lot of information about that filters but only
> in English. As I am a newcomer and a native German speaker
> it is very difficult to understand.
> Thx
> Robert

--
Posted via Mailgate.ORG Server - http://www.Mailgate.ORG

1375. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 07:02:02 UTC
From: Zoran Brlecic <WA7AA@attbi.com>
Message-ID: <3C4D0E68.CFB1964B@attbi.com>
Source record: 150563

Richard Harrison wrote:

> > "I don`t follow your logic."
>
> Of course not. Zoran obviously chooses CW as his mode of last resort, if
> not his mode of first resort. So, he may as well mount his horse and
> head out for the freeway.

I see you chose to disregard my questions. Consider for a moment my example (and I'm sure I'm not an exception - on the contrary): I currently live in a condo where no antennas are allowed, but I did manage to illegally string a 12 m loop on the balcony, approximately 10 feet above ground.

Now, how far do you think SSB would get me even if I were the only station in the world replying to the DX? Don't know? I worked about three times more DXCC entities on CW than on SSB. And now you're gonna tell me that is because CW is "my mode of first and last resort". Most of the DX that I worked was buried in the noise and barely audible, but you would have me believe that somehow all of this doesn't matter. Have you ever had a CW QSO?

I know you have contempt for CW but that is your problem, not everyone's. I am trying to understand what has "the age of satellites" got to do with CW. Therefore, it is only fair to ask the question - do you expect us to use satellites when the spots are down and condx are below marginal for SSB work? It is also not much of a stretch to ask why stop there - if one wants to be on the cutting edge, one should abandon amateur radio altogether in favor of more reliable and much faster fiber optic communication.

I worked CW-SSB about 50-50 when I had better antenna setups (and will again one day) and I equally enjoyed both of them. If you don't like CW - fine with me, but don't pretend that somehow your handicap makes you a cutting edge ham.

I like my horse alright - and as Richard pointed out, very often a horse beats your souped up SUVs without so much as breaking a sweat.

73 ..... Zoran WA7AA

1376. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 09:22:00 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <3C4D2F37.42CE6B7D@agilent.com>
Source record: 150384

Richard Harrison wrote:
>
>
>
> It makes little sense to use CW in the age of satellites,
>
>

I know what you mean. While we're on that subject, it makes little sense to use:

Sails in the age of boats with motors,
Pianos in the age of Yamaha synthesizers,
Cotton in the age of polyester,
Gas stoves in the age of microwave ovens,
Hardy Boys in the age of Harry Potter,
Cash in the age of credit cards,
Single sideband in the age of orthogonal frequency division multiplexing,
The local hardware store in the age of Wal-Mart,
Religion in the age of paganism,
1965 Mustangs in the age of 2002 Suburbans,
Eyeglasses in the age of laser surgery,
I Love Lucy in the age of Friends,
Actually going shopping in the age of buying on-line,
Hand-quilting in the age of sewing machines,
and Books in the age of word processors.

Anything old is bad. Anything new is not only better, but should replace the old, and nobody should use the old anymore. Cuz it's old. Anyone who does is just, well, old-fashioned, and is holding back the hobby from progressing. How can we progress with a bunch of old guys still using CW on our bands?

1377. Re: 160M on R-5 Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 12:37:29 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <klpNPBVwK6meGdB=Wk8QoC9Hx4Kt@4ax.com>
Source record: 150564

"Richard Valentine" <rwvNOSPAM@attbi.com> wrote:

>
>I was wondering if anyone out there knows if I can damage the matching box
>on an R-5 Vertical by forcing 160Meters on the antenna? I've tried it, after
>getting a 1:1 SWR through an antenna tuner and I kept the power low (10Watts
>AM). Who knows where or how the signal radiates, but it actually worked.
>Made some AM contacts, albeit weak. This is strictly a temporary situation,
>with a long story behind it. My only concern is, In the meantime will I
>toast the Matching box on the antenna, or no worries? Till now I've heard
>varying opinions. Thanks, Rick.
>N1SQJ

I don't know if you will toast the matching box, but I do know that Cushcraft no longer supplies parts for the R5. If you toast it, it's gone, unless you can rebuild it yourself. Might be easier to load up something else with your tuner.

(Of course, you don't want to toast your tuner, either :-)

Bob
k5qwg
>
>------------
>
>
>

1378. Directional remote control antenna - Pls help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 14:01:49 UTC
From: "Mike W." <mike@home>
Message-ID: <hhe38.575$8i2.18355@news2.mts.net>
Source record: 150565

Anybody/everybody:

I'm having trouble coming up with a transmitter antenna and "directional-shielding" design for a position-feedback project I'm working on. The problem is that I'd like to use the 75.41MHz-75.99MHz license free (remote control) band which has a requirement that : "An antenna gain not exceeding that of a half wave dipole shall be used". I need directivity from the transmitter in order to limit reflections from nearby objects (which will result in "multi-path distortion" of the apparent signal direction at the receiver). The power limit set for this band (.75 watts) should be way more than I'm going to need for my 100m maximum range, extremely small bandwidth (i.e. CW emission) channel. The plan is to comply with the antenna requirement then use shielding to absorb (rather than redirect) energy which is being emitted in a wrong direction.

I want to radiate a beam which I can rotate from +90 to -90 degrees around the horizon using a rotating platter and stepper motor. A few degrees horizontal and vertical beamwidth (with virtually no side lobes) and 40dB or 50dB front to back ratio would be ideal. At one point I had been picturing a three element "cubical-quad / yagi" of some sort but the polarization of the magnetic component was wrong for the receiving loops (see below). I had decided a dish (or dish segment) would not be practical at 75.55MHz but this was also an initial idea. Both these antennas have a gain greatly exceeding that of a half-wave dipole (i.e. would be illegal) but this is the radiation pattern I'm after.

I have an additional consideration in that the signal is being received by electrostaticly shielded small-loop antennas oriented "edge-on" to the transmitter (within +/- 18 degrees). A loop is a single 12 inch turn (i.e. .08 wavelength) of 12 gauge copper wire suspended inside 1/2" diameter copper tubing by rubber grommets. The tubing is grounded at a single point to provide electrostatic shielding for sharper directional response. This is an adaptation the "Radio Direction Finding Antenna" described in the ARRL handbook (1999, etc editions).

The best idea I've come up with is to use a single turn loop for the transmitting antenna as well. The loop would be mounted on the rotating platter so it could be turned to align the transmitting and receiving antennas in the same vertical plane (i.e. like the primary and secondary windings in a transformer). This would confine the emission considerably in the horizontal direction and would direct a large amount of energy skyward (where reflections aren't a problem) so I'm not in violation of the gain limitation. Just what is the gain of a transmitting loop (either small-loop or 1/4 wavelength) relative to a half-wave dipole? How would I absorb the energy that would be emitted in the opposite direction and in the

substantial front and back side lobes apparent in the radiation pattern for this type of antenna? Anyone got a better idea?

Suggestion appreciated,

Mike Whitfield (VA4MGW)

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*** --oOOOo---(_)---oOOOo-- ***

1379. WTB:military antennas and related parts and stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 14:08:30 UTC
From: fumper@aol.com
Message-ID: <20020122090830.14200.00006091@mb-cj.aol.com>
Source record: 150566

I collect and use military portable antennas. Got any green bag stuff?
Email me

Thanx Steve

1380. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 14:25:45 UTC
From: KB9TMP <NoMoreSpam4Me@antisocial.com>
Message-ID: <a2jt0k$p6s$1@dagobah.blueriver.net>
Source record: 150369

"Crt4239" <crt4239@aol.com> wrote in message
news:20020121223458.22658.00002903@mb-mi.aol.com...
> In honor of Dr. Martin Luther King Day, I am reposting my brief honest
> editorial in his honor. Any THOUGHTFUL (yes, that means non-racist) replies
> are certainly welcome.
> *******
> "Anyone who attends a ham club meeting would have to agree that certain
> minorities, especially, African Americans, are grossly underrepresented in our
> hobby. I believe, and I think many of you will agree, that perhaps we should
> remedy the effects of past discrimination by some sort of affirmative action
> allowing underrepresented minorities a FAIR OPPORTUNITY to get their tickets.
> Much has recently been reported in the last decade of growing "electronic
> divide" in the percentage of white versus black households having computers and
> Internet access. You would all have to agree that this "electronic divide" has
> ALWAYS been in the amateur radio hobby. This would be a perfect time in our
> country's history, especially in light of the dwindling numbers of potential
> hams lost to the computer hobbyists, to begin thinking about policies that
> might create real interest in our great hobby. My ideas of remedies for past
> discrimination include DROPPING THE CODE REQUIREMENT FOR MINORITY APPLICANTS
> and possibly WAIVING SOME SECTIONS OF THE EXAMS. Such remedies are a way to
> ensure an integrated society of amateurs and allow equal opportunity. Numerical
> goals for admission to our great hobby is necessary to integrate a hobby
> traditionally closed to minorities because of discrimination. At a time when
> our hobby needs a shot in the arm, these kind of policies might help in
> increasing our numbers and preserving our power to demand that no more of our
> frequencies be taken away. Any THOUGHTFUL replies are welcomed."
>

My family came to the USA from Scotland in the mid 1800's,
that makes me part of a minority group so when do I get the
FREE HAND OUT ?

--

'73' From KB9TMP
NCI-2385

The sum of the intelligence
on the planet is a constant;
the population is growing.
-Cole's Axiom

1381. Re: saturn 6 meter 3-ring halo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 14:42:02 UTC
From: Kent K9EZ <kwinrich@wi.rr.com>
Message-ID: <YRe38.30759$3K2.4938772@twister.kc.rr.com>
Source record: 150567

I didn't think it needed a matching network. Doesn't it have a gamma feed??

Kent, K9EZ

PS - If you get tired of playing with it, I will help take it off of your hands ;-)

"john b. hinds" <pophinds@prodigy.net> wrote in message news:zhX28.8137$Eh.1360129039@newssvr16.news.prodigy.com...
> Need instructions for making coax length matching network for this old
> antenna that has been in my basement for 40 years.
> Thanks
> John Hinds
> PopHinds@Prodigy.net
>
>

1382. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 14:50:54 UTC
From: wa8ulx@aol.com
Message-ID: <20020122095054.02061.00000597@mb-fc.aol.com>
Source record: 150568

Hell lets just issue them at Birth

1383. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 15:05:06 UTC
From: wa8ulx@aol.com
Message-ID: <20020122100506.01946.00000492@mb-fc.aol.com>
Source record: 150370

>My family came to the USA from Scotland in the mid 1800's,
>that makes me part of a minority group so when do I get the
>FREE HAND OUT ?
>
>--
>
>'73' From KB9TMP

Very soon, I understand the FCC is willing to issue them, if you provide a Welfare card, and an NCI Membership

1384. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 15:40:13 UTC
From: Dave <wd0hwx@nospamplease.swbell.net>
Message-ID: <xJf38.342$9o2.203698230@newssvr30.news.prodigy.com>
Source record: 150371

I don't know if this was meant as a joke or not. In case
it wasn't...

Do you think minorities are too dumb to pass the standard test like
everyone else? I don't! How demeaning to blacks, etc... to suggest
that they need an easier test. If I were black, I'd be offended at the
idea.

Dr. King suggested that men be judged on the content of their
character, not on the color of their skin. I doubt that he would
have agreed with this ridiculous suggestion.

Dave

"KB9TMP" <NoMoreSpam4Me@antisocial.com> wrote in message
My ideas of remedies for past
> > discrimination include DROPPING THE CODE REQUIREMENT FOR MINORITY
APPLICANTS
> > and possibly WAIVING SOME SECTIONS OF THE EXAMS.

1385. Re: WTB: hotstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 15:42:57 UTC
From: richardharrison@webtv.net
Message-ID: <10533-3C4D8881-115@storefull-113.iap.bryant.webtv.net>
Source record: 150372

Irv, VE6BP wrote:
"I would almost wager that the reason why any ham would want a hotstick would be as an antenna support."

Broadcast transmitters usually have a number of grounding sticks installed in sites where high voltage can be contacted. These are metal hooks on the end of an insulating stick. The hook is securely grounded through a stout conducting cable.

These sticks are used to temporarily short the transmitter high voltage to ground. This discharges any capacitors. The short remains in place while working on the transmitter to avoid accidental shock from inappropriate application of high voltage to the transmitter.
When the work is done, the shorting stick is removed from its high voltage connection point, and the transmitter is tested.

These sticks have also been turned around with grounded hook in hand to poke and probe at a high voltage point. This is safe regardless of the stick`s insulating properties as long as a flash doesn`t burn anybody.

Best regards, Richard Harrison, KB5WZI

1386. Re: WTB:military antennas and related parts and stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 16:35:56 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C4D94D1.14E61BAD@tampabay.rr.com>
Source record: 150373

hey steve
have you been to www.fairradio.com
they have tons of that kind of stuff for sale

Fumper wrote:

> I collect and use military portable antennas. Got any green bag stuff?
> Email me
>
> Thanx Steve

1387. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 16:53:39 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <mpdNPOkMvnPXCCBaq5SKiEJAb4GC@4ax.com>
Source record: 150374

"KB9TMP" <NoMoreSpam4Me@antisocial.com> wrote:

>
>My family came to the USA from Scotland in the mid 1800's,
>that makes me part of a minority group so when do I get the
>FREE HAND OUT ?

I don't suppose your family came over from Scotland in chains, on a
slave-trader's ship, to be sold like cattle once they arrived on these shores?

Bob
k5qwg

1388. Re: 160M on R-5 Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 17:40:24 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C4DA405.89893A1A@shaw.ca>
Source record: 150375

Richard Valentine wrote:
>
> I was wondering if anyone out there knows if I can damage the matching box
> on an R-5 Vertical by forcing 160Meters on the antenna? I've tried it, after
> getting a 1:1 SWR through an antenna tuner and I kept the power low (10Watts
> AM). Who knows where or how the signal radiates, but it actually worked.
> Made some AM contacts, albeit weak. This is strictly a temporary situation,
> with a long story behind it. My only concern is, In the meantime will I
> toast the Matching box on the antenna, or no worries? Till now I've heard
> varying opinions. Thanks, Rick.
> N1SQJ
>
> ------------

Most tuners will load a two foot antenna on any band with
little problem, but efficiency will be pretty low. As far
as the R5 is considered, I doubt that 10 watts would hurt
anything -- my R7 has an natural resonant reading at 3.52
megs, and I can work a bit with it, bit I only run a few
watts. I have another antenna for 75M anyways. I wouldn't
risk my R7 for something it was not intended to do unless
there was no alternative.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1389. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 17:42:10 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4DA469.C7F0F602@icok.net>
Source record: 150376

I doubt if his family did, but then I don't know, or
know of anyone alive to day that did either. Personally,
I think that kind of 'reasoning' is very over done, and
very much under thought. It smacks of hypocrisy and
can't be anything but demeaning to who it's applied to.
One of the 'best' ways of oppressing any group is to
destroy their pride. That's the only thing I have seen
'affirmative action' accomplish.
'Doc

1390. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 18:36:10 UTC
From: philrut1@aol.com
Message-ID: <20020122133610.00647.00001714@mb-cg.aol.com>
Source record: 150377

>
>I don't suppose your family came over from Scotland in chains, on a
>slave-trader's ship, to be sold like cattle once they arrived on these
>shores?<<

Does that make them inherently dumber?

1391. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 19:23:28 UTC
From: KB9TMP <NoMoreSpam4Me@antisocial.com>
Message-ID: <a2kef6$pp6$1@dagobah.blueriver.net>
Source record: 150378

"Bob Miller" <bamiller@texas.net> wrote in message
news:mpdNPOkMvnPXCCBaq5SKiEJAb4GC@4ax.com...
> "KB9TMP" <NoMoreSpam4Me@antisocial.com> wrote:
>
>
> >
> >My family came to the USA from Scotland in the mid 1800's,
> >that makes me part of a minority group so when do I get the
> >FREE HAND OUT ?
>
> I don't suppose your family came over from Scotland in chains, on a
> slave-trader's ship, to be sold like cattle once they arrived on these shores?
>
> Bob
> k5qwg
>

No that happened after they got here, AE chain gangs, rail road work crews,
and other pleasant forms of work provided by them (the rich) for us (the poor).

The tongue-in-cheek reply I gave has this point, the ones that the U.S. owes
are now long dead and gone and repaying a debt to their descendants won't
work. They don't need it any more than I need it. And I don't NEED it.

And no I'm not anti-black either. When it comes down to it we all are/were
immigrants here (forced or otherwise) with the exception of the native Americans
who had the whole country stolen from them. Which is worse the slavery of a
people or the genocide of a people, I think both are bad F.W.I.W.

BTW the original post was a troll to begin with!
--

'73' From KB9TMP
NCI-2385

"History repeats itself.
Historians repeat each other"
- Philip Guedalla (1920)

1392. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 20:01:23 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C4DC513.D6489EF3@IEEE.org>
Source record: 150379

KB9TMP wrote:
> And no I'm not anti-black either. When it comes down to it we all are/were
> immigrants here (forced or otherwise) with the exception of the native Americans
> who had the whole country stolen from them.

The latest archaeological evidence is that the Caucasians were here first.
The oldest known American skull is clearly Caucasian and looked like Patrick
Stewart according to The Discovery Channel.
--
cheers, CAM http://www.qsl.net/w5dxp

1393. Re: Condo Isoloop RFI problems - advice? *see web page photos*

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 20:09:04 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c4dc3d6_1@corp.newsgroups.com>
Source record: 150380

"Tom" <tegwilym@hotmail.com> wrote in message
news:efb6d1ef.0201211937.26e97907@posting.google.com...
> Hello,
> I have been experimenting with an isoloop on HF on my townhouse patio.
> I was told that if I put the antenna in the vertical position that
> the RFI would be reduced. I tried that, but didn't notice much
> change.
> See this web page for some photos and description of the setup:
>
> http://www.geocities.com/tegwilym/ham/
>
> The loop seems to tune up pretty good with a low SWR, but once I hit
> that point (even with just 20 watts) it gets into everything. I want
> to clean this up so I'm not blasting the neighbors and screwing up
> their phone, TV, radio...etc. then risk getting caught! Of course
> being in a condo, I have to deal with all the usual rules.
>
> I just realized that I can probably ground the station pretty easily
> since it is next to the water heater pipes. I haven't tried that yet.
>
> Any ideas?
>
> Thanks!
>
> Tom KA7VIK

Hi Tom,
Looking at the pictures on the web sight.. looks like there are not many
options.. couple of things.. yes ground the rig the best you can. Also i've
found that rf travels along the control cable from my small loop. that was
cured by placeing several ferite beads on the cable.. this could the part of
the cause of your problems. worth a try anyway.
Hope this is of some help.
73 Dave Kc1di // always qrp

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.317 / Virus Database: 176 - Release Date: 1/21/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

1394. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 20:18:34 UTC
From: pkgojak <pkgojak@mydeja.com>
Message-ID: <3c4dd817_9@Usenet.com>
Source record: 150383

KB9TMP <NoMoreSpam4Me@antisocial.com> wrote in message
news:a2jt0k$p6s$1@dagobah.blueriver.net...
> "Crt4239" <crt4239@aol.com> wrote in message
news:20020121223458.22658.00002903@mb-mi.aol.com...
> > In honor of Dr. Martin Luther King Day, I am reposting my brief honest
> > editorial in his honor. Any THOUGHTFUL (yes, that means non-racist)
replies
> > are certainly welcome.
> > *******
> > "Anyone who attends a ham club meeting would have to agree that certain
> > minorities, especially, African Americans, are grossly underrepresented
in our
> > hobby. I believe, and I think many of you will agree, that perhaps we
should
> > remedy the effects of past discrimination by some sort of affirmative
action
> > allowing underrepresented minorities a FAIR OPPORTUNITY to get their
tickets.
> > Much has recently been reported in the last decade of growing
"electronic
> > divide" in the percentage of white versus black households having
computers and
> > Internet access. You would all have to agree that this "electronic
divide" has
> > ALWAYS been in the amateur radio hobby. This would be a perfect time in
our
> > country's history, especially in light of the dwindling numbers of
potential
> > hams lost to the computer hobbyists, to begin thinking about policies
that
> > might create real interest in our great hobby. My ideas of remedies for
past
> > discrimination include DROPPING THE CODE REQUIREMENT FOR MINORITY
APPLICANTS
> > and possibly WAIVING SOME SECTIONS OF THE EXAMS. Such remedies are a
way to
> > ensure an integrated society of amateurs and allow equal opportunity.
Numerical
> > goals for admission to our great hobby is necessary to integrate a hobby
> > traditionally closed to minorities because of discrimination. At a time
when
> > our hobby needs a shot in the arm, these kind of policies might help in
> > increasing our numbers and preserving our power to demand that no more

of our
> > frequencies be taken away. Any THOUGHTFUL replies are welcomed."
> >
>
> My family came to the USA from Scotland in the mid 1800's,
> that makes me part of a minority group so when do I get the
> FREE HAND OUT ?

An amateur radio license is a free hand out. The answers to the actual questions are available to you before you take the exam. Why would anybody think it's an accomplishment over and above being able to memorize a few questions?

>
> --
>
> '73' From KB9TMP
> NCI-2385
>
> The sum of the intelligence
> on the planet is a constant;
> the population is growing.
> -Cole's Axiom
>
>

Posted Via Usenet.com Premium Usenet Newsgroup Services

** SPEED ** RETENTION ** COMPLETION ** ANONYMITY **
----
http://www.usenet.com

1395. Need help with yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 20:29:47 UTC
From: chris <chris.c@ntlworld.com>
Message-ID: <FZj38.4358$Ph2.690179@news2-win.server.ntlworld.com>
Source record: 150381

I have a 6 Mtr 5 ele tonna that will not tune where it is supposed to.....in order to get it to tune from 50.05 to 50.3 i have to extend the drivern element by 1.5" each side...from my very limited under standing on aerials, the reflector should be around 5% bigger than the driver.....but adjusting this makes the reflector about 2% longer....does this mean that the reflector will not work...is it worth me making the reflector 3" longer.

1396. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 20:33:01 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201221233.3905aa61@posting.google.com>
Source record: 150382

"stefano" <sgalast@tin.it> wrote in message news:<Ol038.10122$Rv3.435190@news2.tin.it>...
> Hi dear friends,
> Yes I understand all and I am agree with all of your objections...
> simply you don't have the needed data to judge.

All the theory needed to decide if the antanna works as claimed or
not, already exists. The tests have already been done. That antenna is
really nothing new in the overall design. Yours just might look a
little funnier than other versions. Unfortunately, the design has
warts. If it didn't , everyone and his sister would be using one
already.
>
> please, I am speaking for the EH antenna only.
> This antenna was announced for the first time at the world last
> september....is just a baby now.

Your version maybe...

> We are working very hard to start a production, lab tests, indipendent
> measurements.

Well, I guess we can't call you all lazy. :/
>
> very soon everybody will know about. Please is not an excuse, we just need
> some more time.
> At the moment is almost unknown...

To you maybe...just judging from Steves comments, I'd say he's already
got a pretty good grip on the finer specifics of that antenna. I think
clipping his post and reading it over and over a few times might save
you all a lot of time and maybe even money. But it's your life...:/

P.S. Experimenting is fine. But myself, I don't experiment on ideas I
already know don't/won't work. Would be like driving on ice with
racing slicks. MK

1397. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 21:21:54 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <a2kle6$11onrq$1@ID-105647.news.dfncis.de>
Source record: 150386

"loloken" <loloken@worldnet.att.net> wrote in message
news:wE538.113073$fe1.2104164@bgtnsc06-news.ops.worldnet.att.net...
>
> "Crt4239" <crt4239@aol.com> wrote in message
> news:20020121223458.22658.00002903@mb-mi.aol.com...
> > In honor of Dr. Martin Luther King Day, I am reposting my brief honest
> > editorial in his honor. Any THOUGHTFUL (yes, that means non-racist)
> replies
> > are certainly welcome.
> > *******
> You have to be joking. Dumbing down exams to admit an unqualified person
> will cause serious, possibly irreparable harm to the hobby. If any person
> really wants to get their ticket, trust me they will study and get it.
Ideas
> such as yours do minorities a great disservice since you apparently feel
> they are not intelligent enough to do anything on their own. People such
as
> yourself feel you must intervene on their behalf. People such as yourself
> have caused untold damage to innumerable American institutions. People
such
> as yourself should MIND YOUR OWN BUSINESS.

I agree, lowering the standards based on race is an insult to those you seek
to help.

If you (Crt4239) really want to help, instead do it the right way. Find a
school in a district that is primarily in a minority area. Get one of the
teachers to agree to be the sponsor, help that teacher get his or her
license. Then, donate a rig to the school. Come in on a regular basis, work
with the kids, get them interested. Not only will they have fun and maybe
become hams, but they'll get interested in the science and math behind it
all too.

Doesn't have to be a school, could be a boys/girls club, church, daycare,
scouting, what ever. THAT'S how to achieve your goals, NOT by lowering the
standards and cheapening the achievement, solely because someone happens to
look a little different.

By the way, this technique works with ANYONE!

73's,

Robert / N4IXT

PS Yeah, I know it was a troll, but I just can't let it go....

1398. Re: how to construct a matching circut for a ramdom wire for 40 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 21:24:45 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201221324.6681c040@posting.google.com>
Source record: 150385
Cross-posted to: rec.radio.amateur.antenna,rec.radio.homebrew

Ralph Blach <rblach@intrex.net> wrote in message news:<3C4A2B5A.2040802@intrex.net>...
> I need to match a long 40 foot random wire antenna for 40 meters.

Use a simple L tuner. A simple MFJ random wire tuner would work fine, and match nearly anything. You reverse the connections depending on a low or hi Z load. I've had one of those things since about 1978 and it still works. I once got it so hot about 15 years ago the plastic coating on the toroid was bubbling, but it didn't kill it. I tacked a 2nd variable cap onto it later and made a universal tuner. I use that thing as my impedance metching when I run mobile and as a small tuner when portable if I don't feel like dragging my big tuner around.

> This will be used only on 40 meters novice bands.
> The redio will be a emtech nw 40 qrp radio.

40 ft random wires, tuners, and qrp don't really mix very well. If you want a real signal from qrp, put up a center fed dipole fed with coax and use no tuner at all. You can't afford to waste power running qrp. The dipole will eat that 40 ft wire for lunch and spit out the seeds. Also a random wire really should have a ground connection. A dipole doesn't need it. I worked a qrp station the other night on 40m that sounded like he was running 200w. He sure wasn't on a short random wire though...If you are space limited and can't swing the 66 ft dipole, I'd use hi-Q coils and make a loaded version coax fed version. It would still outdo the random wire I bet. Opinions vary, but I've never had very good luck with random wires in general. I sure wouldn't use one for qrp if I wanted any kind of decent signal. Taking a whiz in a whirlwind is not my idea of fun. I've been though this on a few field days until I finally put my foot down and refused to use what I consider as 2nd rate antennas like random wires, G5RV's , windoms, etc. They can keep all that crap as far as I'm concerned. Almost drove me to drinking again with the unpredictable and usually lousy performance. And the goofy part which I never could fathom, is we always had room for full size antennas. Why use anything less in a case like that? I'll stick with my regular old dipoles. Usually coax fed I might add. :/ I only can see using a random wire in cases where you really have no other choice.

>
> 1) will I need an antenna analyzer?

No. I've never needed one of those in my life. Don't own one. They can be real handy for certain things though. They can cause great confusion in many others.

> 2) is there a program to tell me the location and value of the
> inductor values which I will need.

Knowing Reg, I wouldn't be surprised he he had something along those line. He writes so many programs, I can't keep up with them all...I'm sure he will alert you if he does. Actually, from the way you ask that, are you wanting to just add a loading coil to the antenna itself? That would be easy enough, but a dipole would still eat it for lunch. You can use Reg's vertload program to come up with coil dimensions in that case. With a 40 ft wire, you won't need too large a coil. You could also find the values needed for a loaded dipole with that program. Just think of the wire/vertical as one half of the dipole antenna. MK

1399. Re: Need help with yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 22:04:45 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3c4de1b5$0$1618$1dc6e903@news.corecomm.net>
Source record: 150387

Chris
What you have discovered is just why antenna design is an art not a
science.
Make what ever adjustments you need to to make the antenna tune and to
provide for the greatest forward gain possible.
Dave WD9BDZ

chris wrote:
>
> I have a 6 Mtr 5 ele tonna that will not tune where it is supposed to.....in
> order to get it to tune from 50.05 to 50.3 i have to extend the drivern
> element by 1.5" each side...from my very limited under standing on aerials,
> the reflector should be around 5% bigger than the driver.....but adjusting
> this makes the reflector about 2% longer....does this mean that the
> reflector will not work...is it worth me making the reflector 3" longer.

1400. Re: how to construct a matching circut for a ramdom wire for 40 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 22:54:43 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <T4m38.20833$s13.1721205960@newssvr17.news.prodigy.com>
Source record: 150388
Cross-posted to: rec.radio.amateur.antenna,rec.radio.homebrew

A tuner is probably the easiest answer. You might get some helpful info on this newsgroup Long Wire Antenna feed point Z. If your qrp is ten watts or less, you might be transmitting in the milliwatts.
"Ralph Blach" <rblach@intrex.net> wrote in message news:3C4A2B5A.2040802@intrex.net...
> I need to match a long 40 foot random wire antenna for 40 meters.
> This will be used only on 40 meters novice bands.
> The redio will be a emtech nw 40 qrp radio.
>
> 1) will I need an antenna analyzer?
> 2) is there a program to tell me the location and value of the
> inductor values which I will need.
>
> 3)the antenna will be withing feet of the radio
>
> thanks and 73's
>
> kf4wbk
>
> Chip
>

1401. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 23:19:42 UTC
From: k1bqt@aol.com
Message-ID: <20020122181942.01108.00000276@mb-cl.aol.com>
Source record: 150389

>We are working very hard to start a production, lab tests, indipendent measurements.<

In that order, it appears!

Rick K1BQT

1402. Re: Need help with yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 23:20:26 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3C4DF3BA.12941141@hiwaay.net>
Source record: 150390

Chris- My question is- how did you determine the original length for the
driver, that you then had to add to? Did you use one of the published
"formulas", or a modeling program, or was this a commercial antenna?
What is the size of the driven element (diameter and length)?

With this added information, some answers may be possible.

Bill-W4BSG

chris wrote:
>
> I have a 6 Mtr 5 ele tonna that will not tune where it is supposed to.....in
> order to get it to tune from 50.05 to 50.3 i have to extend the drivern
> element by 1.5" each side...from my very limited under standing on aerials,
> the reflector should be around 5% bigger than the driver.....but adjusting
> this makes the reflector about 2% longer....does this mean that the
> reflector will not work...is it worth me making the reflector 3" longer.

1403. Re: Directional remote control antenna - Pls help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-22 23:25:52 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a2ksdu05dt@enews2.newsguy.com>
Source record: 150391

strange requirements... some off the cuff comments to think about...

to get 40-50db f/b with very low sidelobes will require a very directive antenna, but to keep the gain low it will have to be very inefficient.. my first thoughts would be of a dish, but at the abt 4m wavelength it would be fairly large to get a clean pattern, and would probably have to be fed with a shielded resistor to keep the overall gain low. a slot antenna also comes to mind, but without an array of them the sidelobes would be too large. A horn is another possibility, maybe if made out of a lossy material or by adding ferrites or a lossy dielectric near the feed point the gain could be kept under control, or maybe using a very small feed probe would make it inefficient enough. if none of those work just build the best antenna you can to get the directivity and then add an adjustable attenuator as part of the feed point and adjust it till the field strength is the same as a dipole for a given power input.

"Mike W." <mike@home> wrote in message
news:hhe38.575$8i2.18355@news2.mts.net...
>
> Anybody/everybody:
>
> I'm having trouble coming up with a transmitter antenna and
> "directional-shielding" design for a position-feedback project I'm working
> on. The problem is that I'd like to use the 75.41MHz-75.99MHz license free
> (remote control) band which has a requirement that : "An antenna gain not
> exceeding that of a half wave dipole shall be used". I need directivity
from
> the transmitter in order to limit reflections from nearby objects (which
> will result in "multi-path distortion" of the apparent signal direction at
> the receiver). The power limit set for this band (.75 watts) should be way
> more than I'm going to need for my 100m maximum range, extremely small
> bandwidth (i.e. CW emission) channel. The plan is to comply with the
antenna
> requirement then use shielding to absorb (rather than redirect) energy
which
> is being emitted in a wrong direction.
>
> I want to radiate a beam which I can rotate from +90 to -90 degrees
around
> the horizon using a rotating platter and stepper motor. A few degrees
> horizontal and vertical beamwidth (with virtually no side lobes) and 40dB
or
> 50dB front to back ratio would be ideal. At one point I had been picturing
a
> three element "cubical-quad / yagi" of some sort but the polarization of

the
> magnetic component was wrong for the receiving loops (see below). I had
> decided a dish (or dish segment) would not be practical at 75.55MHz but
this
> was also an initial idea. Both these antennas have a gain greatly
exceeding
> that of a half-wave dipole (i.e. would be illegal) but this is the
radiation
> pattern I'm after.
>
> I have an additional consideration in that the signal is being received
by
> electrostaticly shielded small-loop antennas oriented "edge-on" to the
> transmitter (within +/- 18 degrees). A loop is a single 12 inch turn (i.e.
> .08 wavelength) of 12 gauge copper wire suspended inside 1/2" diameter
> copper tubing by rubber grommets. The tubing is grounded at a single point
> to provide electrostatic shielding for sharper directional response. This
is
> an adaptation the "Radio Direction Finding Antenna" described in the ARRL
> handbook (1999, etc editions).
>
> The best idea I've come up with is to use a single turn loop for the
> transmitting antenna as well. The loop would be mounted on the rotating
> platter so it could be turned to align the transmitting and receiving
> antennas in the same vertical plane (i.e. like the primary and secondary
> windings in a transformer). This would confine the emission considerably
in
> the horizontal direction and would direct a large amount of energy skyward
> (where reflections aren't a problem) so I'm not in violation of the gain
> limitation. Just what is the gain of a transmitting loop (either
small-loop
> or 1/4 wavelength) relative to a half-wave dipole? How would I absorb the
> energy that would be emitted in the opposite direction and in the
> substantial front and back side lobes apparent in the radiation pattern
for
> this type of antenna? Anyone got a better idea?
>
> Suggestion appreciated,
>
> Mike Whitfield (VA4MGW)
>
> ********* \\\\lll//// *********
> ********** \ -- -- / **********
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> *** --oOOOo---(_)---oOOOo-- ***
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1404. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 00:41:53 UTC
From: Chip Griffin <n1mie@NOSPAM.snet.net>
Message-ID: <220120021941521999%n1mie@NOSPAM.snet.net>
Source record: 150392

In article <mpdNPOkMvnPXCCBaq5SKiEJAb4GC@4ax.com>, Bob Miller
<bamiller@texas.net> wrote:

] I don't suppose your family came over from Scotland in chains, on a
] slave-trader's ship, to be sold like cattle once they arrived on these shores?

And what does that have to do with intelligence, ham radio, and passing
exams?

--
N1MIE - FN31xm

1405. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 01:22:16 UTC
From: stefano <sgalast@tin.it>
Message-ID: <cfo38.14394$hi.379407@news1.tin.it>
Source record: 150394

Hi Mark,
I repeat ,I don't want be polemic at all.
But i think you never tested one of it....I mean a full network one...well built and well tuned...
because ,otherwise, you couldn't say that.

I know ,for sure, there are a lot of funny versions around ...working absolutely under the expected efficiency.

Since you know all about it, could you ,please, tell me exactely what you tested?And how?
Thanks very much.
Stefano IK5IIR

"Mark Keith" <nm5k@wt.net> ha scritto nel messaggio news:25eb70d7.0201221233.3905aa61@posting.google.com...
> "stefano" <sgalast@tin.it> wrote in message news:<Ol038.10122$Rv3.435190@news2.tin.it>...
> > Hi dear friends,
> > Yes I understand all and I am agree with all of your objections...
> > simply you don't have the needed data to judge.
>
> All the theory needed to decide if the antanna works as claimed or
> not, already exists. The tests have already been done. That antenna is
> really nothing new in the overall design. Yours just might look a
> little funnier than other versions. Unfortunately, the design has
> warts. If it didn't , everyone and his sister would be using one
> already.
> >
> > please, I am speaking for the EH antenna only.
> > This antenna was announced for the first time at the world last
> > september....is just a baby now.
>
> Your version maybe...
>
> > We are working very hard to start a production, lab tests, indipendent
> > measurements.
>
> Well, I guess we can't call you all lazy. :/
> >
> > very soon everybody will know about. Please is not an excuse, we just need
> > some more time.
> > At the moment is almost unknown...
>

> To you maybe...just judging from Steves comments, I'd say he's already
> got a pretty good grip on the finer specifics of that antenna. I think
> clipping his post and reading it over and over a few times might save
> you all a lot of time and maybe even money. But it's your life...:/
>
> P.S. Experimenting is fine. But myself, I don't experiment on ideas I
> already know don't/won't work. Would be like driving on ice with
> racing slicks. MK

1406. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 01:29:40 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C4E1204.7050709@europa.com>
Source record: 150393

Hi Reg,

Reg Edwards wrote:

> Dear Mike, do stop worrying. You won't have the slightest difficulty talking
> to your dad at a distance of 250 miles on the 160m band, in darkness, at any
> time of the sunspot cycle, using 50 to 100 watts into any reasonable length
> of any sort of junk wire. 250 miles is one bounce, up and down, off the good
> old night-time F-layer. With a bit of luck you might even catch the E-layer
> just before sunset and just after sunrise. Fascinating at dawn listening to
> the F changing to the E and then dropping out altogether.

That's good to know. I've actually gotten out my old antenna books and done some re-reading on the 160 meter band. Since I never could put up an antenna before, I've not really paid much attention to the how the band works since I got my license back in 1984. I'd forgotten that vertical actually works better for the low frequencies than a horizontal antenna would... if you have the tower or other object to get the height for it.

>
> Use a dipole, length = 210 feet or more, or an inverted-L, overall length =
> 110 feet or more with a dozen shallow buried radials in an average sort of
> ground.

The antenna I'm going to use is a 125' shorty inverted V. I'm not going to be able to get as much "V" out of it as I'd like, but like you said, at night it should work fine.

>
> In full sunlight don't bother switching on the rig unless, perhaps, you can
> run a kilowatt or more and your local noise level is better than S1 or S2.

Luckily for daytime I have the other bands to play in.

>
> My regards to your dad.

Thanks. We're both looking forward to getting on 160. He's lucky and has about 3 acres to play with. He had a 60' tower up but a freak circular wind storm came through last year and twisted the top half of the tower and laid it down. With the beam and the wire antennas it came down in the only spot that wouldn't do any damage to their house or their motor home. The only thing hit was the gutter on the house and that was only a few feet of it. The beam was a total loss though. He lost his 160 antenna then but we are going to put it back up now that I'm getting something that can talk on

160. Next spring we'll put his tower back up... actually about 30 feet of it is still up and attached to the big 3 story 100+ year old house that is on the property and is used mostly for storage now. It bent at the roof line. The weather people think they got a mini-tornado through the area but there was not proof of what it was.

Thanks again.

Mike

--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1407. As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 01:51:06 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201221751.1c10033d@posting.google.com>
Source record: 150395

The next time I look for a new apartment, what should I look for? My current QTH is miserable because it is on the ground floor, and the location is at a low land elevation.

I know that apartments are miserable compared to houses. I just want to do better next time. Also, I am more willing to pay extra for a better QTH in the future than I was in the past. (I was a lowly No-Code Tech when I moved into my current QTH. I was expecting a career in fiber optics instead of antennas/RF/microwave. There were so few apartments to choose from, and the nonham issues won me over.)

While being at a higher elevation won't necessarily help for HF skywave, it will help for line-of-sight communications on VHF, UHF, and microwave (a part of the hobby I would like to enter) and possibly even ground wave on HF. I know I also want to be at least 1 floor above the ground, as I would feel free to keep my antennas (especially the more expensive and bulky DK3 Screwdriver antenna for HF) on the outside balcony without concerns about theft. This would be MUCH more convenient. (Obviously, the apartment must have a balcony to begin with.)

So what should I do next time? Some of my ideas:
1. I will try out my Yaesu FT-50R radio and at least listen to all the local repeaters. The more repeaters I can use (especially among those far away), the better for line-of-sight.
2. I will bring an AM/FM radio and see how many local FM and AM radio stations I can listen to. The more FM stations I can listen to and the more AM stations I get during the day, the better.
3. I will also use the AM part of the radio (on frequencies between broadcast stations) and check for noise sources (in case power line problems cause interference).

Are there any other factors I should look for? More importantly, are there red flags to watch out for? (Examples: metal instead of wood railings, metal structures at close range, metal roofing or siding just above a top-floor apartment, etc.)

Jason Hsu, AG4DG
jason_hsu_802701@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

1408. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 02:06:09 UTC
From: ik7565@erols.com
Message-ID: <3C4E1A91.89366EA7@erols.com>
Source record: 150396

Jason - the higher up the better. I have WAS (+ 70 sections in the last SS) and 75 countries from my 5th floor apartment with only hamsticks and a 706mk2G. Nothing you can do about all the metal around the balcony - your tuner will take care of it. Definitely want a balcony - external antennas are preferable to indoor antennas.

73 de Ian
N8IK

Jason Hsu wrote:
>
> The next time I look for a new apartment, what should I look for? My
> current QTH is miserable because it is on the ground floor, and the
> location is at a low land elevation.
>
> I know that apartments are miserable compared to houses. I just want
> to do better next time. Also, I am more willing to pay extra for a
> better QTH in the future than I was in the past. (I was a lowly
> No-Code Tech when I moved into my current QTH. I was expecting a
> career in fiber optics instead of antennas/RF/microwave. There were
> so few apartments to choose from, and the nonham issues won me over.)
>
> While being at a higher elevation won't necessarily help for HF
> skywave, it will help for line-of-sight communications on VHF, UHF,
> and microwave (a part of the hobby I would like to enter) and possibly
> even ground wave on HF. I know I also want to be at least 1 floor
> above the ground, as I would feel free to keep my antennas (especially
> the more expensive and bulky DK3 Screwdriver antenna for HF) on the
> outside balcony without concerns about theft. This would be MUCH more
> convenient. (Obviously, the apartment must have a balcony to begin
> with.)
>
> So what should I do next time? Some of my ideas:
> 1. I will try out my Yaesu FT-50R radio and at least listen to all
> the local repeaters. The more repeaters I can use (especially among
> those far away), the better for line-of-sight.
> 2. I will bring an AM/FM radio and see how many local FM and AM radio
> stations I can listen to. The more FM stations I can listen to and
> the more AM stations I get during the day, the better.
> 3. I will also use the AM part of the radio (on frequencies between
> broadcast stations) and check for noise sources (in case power line
> problems cause interference).
>
> Are there any other factors I should look for? More importantly, are
> there red flags to watch out for? (Examples: metal instead of wood

> railings, metal structures at close range, metal roofing or siding
> just above a top-floor apartment, etc.)
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

1409. Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 02:06:31 UTC
From: Richard Corkish <r.corkish@unsw.edu.au>
Message-ID: <a2l5rphhg1@tomahawk.unsw.edu.au>
Source record: 150400
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

I have noticed what seems to me to be a basic discrepancy in the antenna literature and would appreciate your comments. Probably it is just my misunderstanding.

"Antenna Theory Analysis and Design" by C. Balanis (2nd edition) clearly and explicitly states that for a transmitting antenna (at best, with a conjugate match of the antenna to the transmitter) "half of the total power supplied by the generator is radiated by the antenna during conjugate matching, and the other half is dissipated by heat in the generator. (p. 75)". Similarly, for a conjugate match between a receive antenna and its load, "half the power is delivered to the load and the other half is scattered. (p. 77)". This suggests to me that a microwave free-space power transmission system (eg. W.C. Brown, IEEE Trans. Microwave Theory and Techniques, MTT-32 (9), 1230 (1984)) would lose half the input power at the transmit stage and half again at the receive stage, giving upper efficiency limit of 25%. Yet, Brown claims measured DC-microwave-transmission-reception-DC efficiencies exceeding 50%.

Other antenna theory books, such as Kraus (1950), King (1956) and Wolff (1966) support Balanis' position but two others, S.Silver (1949), p. 40 and Ramo, Whinnery and Van Duzer (1994) do not. The latter goes so far as to say (p. 669), "... one would conclude that as much power is scattered under a condition of perfect match as is absorbed in the load. This conclusion is not true, except in special cases where the current distribution may be the same for reception as for transmission."

I'd be grateful if any reader could please help me clarify this apparrent confusion/conflict or point me towards relevant literature.

Thanks in advance,
Dr Richard Corkish
University of New South Wales

1410. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 02:09:23 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <nXo38.8945$l61.28828@rwcrnsc54>
Source record: 150397

```
What difference would that make?
"Bob Miller" <bamiller@texas.net> wrote in message
news:mpdNPOkMvnPXCCBaq5SKiEJAb4GC@4ax.com...
> "KB9TMP" <NoMoreSpam4Me@antisocial.com> wrote:
>
>
> >
> >My family came to the USA from Scotland in the mid 1800's,
> >that makes me part of a minority group so when do I get the
> >FREE HAND OUT ?
>
> I don't suppose your family came over from Scotland in chains, on a
> slave-trader's ship, to be sold like cattle once they arrived on these
shores?
>
> Bob
> k5qwg
>
```

1411. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 02:46:04 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <vh6s4uslckn1gvn201hvpokh7g6jthito7@4ax.com>
Source record: 150398

On Wed, 23 Jan 2002 01:22:16 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi Mark,
>I repeat ,I don't want be polemic at all.
>But i think you never tested one of it....I mean a full network one...well
>built and well tuned...
>because ,otherwise, you couldn't say that.
>
>I know ,for sure, there are a lot of funny versions around ...working
>absolutely under the expected efficiency.
>
>Since you know all about it, could you ,please, tell me exactely what you
>tested?And how?
>Thanks very much.
>Stefano IK5IIR
>

Hi Stefano,

Instead of presuming Mark has no experience with the differences that matter, why don't you simply tell us what they are? ...yeah sure, when pigs fly...

The fact remains that this group or even single members have far more experience than you do with well built, well tuned ones AND the funny versions.

Frankly, you have to convince us that your design is NOT one of these funny ones. The burden of proof is on you. The simple repetition of testimonial just won't suffice as we can offer 10 counter testimonials to every one you thump the tub with.

Simply put, you cannot and have not answered
>Since you know all about it, could you ,please, tell me exactely what you
>tested?And how?
for yourself, Mark is under no compulsion to prove anything you yourself have so utterly failed at.

Stefano, this is a game of denial you are playing. You cannot satisfy the minimal requirements of Scientific American's test for bogus science and you consistently exhibit that with every post. You give no one the impression that will change shortly or even in the distant future. What is worse, you have not added one iota of additional data since your first post some months ago. Personally, I don't have any faith you have accomplished anything.

73's
Richard Clark, KB7QHC

1412. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 02:50:16 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <mB9OPDJQ9fo=ffouGWmOK365x5yk@4ax.com>
Source record: 150399

jason_hsu@my-deja.com (Jason Hsu) wrote:

>The next time I look for a new apartment, what should I look for? My
>current QTH is miserable because it is on the ground floor, and the
>location is at a low land elevation.

Get as high as you can -- then you can hang end-fed wire antennas from your balcony or window when it's dark.

Look at the upper architecture of the building -- if there is an attic with crawl space, not only will that keep a top floor apartment cooler, you might be able to string a wire antenna in the attic, and feed it into the apartment below.

Look for newer apartments -- newer wiring and ground systems should be less susceptible to rfi. And give you a better chance of getting a decent equipment ground through the 3rd prong on the plug.

Built-in cable tv outlets in each apartment unit will mean less tvi.

Check the book section at the arrl web site -- they have a few books on stealth and limited space antennas -- might give you some ideas.

And, if you can get right next to a big swimming pool, that may or may not give you some nice signal bounce. Take your ht into the pool, and work the world :-)

Bob
k5qwg
>
>I know that apartments are miserable compared to houses. I just want
>to do better next time. Also, I am more willing to pay extra for a
>better QTH in the future than I was in the past. (I was a lowly
>No-Code Tech when I moved into my current QTH. I was expecting a
>career in fiber optics instead of antennas/RF/microwave. There were
>so few apartments to choose from, and the nonham issues won me over.)
>

>Jason Hsu, AG4DG
>jason_hsu_802701@@@@@yahoo.com
>http://www.jasonhsu.com/ham_radio-technical.html

1413. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 03:30:14 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C4E2E92.4E831A4D@bellatlantic.net>
Source record: 150401

The fact that someone else has better privileges than
you or I, does not mean we are entitled to those privileges.
Your salary is bigger than mine - does that mean I should
be paid the same as you? You need to make a better case
to support your point.

StarGazer wrote:

> Thanks for making my point. Since their are so many US hams
> all the more reason to have a much bigger phone band like
> Canada (Phone being more popular of a mode and much
> more practical) And I do a lot more CW than phone.
> The fact that ham radio is more popular in the US than Canada
> is irrelevant.
>
> ac6v wrote:
>
> > Guess it is because the FCC sez so. And it might have something to do
> > with the fact there are
> > 700,000 hams in the USA and about 65,000 in Canada. On 20 Meters - USA
> > allotment is now 150 kHz for CW/Data and 200 kHz for CW phone/image --
> > seems fair. One can operate CW in the "phone band" but few do.
> >
> > I seem to recall the USA phone privileges were expanded a few years
> > back. About 1987
> > --
> > 73 From AC6V, Rod In Oceanside, CA
> > I doubt, therefore I might be!
> > AC6V Mega Ham Index at http://ac6v.com
> > AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
> > AC6V Brag Tape at http://ac6v.com/brag.htm
> > ==========
> > StarGazer wrote:
> >
> > > .

1414. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 03:47:37 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <alcs4u8mnai2dbp4hg1sdl9n53tl7h9dsn@4ax.com>
Source record: 150402
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

On Wed, 23 Jan 2002 13:06:31 +1100, "Richard Corkish"
<r.corkish@unsw.edu.au> wrote:

>I have noticed what seems to me to be a basic discrepancy in the antenna
>literature and would appreciate your comments. Probably it is just my
>misunderstanding.
>
>"Antenna Theory Analysis and Design" by C. Balanis (2nd edition) clearly and
>explicitly states that for a transmitting antenna (at best, with a conjugate
>match of the antenna to the transmitter) "half of the total power supplied
>by the generator is radiated by the antenna during conjugate matching, and
>the other half is dissipated by heat in the generator. (p. 75)". Similarly,
>for a conjugate match between a receive antenna and its load, "half the
>power is delivered to the load and the other half is scattered. (p. 77)".
>This suggests to me that a microwave free-space power transmission system
>(eg. W.C. Brown, IEEE Trans. Microwave Theory and Techniques, MTT-32 (9),
>1230 (1984)) would lose half the input power at the transmit stage and half
>again at the receive stage, giving upper efficiency limit of 25%. Yet,
>Brown claims measured DC-microwave-transmission-reception-DC efficiencies
>exceeding 50%.
>
>Other antenna theory books, such as Kraus (1950), King (1956) and Wolff
>(1966) support Balanis' position but two others, S.Silver (1949), p. 40 and
>Ramo, Whinnery and Van Duzer (1994) do not. The latter goes so far as to
>say (p. 669), "... one would conclude that as much power is scattered under
>a condition of perfect match as is absorbed in the load. This conclusion is
>not true, except in special cases where the current distribution may be the
>same for reception as for transmission."
>
>I'd be grateful if any reader could please help me clarify this apparrent
>confusion/conflict or point me towards relevant literature.
>
>Thanks in advance,
>Dr Richard Corkish
>University of New South Wales
>

Hi Richard,

This is the result of the confusion of matching basis as described by:
Beatty, R. W., "Intrinsic Attenuation," IEEE Trans. on Microwave
Theory and Techniques, Vol. MTT-1, no. 3, May 1963, p. 179
and
Beatty, R. W., "Insertion Loss Concepts," Proc. IEEE, Vol 52, no.

6, June 1964, 663.

From "Microwave Theory and Applications," Stephen F. Adam, published by Hewlett Packard, 1969, pg. 232:
"Considerable confusion has arisen over the use of terms such as "match" and "mismatch," since it is not always clear just what basis is intended."

Such discussion embodied in these tracts are part of the NBS (now NIST) definitions for Conjugal and Zo matches. I would point out that the key word here is "basis" which demands close attention in how they are enumerated in these references. The mid 60's was a transitional era in the usage of these concepts and you are sure to find conflict between sources that bracket this period.

73's
Richard Clark, KB7QHC

1415. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 03:51:55 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C4E335B.1FA04E10@IEEE.org>
Source record: 150403

Jason Hsu wrote:
> Are there any other factors I should look for?

Get a top floor apartment that has a large accessible
attic.
--
cheers, CAM http://www.qsl.net/w5dxp

1416. Selection Advice Both Needed and Appreciated

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 03:54:10 UTC
From: Steve Crain <jscrain@tulsa.quik.com>
Message-ID: <Ctq38.772$mv.4628@newsfeed.intelenet.net>
Source record: 150404

I have the opportunity of installing an antenna on the roof of the office building I work in (10 stories tall). My interest is worldband listening in general including 10 meter. The receiver is a Drake R8. What antennas might be considered. Thanks.

jscrain@tulsa.quik.com

1417. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 04:18:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C4E39A2.E657F4EF@eznec.com>
Source record: 150405
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

Balanis makes the assumption that the internal resistance of the transmitter consists of a resistor or other invariant resistance, as in a Thevenin or Norton source. This is convenient for analysis and is an accurate representation of a laboratory signal generator, but is not an accurate model for a transmitter. Conventional AM broadcast transmitters, for example, have for many decades routinely achieved significantly greater than 50% efficiency. That is, more than half the power applied to the output stage of the transmitter is delivered to the load. I've personally designed and built CW transmitters with over 85% efficiency. It's because the dissipation is determined largely by the DC resistance of the output device, while the output resistance is determined by the dynamic resistance. (This is, admittedly, quite a simplification.) Tubes and transistors are nonlinear devices in which these two can be dramatically different. (Some have taken to calling part or all of the output resistance of transmitters "dissipationless resistance" but I personally don't like the term, choosing instead to seek explanations that don't require it.)

It's not surprising that an academic person specializing in antennas would make the assumption that "transmitters" are like laboratory signal generators, with which he was apparently much more familiar. But it's a shame that this kind of misinformation makes its way into otherwise respectable books without even cursory scrutiny from anyone who has actually seen and used a transmitter. Any technician ever involved with the adjustment of AM or most FM transmitters could have pointed out at least that the statement couldn't be true in light of everyday experience.

Roy Lewallen, W7EL

Richard Corkish wrote:
>
> I have noticed what seems to me to be a basic discrepancy in the antenna
> literature and would appreciate your comments. Probably it is just my
> misunderstanding.
>
> "Antenna Theory Analysis and Design" by C. Balanis (2nd edition) clearly and
> explicitly states that for a transmitting antenna (at best, with a conjugate
> match of the antenna to the transmitter) "half of the total power supplied
> by the generator is radiated by the antenna during conjugate matching, and
> the other half is dissipated by heat in the generator. (p. 75)". Similarly,
> for a conjugate match between a receive antenna and its load, "half the
> power is delivered to the load and the other half is scattered. (p. 77)".
> This suggests to me that a microwave free-space power transmission system

> (eg. W.C. Brown, IEEE Trans. Microwave Theory and Techniques, MTT-32 (9),
> 1230 (1984)) would lose half the input power at the transmit stage and half
> again at the receive stage, giving upper efficiency limit of 25%. Yet,
> Brown claims measured DC-microwave-transmission-reception-DC efficiencies
> exceeding 50%.
>
> Other antenna theory books, such as Kraus (1950), King (1956) and Wolff
> (1966) support Balanis' position but two others, S.Silver (1949), p. 40 and
> Ramo, Whinnery and Van Duzer (1994) do not. The latter goes so far as to
> say (p. 669), "... one would conclude that as much power is scattered under
> a condition of perfect match as is absorbed in the load. This conclusion is
> not true, except in special cases where the current distribution may be the
> same for reception as for transmission."
>
> I'd be grateful if any reader could please help me clarify this apparrent
> confusion/conflict or point me towards relevant literature.
>
> Thanks in advance,
> Dr Richard Corkish
> University of New South Wales

1418. Re: Selection Advice Both Needed and Appreciated

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 04:28:01 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4E3BC6.F54C00CA@icok.net>
Source record: 150406

Steve,
I think I'd start out with a 1.5 to 32 Mhz logperiodic. But,
since I doubt if that would go over very well either with the
building supervisor or your wallet, probably something like a
doublet on a low frequency, a vertical, or the longest wire I was
allowed to put up. Considering what the top of that building
looks like (antennas, ac's, other mechanical stuff, a vertical
would probably be the 'best' compromise.
'Doc

1419. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 04:35:46 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C4E3D97.FFB50B36@icok.net>
Source record: 150407

Jason,
After you look at all the things the others have suggested,
there's one more thing to look for. Find an appartment complex
loaded with young, unmarried females, (the license lasts for
10 years and is renewable...).
'Doc

1420. Re: Need help with yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 04:57:08 UTC
From: chris <chris.c@ntlworld.com>
Message-ID: <bpr38.6057$Ph2.1085363@news2-win.server.ntlworld.com>
Source record: 150408

It is a commercial aerial and the length of the DE is 2875mm as givern in the specs in the instruction manual..it is matched with a beta match, they are about half inch diameter and there is supposed to be no tuneing involed....you are supposed to just put it together and away you go....thats what most people do...but not mine (for some reason)......i have tried it with 2 different lengths of cable and evern tried connecting the cable direct to the elements, but still no good...also it seems that the higher i put the aerial the higher the SWR goes...at the moment it is on a pole in the garden about 3 feet from the ground and the SWR is 1.1:1 from 50.33-50.62 but if i put it on a pole at 15 feet high it then goes up to 1.5:1 and then at 30 feet its 1.8:1...it is supposed to be approx 1.1:1 from 49.9- 50.5.....if i lengthern the DE buy about 3 inches it is then 1.1:1 from 50.1-50.3......dont know what happens when i put it up on the pole as i have not tried yet...it got to dark last night.

"Bill Aycock" <baycock@hiwaay.net> wrote in message news:3C4DF3BA.12941141@hiwaay.net...
> Chris- My question is- how did you determine the original length for the
> driver, that you then had to add to? Did you use one of the published
> "formulas", or a modeling program, or was this a commercial antenna?
> What is the size of the driven element (diameter and length)?
>
> With this added information, some answers may be possible.
>
> Bill-W4BSG
>
> chris wrote:
> >
> > I have a 6 Mtr 5 ele tonna that will not tune where it is supposed to.....in
> > order to get it to tune from 50.05 to 50.3 i have to extend the drivern
> > element by 1.5" each side...from my very limited under standing on aerials,
> > the reflector should be around 5% bigger than the driver.....but adjusting
> > this makes the reflector about 2% longer....does this mean that the
> > reflector will not work...is it worth me making the reflector 3" longer.

1421. Re: Help with Ext Power for Yaesu VX-5R?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 05:29:42 UTC
From: US <rjhamp@pacbell.net>
Message-ID: <aTr38.35230$ca3.1768017980@newssvr21.news.prodigy.com>
Source record: 150409

The Yaesu Manual only talks about the charging of the
batteries (...helps sell their charging adapters$$$!) but it does
not specify any special considerations for "running/transmitting"
off a 12 vdc (13.8 vdc) power supply with special connectors!..
...maybe it shouldn't need too, oh well.....

Interesting about the Core!.... does the "Snap on Core" solve an
impedence problem in the dc power wire, sort of like turns in a
telephone cable, where the two wires are cross feeding some
kind of signal into the radio across the DC voltage side of
the power supply (overloading the voltage or current to the radio
for some reason)?? If you know what the core is actually solving,
please explain as I am always learning?

Is the Radio Shack part number for the Core = 273-104?
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CT
LG%5F010%5F004%5F013%5F000&product%5Fid=273%2D104

or 273-105?

http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CT
LG%5F010%5F004%5F013%5F000&product%5Fid=273%2D105

(I happened to get a free Radio Shack 2002 catalog from the store clerk
this past weekend...anyway, bottom of page 276 shows these types
of snap-together chokes!) Are one of these Core types the one you
wrapped "one or both" of the wires around a couple of times?

Robert
KF6FGH

"Screaming Skull" <KG4IVT@hotmail.spamsucks.leaveme.alone.com> wrote in
message news:CVX28.83947$6L1.20458060@typhoon.southeast.rr.com...
> Are you using the little cheapie adapter that does not have any filtering
on
> it? It's just two pieces of wire and a connector on the end? If so, that
> may be your problem. I had similar results with mine when using it on a
> power supply. I wrapped the wire around one of those snap-on cores you
can
> get from Radio Shack and it stopped the problem. Before I did this the
> exact same thing would happen to me when I transmitted.
>
>
> "Bob Miller" <bamiller@texas.net> wrote in message
> news:OA1MPN5I6eSskpHruDPPe0L9zis3@4ax.com...
> > "US" <rjhamp@pacbell.net> wrote:

> >
> > >Any VX-5R Owners?:
> > >
> > >Just got myself a new Yaesu VX-5R and trying to run it with
> > >an external Power Supply (Tripp Lite VR-7b,13.8V, Max 7 Amps).
> > >
> > >When I connect the external plug to the radio, it shows "charging"
> > >(connectivity to power!!!), however the radio will not let me use the
> > >external 13.8v power supply for "Transmit" (...radio goes dead, and
> > >resets when I pull out the ext. plug)?
>
> >
>
>

1422. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 05:36:27 UTC
From: k3bu@aol.com
Message-ID: <20020123003627.04686.00001834@mb-cg.aol.com>
Source record: 150410

>My ideas of remedies for past
>discrimination include DROPPING THE CODE REQUIREMENT FOR MINORITY APPLICANTS
>and possibly WAIVING SOME SECTIONS OF THE EXAMS.

Yes!
Finally some realistic proposal. I can go further: Let's pay them to get the ticket, free radios, installed towers and special channels for ebonics SSB. Those who can push microphone button should get life time pension and free diet treatments if they get too fat. I am willing to give up all my income to contribute to this program. Long live Mr. King!

Bada BUm

1423. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 06:58:34 UTC
From: cooperjim@aol.com
Message-ID: <20020123015834.19053.00003049@mb-cl.aol.com>
Source record: 150411

Stefano

Isyour design for the EH antennea available on the web? Antennex maybe?

I would very much like a small antennea like the EH or CFA to work. If you have detailed descriptions of how to build it and how to tune it (probably the most important part), I will try it. Til then, I will stay with my magloops.

I played with the CFA for a couple of months and made several contacts on 40 meters. I got a good 1:1 match and saw some strange hysteretic effects that might have been a sort of phase-lock-in of the field generation. But it did not work as well as my 5 foot vertical with Hustler trap. When Jack Stone of Antennex contacted me when he heard that I had made contacts, I was amazed that my mediocre results were a significant data point.

One of the reasons I like to build ham radio stuff is that I dont have to be perfcet. I can try things that just look like fun, even if there is a better way. And, luckily, I can afford my own time to try things that may not work (on weekends at least, during the week my company insists that my designs work hi hi).

73
Jim Cooper NE6O
CooperJim@aol.com

1424. Re: 160M on R-5 Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 07:20:13 UTC
From: JTMac <Privat1@subtlenergy.com>
Message-ID: <Z0w38.7210$li5.2261623@news20.bellglobal.com>
Source record: 150414

My R5 just crashed to the ground (from 60ft). Shaft broke just above the 'radials". It hit the ground on the tip but did not bend it too badly. It was up for about 11 years. I guess I have a few spare parts for sale.

VA3VT

"Bob Miller" <bamiller@texas.net> wrote in message news:klpNPBVwK6meGdB=Wk8QoC9Hx4Kt@4ax.com...
> "Richard Valentine" <rwvNOSPAM@attbi.com> wrote:
>
> >
> > >I was wondering if anyone out there knows if I can damage the matching box
> > >on an R-5 Vertical by forcing 160Meters on the antenna? I've tried it, after
> > >getting a 1:1 SWR through an antenna tuner and I kept the power low (10Watts
> > >AM). Who knows where or how the signal radiates, but it actually worked.
> > >Made some AM contacts, albeit weak. This is strictly a temporary situation,
> > >with a long story behind it. My only concern is, In the meantime will I
> > >toast the Matching box on the antenna, or no worries? Till now I've heard
> > >varying opinions. Thanks, Rick.
> > >N1SQJ
> >
> > I don't know if you will toast the matching box, but I do know that Cushcraft no
> > longer supplies parts for the R5. If you toast it, it's gone, unless you can
> > rebuild it yourself. Might be easier to load up something else with your tuner.
> >
> > (Of course, you don't want to toast your tuner, either :-)
> >
> > Bob
> > k5qwg
> > >
> > >------------
> > >
> > >
> > >
> >

1425. Re: how to construct a matching circut for a ramdom wire for 40 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 07:27:26 UTC
From: ok1sip@atlas.cz
Message-ID: <8f3e93b5.0201222327.ba8899a@posting.google.com>
Source record: 150412
Cross-posted to: rec.radio.amateur.antenna,rec.radio.homebrew

Hi Ralph,
random wires are not very good. I would consider a center-fed
coil-shortened dipole for your conditions. Look at
http://www.g3ycc.karoo.net/4s7nr.html or
http://www.qsl.net/qrp/ant/short80.htm for inspiration. If you want to
calculate one exactly for you, download the HamCalc program by George
VE3ERP (not another HamCalc!), open menu B selection 4 - Short dipole
for restricted space and see.

BR from Ivan

1426. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 09:42:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C4E8569.6EE99668@eznec.com>
Source record: 150413

Jim Cooper NE6O says about the EH antenna:

". . .made several contacts. . . got a good match and saw. .
phase-lock-in of the field generation. . .a significant data point. .
.perfect. . .fun. . .a better way. . .designs work!"

If you're looking for information about the EH or CFA antenna, I'm
afraid this is what you're going to have to settle for.

Roy Lewallen, W7EL

CooperJim wrote:
>
> Stefano
>
> Isyour design for the EH antennea available on the web? Antennex maybe?
>
> I would very much like a small antennea like the EH or CFA to work. If you
> have detailed descriptions of how to build it and how to tune it (probably the
> most important part), I will try it. Til then, I will stay with my magloops.
>
> I played with the CFA for a couple of months and made several contacts on 40
> meters. I got a good 1:1 match and saw some strange hysteretic effects that
> might have been a sort of phase-lock-in of the field generation. But it did
> not work as well as my 5 foot vertical with Hustler trap. When Jack Stone of
> Antennex contacted me when he heard that I had made contacts, I was amazed that
> my mediocre results were a significant data point.
>
> One of the reasons I like to build ham radio stuff is that I dont have to be
> perfcet. I can try things that just look like fun, even if there is a better
> way. And, luckily, I can afford my own time to try things that may not work
> (on weekends at least, during the week my company insists that my designs work
> hi hi).
>
> 73
> Jim Cooper NE6O
> CooperJim@aol.com

1427. Re: Basic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 11:10:44 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <ITw38.28$b62.69415@newsfeed.slurp.net>
Source record: 150415
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

I want back the part of the signal re-radiated by my receiving antenna ;o)))

73, Dave, K3BHJ

1428. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 12:05:51 UTC
From: stefano <sgalast@tin.it>
Message-ID: <zGx38.15457$Rv3.598562@news2.tin.it>
Source record: 150417

Hi Jim,
Nice to meet a ham still loving experimenting with no preconceptions....you are a rare person...hi .
So about CFA can be a long chat. I know very well Jack Stone. If you want prove your self the CFA CAN have the same efficiency of a full size vertical (with no traps) you can look for "stefano's cfa experiments" in the antennex archive.
I have completely descript a 40 meters CFA antenna having the efficiency minimum of 70%.
Still today I don't understand WHY very few hams tried to have one built.
I gave all measures, all hints , all....but, I am sure, only three or four hams did it....I know it can be a quite important mechanic job,using some expensive parts...but these behaviors still surprising me.
Of course it can be optimized, and I am still available to suggest you how.

BUT...

The EH antenna is so far superior to it, hence I will be happy to guide you on a complete experiment with it.
You will have a lot of fun and On a simple and fast manner ,you will see the antenna keep his promises.
Thanks , Stefano Ik5IIR

"CooperJim" <cooperjim@aol.com> ha scritto nel messaggio news:20020123015834.19053.00003049@mb-cl.aol.com...
> Stefano
>
> Isyour design for the EH antennea available on the web? Antennex maybe?
>
> I would very much like a small antennea like the EH or CFA to work. If you
> have detailed descriptions of how to build it and how to tune it (probably the
> most important part), I will try it. Til then, I will stay with my magloops.
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> I played with the CFA for a couple of months and made several contacts on 40
> meters. I got a good 1:1 match and saw some strange hysteretic effects that
> might have been a sort of phase-lock-in of the field generation. But it did
> not work as well as my 5 foot vertical with Hustler trap. When Jack Stone of
> Antennex contacted me when he heard that I had made contacts, I was amazed

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> my mediocre results were a significant data point.
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> One of the reasons I like to build ham radio stuff is that I dont have to
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> way. And, luckily, I can afford my own time to try things that may not
work
> (on weekends at least, during the week my company insists that my designs
work
> hi hi).
>
> 73
> Jim Cooper NE6O
> CooperJim@aol.com

1429. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 12:10:09 UTC
From: jo <captjoejoe@uswest.net>
Message-ID: <BKx38.117108$va.55284609@news2.rdc1.mi.home.com>
Source record: 150416

So you suggest dumbing the tests down for just some folks... the colored ones,and you say...buy reducing the fees to nothing... to make it even easier....to let colored people with little or no ambitions or commitment, into ham radio..this will help us and help the hobby in the long run!!!!!!!!!!

Ok.. lets see here... So what your really saying in your own script.. is colored folks USUALLY AVERAGE OUT TO BE not as ambitious, and not as smart, and are alot more poor than than Joseph Whitey and Robert Crackery RIGHT!!!!!!!!!!!!!!!!!

BY GIVING IT AWAY TO ANYONE BECAUSE OF THERE COLOR!!!
YOUR OUTTA YOUR MIND!

ENOUGH SAID!!!!!!!!!!!!!!

1430. Re: how to construct a matching circut for a ramdom wire for 40 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 13:07:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2md71$12i8hm$1@ID-124126.news.dfncis.de>
Source record: 150418
Cross-posted to: rec.radio.amateur.antenna,rec.radio.homebrew

> > I need to match a long 40 foot random wire antenna for 40 meters.
>
==========

Download program ENDFEED from website below. Enter antenna height and length
and ground system details. Program will predict radiating efficiency, etc.
Also provides a choice of 3 matching/tuning networks - program calculates
L and C values of two L-networks and one T-network.

If homebrewing your own tuner and other coils use program SOLNOID2.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

1431. Re: Basic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 13:24:29 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201230524.4f9ad926@posting.google.com>
Source record: 150319
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

"David J. Windisch" <davidw@copper.net> wrote in message
news:<lTw38.28$b62.69415@newsfeed.slurp.net>...
> I want back the part of the signal re-radiated by my receiving antenna ;o)))
>
> 73, Dave, K3BHJ

The only way I know of to do this is to completely enclose your
receiving antenna in a metal sheild ;-)

Jim
N8EE

1432. Re: Need help with yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 13:24:57 UTC
From: AL GOSS <renal@localnet.com>
Message-ID: <3C4EB9A9.28CB7F69@localnet.com>
Source record: 150320

chris 2% not very much, I think 1st try to adj the gamma match (has one or is T fed) I bought one 3 el for /P use had to adj the gamma 1st then all fell into place. 110" DR. EL for 50.1 area to start. all else will follow. my 3 el had gamma sleeve TOO LONG so too too much capacitance and tried a 'sub' piece 1/2 as long to confirm it--- worked fb, so contacted the manu said they 'may' have made a mistake with sub-in wrong part. nice !! gl AL k2ERG

chris wrote:

> I have a 6 Mtr 5 ele tonna that will not tune where it is supposed to.....in
> order to get it to tune from 50.05 to 50.3 i have to extend the drivern
> element by 1.5" each side...from my very limited under standing on aerials,
> the reflector should be around 5% bigger than the driver.....but adjusting
> this makes the reflector about 2% longer....does this mean that the
> reflector will not work...is it worth me making the reflector 3" longer.

1433. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 13:37:19 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <3C4EBC8F.8030403@mwci-news>
Source record: 150321
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

Richard Corkish wrote:

>
> "Antenna Theory Analysis and Design" by C. Balanis (2nd edition) clearly and
> explicitly states that for a transmitting antenna (at best, with a conjugate
> match of the antenna to the transmitter) "half of the total power supplied
> by the generator is radiated by the antenna during conjugate matching, and
> the other half is dissipated by heat in the generator. (p. 75)".

This is one Balanis error.

> for a conjugate match between a receive antenna and its load, "half the
> power is delivered to the load and the other half is scattered. (p. 77)".

This is correct. An incoming wave has a certain
"available power" and a 377 ohm space (generator)
impedance. The receive antenna can, at best,
therefore only deliver the power that is
"available" from the wave, which is one-half the
power in the wave. The rest is re-radiated.

Bill W0IYH

1434. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 13:39:28 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <k2z38.317493$WW.14491862@bgtnsc05-news.ops.worldnet.att.net>
Source record: 150322

"stefano" <sgalast@tin.it> wrote in message
news:cfo38.14394$hi.379407@news1.tin.it...

>
> Since you know all about it, could you ,please, tell me exactely what you
> tested?And how?
> Thanks very much.
> Stefano IK5IIR
>

Why don't you tell us exactly what you built, exactly how you tested it and
provide full details of the measured results so that we can make our own
evaluation???

Steve VE9SRB

1435. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 13:41:53 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <B4z38.317496$WW.14492043@bgtnsc05-news.ops.worldnet.att.net>
Source record: 150323

"stefano" <sgalast@tin.it> wrote in message
news:Ol038.10122$Rv3.435190@news2.tin.it...
> Hi dear friends,
> Yes I understand all and I am agree with all of your objections...
> simply you don't have the needed data to judge.
>
> please, I am speaking for the EH antenna only.
> This antenna was announced for the first time at the world last
> september....is just a baby now.
> We are working very hard to start a production, lab tests, indipendent
> measurements.
>
> very soon everybody will know about. Please is not an excuse, we just need
> some more time.
> At the moment is almost unknown...
> In the mean time we decided to reveal all about his building
> instructions...just for the curious ham loving experimenting.
>
> Thanks, 73 Ik5IIR
>

From these statements: "We are working very hard to start a production, lab tests, indipendent measurements." and "Please is not an excuse, we just need some more time.", it sounds like you are the one who "don't have the needed data to judge"

Steve VE9SRB

1436. Re: Need help with yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 13:47:41 UTC
From: Val <val_a20@hotmail.com>
Message-ID: <3C4EBEFD.66522583@hotmail.com>
Source record: 150324

There defititly is something "fishy" here.

This SEAMS to be a problem with the distance between
the radiators and/or radiator(s)/DE. Check this
with Your drawing!
Possible cause: Boom incorrectly put together, one
section turned "backwards", so that the distance
between the elements became incorrect. Or even all
elements mounted in "opposite" order on boom.

Otherwise, talk to the person/firm that sold it to
You, claiming Your money back. It is defective. A
Tonna antenna should work without any extra work (if
not placed at an extreme location)

73 de V

chris wrote:
>
> It is a commercial aerial and the length of the DE is 2875mm as givern in
> the specs in the instruction manual..it is matched with a beta match, they
> are about half inch diameter and there is supposed to be no tuneing
> involed....you are supposed to just put it together and away you go....thats
> what most people do...but not mine (for some reason).....i have tried it
> with 2 different lengths of cable and evern tried connecting the cable
> direct to the elements, but still no good...also it seems that the higher i
> put the aerial the higher the SWR goes...at the moment it is on a pole in
> the garden about 3 feet from the ground and the SWR is 1.1:1 from
> 50.33-50.62 but if i put it on a pole at 15 feet high it then goes up to
> 1.5:1 and then at 30 feet its 1.8:1...it is supposed to be approx 1.1:1 from
> 49.9- 50.5.....if i lengthern the DE buy about 3 inches it is then 1.1:1
> from 50.1-50.3.....dont know what happens when i put it up on the pole as i
> have not tried yet...it got to dark last night.
>
> "Bill Aycock" <baycock@hiwaay.net> wrote in message
> news:3C4DF3BA.12941141@hiwaay.net...
> > Chris- My question is- how did you determine the original length for the
> > driver, that you then had to add to? Did you use one of the published
> > "formulas", or a modeling program, or was this a commercial antenna?
> > What is the size of the driven element (diameter and length)?
> >
> > With this added information, some answers may be possible.
> >
> > Bill-W4BSG
> >

> > chris wrote:
> > >
> > > I have a 6 Mtr 5 ele tonna that will not tune where it is supposed
> to.....in
> > > order to get it to tune from 50.05 to 50.3 i have to extend the drivern
> > > element by 1.5" each side...from my very limited under standing on
> aerials,
> > > the reflector should be around 5% bigger than the driver.....but
> adjusting
> > > this makes the reflector about 2% longer....does this mean that the
> > > reflector will not work...is it worth me making the reflector 3" longer.

1437. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 13:58:54 UTC
From: fractenna@aol.com
Message-ID: <20020123085854.27592.00000006@mb-df.aol.com>
Source record: 150325

>
>"stefano" <sgalast@tin.it> wrote in message
>news:Ol038.10122$Rv3.435190@news2.tin.it...
>> Hi dear friends,
>> Yes I understand all and I am agree with all of your objections...
>> simply you don't have the needed data to judge.
>>
>> please, I am speaking for the EH antenna only.
>> This antenna was announced for the first time at the world last
>> september....is just a baby now.
>> We are working very hard to start a production, lab tests, indipendent
>> measurements.
>>
>> very soon everybody will know about. Please is not an excuse, we just need
>> some more time.
>> At the moment is almost unknown...
>> In the mean time we decided to reveal all about his building
>> instructions...just for the curious ham loving experimenting.
>>
>> Thanks, 73 Ik5IIR
>>
>
>From these statements: "We are working very hard to start a production, lab
>tests, indipendent measurements." and "Please is not an excuse, we just need
>some more time.", it sounds like you are the one who "don't have the needed
>data to judge"
>
>Steve VE9SRB

I agree with Steve; kindly realize that these are questions any AND ALL scientist asks.

An antenna is a finite structure, so it shouldn't take years to address the matters at hand. The last time I checked into this discussion it had gone on for months and months and months.

Perhaps project management would help? Have you detailed your tasks and interlaced them on a time line? This standard practice is hardly infallible but does give one a sense of progress and, more importantly,let's one know what's left to do and how long it should take to do it.

73,
Chip N1IR

1438. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 14:10:10 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C4EC421.69E419DD@tampabay.rr.com>
Source record: 150326

jason
what i would do is save what ya can for a downpayment then go buy a house somewhere with an acher of land most times you can buy a house for what you can rent an apartment for then as long as you buy a place that is not deed restricted you can put up what ever you wish

Jason Hsu wrote:

> The next time I look for a new apartment, what should I look for? My
> current QTH is miserable because it is on the ground floor, and the
> location is at a low land elevation.
>
> I know that apartments are miserable compared to houses. I just want
> to do better next time. Also, I am more willing to pay extra for a
> better QTH in the future than I was in the past. (I was a lowly
> No-Code Tech when I moved into my current QTH. I was expecting a
> career in fiber optics instead of antennas/RF/microwave. There were
> so few apartments to choose from, and the nonham issues won me over.)
>
> While being at a higher elevation won't necessarily help for HF
> skywave, it will help for line-of-sight communications on VHF, UHF,
> and microwave (a part of the hobby I would like to enter) and possibly
> even ground wave on HF. I know I also want to be at least 1 floor
> above the ground, as I would feel free to keep my antennas (especially
> the more expensive and bulky DK3 Screwdriver antenna for HF) on the
> outside balcony without concerns about theft. This would be MUCH more
> convenient. (Obviously, the apartment must have a balcony to begin
> with.)
>
> So what should I do next time? Some of my ideas:
> 1. I will try out my Yaesu FT-50R radio and at least listen to all
> the local repeaters. The more repeaters I can use (especially among
> those far away), the better for line-of-sight.
> 2. I will bring an AM/FM radio and see how many local FM and AM radio
> stations I can listen to. The more FM stations I can listen to and
> the more AM stations I get during the day, the better.
> 3. I will also use the AM part of the radio (on frequencies between
> broadcast stations) and check for noise sources (in case power line
> problems cause interference).
>
> Are there any other factors I should look for? More importantly, are
> there red flags to watch out for? (Examples: metal instead of wood
> railings, metal structures at close range, metal roofing or siding
> just above a top-floor apartment, etc.)
>

> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

1439. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 14:15:00 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3C4EC564.2112C2A8@hiwaay.net>
Source record: 150327

Stefano-
Why do you keep avoiding the issue? If there is any basis to your
claims, there must be data to back them. You say you measured 70%
efficiency on a CFA, and that the EH is better.
answer these, if you can.
1. describe what you made.
2. describe the tests you made, and the parameters you measured.
3. describe the method and instrumentation used for the tests.
4. give the results of the measurements.

otherwise- all your claims are junk.

Bill-W4BSG

stefano wrote:
>
> Hi Jim,
> Nice to meet a ham still loving experimenting with no preconceptions....you
> are a rare person...hi .
> So about CFA can be a long chat. I know very well Jack Stone. If you want
> prove your self the CFA CAN have the same efficiency of a full size vertical
> (with no traps) you can look for "stefano's cfa experiments" in the antennex
> archive.
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> Still today I don't understand WHY very few hams tried to have one built.
> I gave all measures, all hints , all....but, I am sure, only three or four
> hams did it....I know it can be a quite important mechanic job,using some
> expensive parts...but these behaviors still surprising me.
> Of course it can be optimized, and I am still available to suggest you how.
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> BUT...
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> The EH antenna is so far superior to it, hence I will be happy to guide you
> on a complete experiment with it.
> You will have a lot of fun and On a simple and fast manner ,you will see
> the antenna keep his promises.
> Thanks , Stefano Ik5IIR
>
> "CooperJim" <cooperjim@aol.com> ha scritto nel messaggio
> news:20020123015834.19053.00003049@mb-cl.aol.com...
> > Stefano
> >
> > Isyour design for the EH antennea available on the web? Antennex maybe?
> >

> > I would very much like a small antennea like the EH or CFA to work. If
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> > most important part), I will try it. Til then, I will stay with my
> magloops.
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> > I played with the CFA for a couple of months and made several contacts on
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> > not work as well as my 5 foot vertical with Hustler trap. When Jack Stone
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> > my mediocre results were a significant data point.
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> > perfcet. I can try things that just look like fun, even if there is a
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> > way. And, luckily, I can afford my own time to try things that may not
> work
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> work
> > hi hi).
> >
> > 73
> > Jim Cooper NE6O
> > CooperJim@aol.com

1440. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 14:28:36 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c4ecc95_1@news1.prserv.net>
Source record: 150328

Richard Clark <kb7qhc@attbi.com> wrote in message
news:alcs4u8mnai2dbp4hg1sdl9n53tl7h9dsn@4ax.com...
> On Wed, 23 Jan 2002 13:06:31 +1100, "Richard Corkish"
> <r.corkish@unsw.edu.au> wrote:
>

<snip>
> Such discussion embodied in these tracts are part of the NBS (now
> NIST) definitions for

> Conjugal

HUH?
Freudian slip?

> and Zo matches. I would point out that
> the key word here is "basis" which demands close attention in how they
> are enumerated in these references. The mid 60's was a transitional
> era in the usage of these concepts and you are sure to find conflict
> between sources that bracket this period.
>
> 73's
> Richard Clark, KB7QHC

--
Crazy George
Remove NO and SPAM from return address

1441. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 14:31:12 UTC
From: richardharrison@webtv.net
Message-ID: <24698-3C4EC930-6@storefull-118.iap.bryant.webtv.net>
Source record: 150329

Richard Corkish wrote:
"half of the total power supplied by the generator is radiated by the antenna during conjugate matching, and the other half is dissipated by heat in the generator."

True in the case where the signal source is continuoous. We know that power flow in a Class C amplifier is not continuous, but is drawn in pulses from the power supply.

Power output from the transmitter is continuous, never-the-less, because there is a tank circuit which continues to supply power during the switched-off periods of the Class C amplifier. If you have scoped the transmitter output, you know the waveform is pure as required by regulations.

Source opposition to current can take the form of an open switch. Zero current flow produces zero dissipation.

In many Class C amplifiers, current flows for only 1/3 of the r-f cycle. 2/3 of the cycle, power output of the Class C amplifier is switched-off. There is no power loss in the Class C amplifier while it is switched-off.

During the 1/3 of the r-f cycle while the amplifier is conducting, it is switched-on hard and fast. The amplifier has a very low voltage drop and power loss.

Internal opposition to power output in a Class C amplifier comes mostly from its switched-off time which is lossless. What loss the Class C amplifier does have comes from the internal voltage drop across its switch while it is conducting. This voltage drop is small and so is the power dissipation.

The apparent output resistance of the Class C amplifier comes from the average internal resistance seen over an r-f cycle.

If there were no internal switch and circuit resistance, a transmitter might have 100% efficiency. 70% or so is typical. This high efficiency is obtained because most of the internal opposition to power output comes from open-switch time which is lossless. This opposition to power flow as produced by an open switch is appropriately called "dissipationless resistance".

Best regards, Richard Harrison, KB5WZI

1442. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 14:57:59 UTC
From: richardharrison@webtv.net
Message-ID: <11777-3C4ECF77-17@storefull-111.iap.bryant.webtv.net>
Source record: 150330

Bill, W0IYH wrote:
"for a conjugate match between a receive antenna and its load, "half the power is delivered to the load and the other half is scattered. (p77)" This is correct."

I don`t like Balanis` use of the word "scattered".

The source resistance of a receiving antenna is its radiation resistance. The voltage induced in the receiving antenna appears in series with the antenna`s radiation resistance as a generator feeding a receiver load resistance, disregarding reactances for simplicity.

If the load matches the source, there is no reflection from the load. Half the energy is absorbed in the load. The other half of the energy is lost in the radiation resistance of the antenna. It is re-radiated (scattered?).

Best regards, Richard Harrison, KB5WZI

1443. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 15:06:27 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2mkj5$126vdj$1@ID-124126.news.dfncis.de>
Source record: 150331

> The apparent output resistance of the Class C amplifier comes from the
> average internal resistance seen over an r-f cycle.
==========

But if the output ('internal' is better) resistance is not known, and how to obtain/calculate it is a mystery, it is not needed for any recognisable purpose and it doesn't matter what it is anyway, why waste bandwidth waffling about it ? ;o)

1444. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 16:20:30 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a2mnvm$a2m$1@newsserver.cilea.it>
Source record: 150332

Bill,
I am afraid you won't get any defendable figure out of them (at this time, at least)... apart from unsupported assertions like "it performs like a full-size dipole", or "the efficiency is 95%", or "somebody has worked New Zealand in 40 m" etc. etc.
The ONLY proper and independent test (that failed..) has been carried out by Ted Hart at 1540 kHz. This was happening in October 2001; we have heard nothing since... his Web site is just silent !
One wonders: how comes that it is taking so long to make the EH antenna work properly at MW frequencies ? Is it more difficult then expected ? Why ?
Oh, I can see it coming.... now Stefano will tell us that - with time - this antenna will storm the world of low frequencies, it is just too early, etc etc. ... good luck to them... I will wait for independent (and trustable) tests.. till then, sorry, but I just cannot stand snake oil !

Michele IZ2EAS

"Bill Aycock" <baycock@hiwaay.net> ha scritto nel messaggio
news:3C4EC564.2112C2A8@hiwaay.net...
> Stefano-
> Why do you keep avoiding the issue? If there is any basis to your
> claims, there must be data to back them. You say you measured 70%
> efficiency on a CFA, and that the EH is better.
> answer these, if you can.
> 1. describe what you made.
> 2. describe the tests you made, and the parameters you measured.
> 3. describe the method and instrumentation used for the tests.
> 4. give the results of the measurements.
>
> otherwise- all your claims are junk.
>
> Bill-W4BSG
>

1445. Vol 2? Williams" Antenna Theory and Design'"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 16:26:15 UTC
From: fractenna@aol.com
Message-ID: <20020123112615.27579.00000033@mb-fv.aol.com>
Source record: 150333

I am still trying to find out if Paul Williams' lovely book " Antenna Theory and Design" (vol 1 pub 1966, Pittman, London UK) had subsequent volumes and am eager to see if anyone has access to these. So far, in a somewhat leisurely and long-term fashion, I have failed to either find a copy of the later volumes, nor found anyone who has heard of them.

Any help?

Thanks!

73
Chip N1IR

1446. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 16:28:35 UTC
From: millersg@dmapub.dma.org
Message-ID: <a2mobj$f0t$1@dmapub.dma.org>
Source record: 150334
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

In article <3C4EBC8F.8030403@mwci-news>,
William E. Sabin <sabinw@mwci-news> wrote:
>Richard Corkish wrote:
>
>>
>> "Antenna Theory Analysis and Design" by C. Balanis (2nd edition) clearly and
>> explicitly states that for a transmitting antenna (at best, with a conjugate
>> match of the antenna to the transmitter) "half of the total power supplied
>> by the generator is radiated by the antenna during conjugate matching, and
>> the other half is dissipated by heat in the generator. (p. 75)".
>
>
>This is one Balanis error.
>
>
>> for a conjugate match between a receive antenna and its load, "half the
>> power is delivered to the load and the other half is scattered. (p. 77)".
>
>
>This is correct. An incoming wave has a certain
>"available power" and a 377 ohm space (generator)
>impedance. The receive antenna can, at best,
>therefore only deliver the power that is
>"available" from the wave, which is one-half the
>power in the wave. The rest is re-radiated.
>
>Bill W0IYH

This is generally the case for most antenna structures. However using
clever design techniques, it is possible to deliver (nearly) all the power
from an incident wave into the load (without enclosing both source and receive
antennas in a metal box).

--
Steve Miller N8SM millersg@dma.org http://www.dma.org/~millersg

1447. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 16:47:10 UTC
From: Ed Cregger <663jlm@vei.net>
Message-ID: <u4tq0s4584te37@corp.supernews.com>
Source record: 150335

I know that Dennis' advice sounds harsh, but it is the
truth, Jason. Play with the toys after you have taken care
of business.

Ed Cregger, NM2K
nm2k@adoublerl.net (wink)

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:3C4EC421.69E419DD@tampabay.rr.com...
> jason
> what i would do is save what ya can for a downpayment then
go buy a house
> somewhere with an acher of land most times you can buy a
house for what
> you can rent an apartment for then as long as you buy a
place that is not
> deed restricted you can put up what ever you wish
>
> Jason Hsu wrote:
>
> > The next time I look for a new apartment, what should I
look for? My
> > current QTH is miserable because it is on the ground
floor, and the
> > location is at a low land elevation.
> >
> > I know that apartments are miserable compared to houses.
I just want
> > to do better next time. Also, I am more willing to pay
extra for a
> > better QTH in the future than I was in the past. (I was
a lowly
> > No-Code Tech when I moved into my current QTH. I was
expecting a
> > career in fiber optics instead of antennas/RF/microwave.
There were
> > so few apartments to choose from, and the nonham issues
won me over.)
> >
> > While being at a higher elevation won't necessarily help
for HF
> > skywave, it will help for line-of-sight communications
on VHF, UHF,
> > and microwave (a part of the hobby I would like to
enter) and possibly

> > even ground wave on HF. I know I also want to be at
least 1 floor
> > above the ground, as I would feel free to keep my
antennas (especially
> > the more expensive and bulky DK3 Screwdriver antenna for
HF) on the
> > outside balcony without concerns about theft. This
would be MUCH more
> > convenient. (Obviously, the apartment must have a
balcony to begin
> > with.)
> >
> > So what should I do next time? Some of my ideas:
> > 1. I will try out my Yaesu FT-50R radio and at least
listen to all
> > the local repeaters. The more repeaters I can use
(especially among
> > those far away), the better for line-of-sight.
> > 2. I will bring an AM/FM radio and see how many local
FM and AM radio
> > stations I can listen to. The more FM stations I can
listen to and
> > the more AM stations I get during the day, the better.
> > 3. I will also use the AM part of the radio (on
frequencies between
> > broadcast stations) and check for noise sources (in case
power line
> > problems cause interference).
> >
> > Are there any other factors I should look for? More
importantly, are
> > there red flags to watch out for? (Examples: metal
instead of wood
> > railings, metal structures at close range, metal roofing
or siding
> > just above a top-floor apartment, etc.)
> >
> > Jason Hsu, AG4DG
> > jason_hsu_802701@@@@@yahoo.com
> > http://www.jasonhsu.com/ham_radio-technical.html
>

1448. Does the type of mast make a difference?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 17:26:07 UTC
From: Screaming Skull <KG4IVT@hotmail.spamsucks.leaveme.alone.com>
Message-ID: <PmC38.65250$n81.15900974@typhoon.southeast.rr.com>
Source record: 150336

In an antenna installation does the type of mast used make a difference in how the antenna performs? I've got a Cushcraft AR-2 2m ringo in my attic attached to the floor of the attic with an antenna mount and a piece of PVC pipe holding it up. However, I have thought about switching it out with a piece of metal mast pipe I have laying around. Will doing this change anything about my antenna at all? I am mostly concerned with TVI which I have somewhat of a problem with but if this will hurt or improve anything I would like to know that. Any suggestions are welcome. Thanks!!

1449. Any experience with the SteppIR Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 17:42:59 UTC
From: "Tim W. Henry" <both@pcisys.net>
Message-ID: <u4ttb5a274pb7e@corp.supernews.com>
Source record: 150337

Hi All,

There is a mechanically adjustable Yagi called the SteppIR antenna. The web site is www.fluidmotion.ws. It looks like a great idea. Does anyone out there have any experience with it? I would love to get your feedback.

Thanks,

Tim Henry AB0RI

1450. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 17:53:57 UTC
From: richardharrison@webtv.net
Message-ID: <11777-3C4EF8B5-33@storefull-111.iap.bryant.webtv.net>
Source record: 150340

Reg wrote:
"But if the output ("internal" is better) resistance is not known, and how to obtain/calculate it is a mystery, it is not needed for any recognizable purpose and it doesn`t matter what it is anyway, why waste bandwidth waffling about it?"

I find only one point of agreement above. Internal resistance is less confusing than output resistance.

Internal resistance can be determined.

Internal resistance limits output.

Some amateurs want maximum output from a transmitter, which may or may not be the same as the rated output.

Maximum output is obtained with a conjugate match. This does not mean an equal power is being dissipated in the transmitter as is being fed to the load because some of the internal resistance of the transmitter is of the non-dissipative variety.

Best regards, Richard Harrisomn, KB5WZI

1451. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 18:03:16 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <1TC38.12224$JM6.2311753@news20.bellglobal.com>
Source record: 150338

<ehsjr@bellatlantic.net> wrote in message
news:3C4E2E92.4E831A4D@bellatlantic.net...
> The fact that someone else has better privileges than
> you or I, does not mean we are entitled to those privileges.
> Your salary is bigger than mine - does that mean I should
> be paid the same as you? You need to make a better case
> to support your point.
>
> StarGazer wrote:
>
> > Thanks for making my point. Since their are so many US hams
> > all the more reason to have a much bigger phone band like
> > Canada (Phone being more popular of a mode and much
> > more practical) And I do a lot more CW than phone.
> > The fact that ham radio is more popular in the US than Canada
> > is irrelevant.

And StarGazers call would be??? Or does he wish it to remain private?

1452. Testing Cushcraft traps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 18:15:48 UTC
From: Alf Green <alf.green@honeywell.com>
Message-ID: <o5D38.671$SK4.277678@paloalto-snr1.gtei.net>
Source record: 150339

Greetings,

Sometime in the next few months, before it gets too hot to climb the tower, I want to put my A4S (20/15/10 4-ele beam) back in the air. It worked fine when I took it down, but has been in pieces laying on my roof for several years, and some of the traps are showing signs of cracking on the end seals.

Although they have not been exposed to standing water, it's possible that moisture could have crept in. I'd rather not dissemble them unnecessarily, so am looking for a way to test them as is.

I have the original datasheet for the A4S but it does not include any details. Neither is Cushcraft forthcoming with anything useful (not that I would really expect them to under the circumstances). I expect each inner trap to be a parallel-resonant circuit at 28MHz, and the outer ones to be resonant at 21MHz, but that may be too simplistic. I'd also like to get some assurance that the power handling hasn't been degraded, even though I probably wont be running much over 100w.

I have a good selection of test equipment, I just need some ideas as to what exactly I need to look for.

All suggestions welcome.

73 Alf NU8I
Scottsdale AZ DM43an

1453. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 18:28:05 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <mbtt4u4a7k02l03vrc04kdbgri327fn2b6@4ax.com>
Source record: 150341

On Wed, 23 Jan 2002 12:05:51 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi Jim,
>Nice to meet a ham still loving experimenting with no preconceptions....you
>are a rare person...hi .
>So about CFA can be a long chat. I know very well Jack Stone. If you want
>prove your self the CFA CAN have the same efficiency of a full size vertical
>(with no traps) you can look for "stefano's cfa experiments" in the antennex
>archive.
>I have completely descript a 40 meters CFA antenna having the efficiency
>minimum of 70%.
>Still today I don't understand WHY very few hams tried to have one built.
>I gave all measures, all hints , all....but, I am sure, only three or four
>hams did it....I know it can be a quite important mechanic job,using some
>expensive parts...but these behaviors still surprising me.
>Of course it can be optimized, and I am still available to suggest you how.
>
>BUT...
>
>The EH antenna is so far superior to it, hence I will be happy to guide you
>on a complete experiment with it.
>You will have a lot of fun and On a simple and fast manner ,you will see
>the antenna keep his promises.
>Thanks , Stefano Ik5IIR
>

Hi Stefano,

It appears you need remedial instruction from Scientific American's
skeptic:

>1. How reliable is the source of the claim?
figures they cite are distorted, taken out of
context or occasionally even fabricated.

>2. Does this source often make similar claims?
since the beginning, and to no obvious evidence.

>3. Have the claims been verified by another source?
They CAN NOT verify it themselves!

>4. How does the claim fit with what we know about how the world works?
It DOES NOT, and we are offered alternative math to prove it.

>5. Has anyone gone out of the way to disprove the claim, or has only
>supportive evidence been sought?
This group, like the fractalists (my spell checker, certainly more

scientifically rigorous that this sect, insists the word should be fantasists), simply ignore bad news; as far as supportive evidence goes, see #3 above!

>6. Does the preponderance of evidence point to the claimant's
>conclusion or to a different one?
Again, see #3 above! This group ignores outside data, and has to rummage through junk science for a rubber crutch.

>7. Is the claimant employing the accepted rules of reason and tools of
>research, or have these been abandoned in favor of others that lead to
>the desired conclusion?
Again, like the failed fractal debate, these nostrums for the curious serve only to satisfy those "in search of ancient mysteries."

>8. Is the claimant providing an explanation for the observed phenomena
>or merely denying the existing explanation?
>This is a classic debate strategy--criticize your opponent and never
>affirm what you believe to avoid criticism. This stratagem is
>unacceptable in science.
This is a classic move from the failed fractal debate too. Stefano tried to pull it on Mark just two posts ago.

>9. If the claimant proffers a new explanation, does it account for as
>many phenomena as the old explanation did?
Well, perhaps Stefano is not guilty of this staple from the fantasy of fractals. Clearly the best defense offered here is simple ignorance cloaked in the fake mumbling.

>10. Do the claimant's personal beliefs and biases drive the
>conclusions, or vice versa?
Again, the hubris of fractal delusions emerges as the operative factor.

Stefano, even with the allowance of #9, you have hit 9 out of 10 to register 91% efficiency in BALONEY generation. This is exceeded only by fractal BALONEY which tips the scale at 1100%! (forgive me for using fractal math, so useful in cooking the books of claims ï¿½ la ENRON/Anderson). By the way, it takes only one hit from the list above to commit CFA, EH, and fractal trash to the science dustbin.

I wish Jim good speed and reward to his effort, and the hopes he will not be ignored by you as a buffoon if/when he reports on the sad numbers that reveal the depth of loss that attends this design (see Scientific American's rules #3, #5, and #6 above).

But not to scare you away Stefano (I see another ghost trying to resurrect himself like Nixon ;-). The group appreciates your impression of Chico Marx. Nothing so amuses (beyond the inflated ego of fractal science (sic)) as these hick routines of aw shucks we're just good ol' boys mixed with the shuffling paisano fruit peddler. If you only had a phD (sung to the music of the tinman in the Wizard of Oz). You need credentials like teaching remedial electricity in a

Home Economics college.

Given the complete lack of hard evidence, it is obvious why this paisano act is so well polished. This, like the failed fractal debate, reveals why data is the first casualty and science finds itself prostituted for commercial gain and ego satisfaction.

73's and many more postings m'boy!
Richard Clark, KB7QHC

1454. Re: Need help with yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 18:47:10 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <pa1u4u450e27al1fu0kpfpb6ppdai6ijv5@4ax.com>
Source record: 150342

On Tue, 22 Jan 2002 20:29:47 -0000, "chris" <chris.c@ntlworld.com>
wrote:

>I have a 6 Mtr 5 ele tonna that will not tune where it is supposed to.....in
>order to get it to tune from 50.05 to 50.3 i have to extend the drivern
>element by 1.5" each side...from my very limited under standing on aerials,
>the reflector should be around 5% bigger than the driver.....but adjusting
>this makes the reflector about 2% longer....does this mean that the
>reflector will not work...is it worth me making the reflector 3" longer.
>

Hi Chris,

Did you decouple the feedline from the drive point?

73's
Richard Clark, KB7QHC

1455. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 18:47:27 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u4u2fkabgkegfb@corp.supernews.com>
Source record: 150346

"Mike Jordan" <mjordan@europa.com> wrote in message
news:3C4AEC8B.8080200@europa.com...

. How well does it hold up?
>

It doesn't hold up. You have to hold it up.

{;-)

Seriously, on 160 meters (actually, anything from 6m on down) galvanized, aluminum, copper, steel, damned near anything will work for a narrowband antenna. And suppose it rusts? Iron oxide is a fairly good conductor, and for those that worry about skin effect, go calculate skin effect depth at 2 MHz..

Jim

1456. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 18:52:18 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <lf1u4u41n6i4810e20bj3947b36mn8lgkd@4ax.com>
Source record: 150344

On Wed, 23 Jan 2002 08:28:36 -0600, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

>> Conjugal
>
>HUH?
>Freudian slip?

Hi George,

Hmmm, sometimes a match is just a match (pass that cigar humidor this
way). Perked right up for that one, eh? Does this account for the
"Crazy?" ...would for me....

73's
Richard Clark, KB7QHC

1457. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 18:56:38 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <pr1u4uonb96romheefu2l4us3e263nmsf4@4ax.com>
Source record: 150345
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

On 23 Jan 2002 11:28:35 -0500, millersg@dmapub.dma.org (Steve Miller)
wrote:

>
>This is generally the case for most antenna structures. However using
>clever design techniques, it is possible to deliver (nearly) all the power
>from an incident wave into the load (without enclosing both source and receive
>antennas in a metal box).
>

Hi Steve,

Can you offer one example of a clever design that does this?

73's
Richard Clark, KB7QHC

1458. Re: Any experience with the SteppIR Yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 19:11:01 UTC
From: me <me@nowwhere.com>
Message-ID: <3C4F0AC5.C235D919@nowwhere.com>
Source record: 150347

"Tim W. Henry" wrote:

> Hi All,
>
> There is a mechanically adjustable Yagi called the SteppIR antenna. The web
> site is www.fluidmotion.ws. It looks like a great idea. Does anyone out
> there have any experience with it? I would love to get your feedback.
>
> Thanks,
>
> Tim Henry AB0RI

i am contemplating buying their 3 ele beam. the only reports on it are ham.net

product reviews.

larry
kd5foy

1459. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 19:15:52 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C4F0BE8.C34D42C@capnet.com>
Source record: 150348

I wish to remain private.

ve3tmt wrote:

> <ehsjr@bellatlantic.net> wrote in message
> news:3C4E2E92.4E831A4D@bellatlantic.net...
> > The fact that someone else has better privileges than
> > you or I, does not mean we are entitled to those privileges.
> > Your salary is bigger than mine - does that mean I should
> > be paid the same as you? You need to make a better case
> > to support your point.
> >
> > StarGazer wrote:
> >
> > > Thanks for making my point. Since their are so many US hams
> > > all the more reason to have a much bigger phone band like
> > > Canada (Phone being more popular of a mode and much
> > > more practical) And I do a lot more CW than phone.
> > > The fact that ham radio is more popular in the US than Canada
> > > is irrelevant.
>
> And StarGazers call would be??? Or does he wish it to remain private?

1460. Re: Need help with yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 19:26:24 UTC
From: chris <chris.c@ntlworld.com>
Message-ID: <98E38.11174$Ph2.1704733@news2-win.server.ntlworld.com>
Source record: 150349

Thanks for everyones help...but i think i might of sussed it..i changed the beta match from a hair pin to a horse shoe and it now tunes 1.1:1 from 50.0-50.41.....and that will do for me...it gets me on the SSB part, which is what i wanted.

Cheers...Chris.

1461. Autotransformer ATU

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 19:41:15 UTC
From: "owen.home" <owen.home@ntlworld.com>
Message-ID: <lpE38.11282$Ph2.1727980@news2-win.server.ntlworld.com>
Source record: 150351

Help
I have a Racal ATU from an HF navigation system, it's unbalanced in and out in the form of an autotransformer with 11 input and output tappings with one or two vacuum variables (8-650pF) across the whole coil which consists of 35 turns on a 2.5" former. I believe it's designed for the lower HF frequencies and perhaps to match to a short vertical. The configuration and use of an autotransformer isn't something I've seen in the amateur literature - I'd appreciate any comments as to it's capabilities and drawbacks as I'd like to use it or modify it for general HF use. The unit is very well built with EHT cable and incorporates a 5A RF current meter driven from a transformer in the output line.
Any comments/suggestions appreciated.
Thanks

John

1462. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 19:45:33 UTC
From: Owen Duffy <owen@oda.com.au>
Message-ID: <3C4F12DD.89E7CF76@oda.com.au>
Source record: 150350

Jim Weir wrote:
>
> "Mike Jordan" <mjordan@europa.com> wrote in message
> news:3C4AEC8B.8080200@europa.com...
>
> . How well does it hold up?
> >
>
> It doesn't hold up. You have to hold it up.
>
> {;-)
>
> Seriously, on 160 meters (actually, anything from 6m on down) galvanized,
> aluminum, copper, steel, damned near anything will work for a narrowband
> antenna. And suppose it rusts? Iron oxide is a fairly good conductor, and
> for those that worry about skin effect, go calculate skin effect depth at 2
> MHz..

Skin depth is small compared to typical zinc coating thickness of new zinc covered wire.

Nevertheless, the resistance of zinc is around 350% of copper, so the ohmic loss of the wire will be higher than an equivalent copper coated wire, but if the wire is not too thin, it won't matter too much.

My estimates using Reg's WIRESKIN calculator, and adjusting for resistivity and permeability, are that you are probably talking additional loss of the order of tenths of a dB for practical wire sizes. In a practical sense, selection of the transmission line is probably more important.

Reg, have you though of adding input fields for rho and mu, so as to model gal wire, stainless elements, aluminium etc?

Owen

1463. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 20:22:19 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201231222.147664cc@posting.google.com>
Source record: 150352

Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
news:<3C4EC421.69E419DD@tampabay.rr.com>...
> jason
> what i would do is save what ya can for a downpayment then go buy a house
> somewhere with an acher of land most times you can buy a house for what
> you can rent an apartment for then as long as you buy a place that is not
> deed restricted you can put up what ever you wish
>
I agree that a house is MUCH better than an apartment. However, I am
not ready to buy a house yet. And the mortgage excludes many expenses
that rent does include (property taxes, maintenance, etc.) and is thus
misleadingly cheap. Then there are the issues of the debt, the
possibility I could move again, and the risk that the property value
will go down. (I know financial history - rising asset prices are NOT
a constitutional right upheld by the Supreme Court.)

I know that if I follow my own suggestions and those provided by
others in this thread, I can have a vastly better QTH, even in an
apartment. I'm not saying that an apartment is a good QTH - I'm just
saying that my current QTH is a MISERABLE one, and simply insisting on
a few key characteristics in my next apartment will be a VAST
improvement.

Now, if you're willing to lend me a few hundred thousand dollars with
no fees and a 1% interest rate, I will buy a house and enjoy QSOs on
the air with you. :)

Jason Hsu, AG4DG
jason_hsu_802701@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

1464. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 20:27:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C4F1CAD.825A0D83@eznec.com>
Source record: 150353

A scale model CFA was measured in a laboratory and the results reported in the September 2001 issue of the IEEE Transactions on Broadcasting in "Short Medium Frequency AM Antennas" by Valentin Trainotti. He found it to have the same performance as a vertical of the same height, if he kept the "D plate" open. When he excited the "D plate" as the inventors recommend, the efficiency dropped appreciably due to losses in the phasing network. These results are completely consistent with theory, modeling results, and experiments reported to me by private correspondence.

The main difference between the CFA and EH antennas, as far as I can tell, is that the EH antenna requires a magical inductor having a 90 degree phase difference in the currents at its two terminals. I'm still waiting to see one of those!

I quoted a concluding paragraph from the Trainotti paper in a posting to this newsgroup on December 19, with the subject "Re: any info about EH?". You should be able to find it at groups.google.com.

Roy Lewallen, W7EL

Michele IZ2EAS wrote:
>
> Bill,
> I am afraid you won't get any defendable figure out of them (at this time,
> at least)... apart from unsupported assertions like "it performs like a
> full-size dipole", or "the efficiency is 95%", or "somebody has worked New
> Zealand in 40 m" etc. etc.
> The ONLY proper and independent test (that failed..) has been carried out by
> Ted Hart at 1540 kHz. This was happening in October 2001; we have heard
> nothing since... his Web site is just silent !
> One wonders: how comes that it is taking so long to make the EH antenna work
> properly at MW frequencies ? Is it more difficult then expected ? Why ?
> Oh, I can see it coming.... now Stefano will tell us that - with time - this
> antenna will storm the world of low frequencies, it is just too early, etc
> etc. ... good luck to them... I will wait for independent (and trustable)
> tests.. till then, sorry, but I just cannot stand snake oil !
>
> Michele IZ2EAS

1465. Re: Testing Cushcraft traps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 20:37:35 UTC
From: Neil <DontDoIt@ImNotHere.com>
Message-ID: <vc3u4ucguhsm8imimqvpicr04hsd4nqmva@4ax.com>
Source record: 150354

(The following is provided as an opinion only, and without warranty of ANY kind. You take all the risk. If you are NOT comfortable doing this job, STOP, you may ruin your antenna. That being said, my own results have been very good...)

Hi Alf;

I was in the same situation as you when I embarked on a project of A4S testing and recovery. It's been a long slow path, but the end result is very satisfying. The unit I have includes the 40 meter add-on kit.

As you, I found that the "support" at Cushcraft amounted to little more than a junior employee telling me he didn't know of any trap problems...YEAH RIGHT!

You need to decide what makes the most sense for you. You can properly restore the antenna, or try to band-aid it hoping for the best. If you do the latter, depending on your weather and climate, you will likely see regular trap failures, partucularly in wet or icy conditions. Sometimes they will clear up when things dry out again, but sometimes you can get internal arcing or opens, in which case the only remedy is to bring the whole antenna down and work on it. If you don't mind doing this every six months or so, then you're more energetic than I.

The resonant points of the traps are neither intutive nor easy to measure with any certainty. In my experience the best approach to dealing with this antenna is to open up EVERY trap and give it a thorough going-over (described below). If you do this, then the chances are very good that you've got at least several years of worry-free operation, hurricanes notwithstanding.

So here goes:

1. During disassembly, mark each trap according to its type, TA, TK, etc. with a black magic marker on the outside of the metal can. Also draw an arrow -> pointing toward the boom (this is not really necessary, but can help avoid a backwards mounted trap).

2. Pick a trap to begin with and remove the end caps. Note whether they are cracked or dried. (You'll want to order a bunch of replacements from Cushcraft, be sure to order a few extras.)

3. Notice that the trap has on one end a region of the can that has been stamp-formed inwardly, and has a screw attaching it to the element tubing (remove this screw and save it). The other end of the can has a few dimples that have been impressed into it. These dimples

rest in a groove in a spacer doughnut inside the end of the trap, and will make disassembly very hard.

Now for the tough part...

4. Using only as large a drill bit as necessary, drill out all of the pesky dimples. Don't drill any deeper than you have to, you just have to penetrate the aluminum can. Yes, this drilling will very slightly change the capacitance, but experimentally it hasn't seemed to matter. It's best to use a drill press for this step so you can better control how deep you go. Now, the discovery...telescope the trap "guts" and the spacer doughnut out that end of the trap, and see what's inside (for better or worse)!

5. Inspect for insects, dirt, arcing or burn marks, etc. Clean up the trap contents, but do NOT use any solvents nor abrasives on the body of the coil. In most cases a soft bristle brush and a vacuum cleaner will do fine. Compressed air is also a help.

6. Notice that each end the coil is fastened to the tubing with a thread-cutting screw. This interface is where most of the contact problems occur, due to the copper-to-aluminum interface.

Here's the messy part...

6. Remove each coil-end screw (2) and observe if the screw itself has rusted/corroded warranting replacement. If so, get a stainless screw of the same design and size. Now lift the end of the copper coil slightly and abrade the two contacting surfaces (one copper, one aluminum) using a fine grit double sided emery file (or a diamond-dust double-sided nail file). You can also clean up the top of the copper wire (just at that point) so the screw will have a clean contact area to clamp onto. Using Penetrox-A, grease up all of the contact areas thoroughly, and tightly reinstall the two hold-down screws (don't strip them!). Work clean, keep a clean rag handy, and be careful not to get Penetrox on the coil windings, nor anywhere else for that matter (not easy).

7. Reassemble the trap. Using a similar approach, abrade and grease up the contacting surfaces where the screw removed in step 3 goes. Replace this screw with a new one if it's badly corroded, tighten well but don't strip.

8. Replace the plastic end caps, either with your originals (if intact) or with new ones. Now, ohm out the trap, you should see a small fraction of 1 ohm, in other words a DC short. If you see any appreciable resistance, something's wrong, don't continue till you resolve it.

9. Repeat with all traps.

10. Reassemble the antenna, putting a layer of Penetrox-A in each of the tubing joints prior to insertion.

Once you do this, and get the antenna tuned up to the band centers you like, it should be very stable for a very long time.

Note: If in this process you find one or more trap coils that appear to be heavily coated with carbon powder or residue, you've got an arced-over trap that needs replacement. This can be the result of too much power, an insulation failure, or using it on a non-supported band (such as 17m).

Hope this helps.

Neil, K1VY

email to K1VY@arrl.net

P.S. On my A4s I still occasionally see some motion of the resonance center point in icy conditions, what I understand is that the ice makes the antenna look electrically longer, thus the resonant frequency decreases until the ice melts off at some point.

On Wed, 23 Jan 2002 18:15:48 GMT, "Alf Green"
<alf.green@honeywell.com> wrote:

>Greetings,
>
>Sometime in the next few months, before it gets too hot to climb the tower,
>I want to put my A4S (20/15/10 4-ele beam) back in the air. It worked fine
>when I took it down, but has been in pieces laying on my roof for several
>years, and some of the traps are showing signs of cracking on the end seals.
>
>Although they have not been exposed to standing water, it's possible that
>moisture could have crept in. I'd rather not dissemble them unnecessarily,
>so am looking for a way to test them as is.
>
>I have the original datasheet for the A4S but it does not include any
>details. Neither is Cushcraft forthcoming with anything useful (not that I
>would really expect them to under the circumstances). I expect each inner
>trap to be a parallel-resonant circuit at 28MHz, and the outer ones to be
>resonant at 21MHz, but that may be too simplistic. I'd also like to get some
>assurance that the power handling hasn't been degraded, even though I
>probably wont be running much over 100w.
>
>I have a good selection of test equipment, I just need some ideas as to what
>exactly I need to look for.
>
>All suggestions welcome.
>
>73 Alf NU8I
>Scottsdale AZ DM43an
>
>

1466. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 20:46:53 UTC
From: richardharrison@webtv.net
Message-ID: <21590-3C4F213D-17@storefull-113.iap.bryant.webtv.net>
Source record: 150357

Mike Jordan wrote:
"How well does it hold up?"

In Tierra del Fuego, Argentina galvanized steel fence wire is used for telephones. It doesn`t rust out. Bare steel doesn`t rust much. It`s too cold. Winds are usually hurricane force. Wind is so prvailing that the airport shuts down when the wind dies down. The runways are too short for commercial traffic absent the wind. The airport seldom must close.

The main telephone line between Rio Grande and San Sebastian is one galvanized fence wire nailed to poles alongside the main road. The length is 40 miles or so. The earth is used as a return circuit. The line criss-crosses the road at several points, being brought down from the poles and routed through the culverts under the road. No insulators are used. This works pretty well for voice and carrier!

Best regards, Richard Harrison, KB5WZI

1467. Re: A-99 (Antron 99) using it on HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 20:47:07 UTC
From: norm <kb9ygd@crown.net>
Message-ID: <02A703D5DD682F1D.3FE1BB03CE069173.FA0F65995B87DEF1@lp.airnews.net>
Source record: 150343

well i have used the a99/gpk1 kit for 15 years and it works very well on all of ten meters.i have used it to make contacts all over the planet,at times as a signal is bounced off the f2 it comes back verticle or horizontal so its nice to be able to switch between two antennas.i use it on cw at 28.0 and up and for am,29,0 and fm 29.6 and the repeaters and it works very well.i use it with my icom 756pro11 with the built in tuner and with my mfj-989-c and amp at high power with no problems and the antenna will tune 6 meters but its not to good .73`s Norm:)

1468. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 20:49:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C4F21CF.F15317AB@eznec.com>
Source record: 150355

I did a quick run with EZNEC, starting with the example file BYDipole, a 20 meter dipole made from #12 wire. Anyone with EZNEC, including the demo version, can duplicate these results.

With copper wire, the maximum field strength is 6.78 dBi. I had to guess at steel, since it varies a great deal, but my guess was a resistivity of 5E-7 ohm-m and relative permeability of 100. With these values, the field strength was 5.0 dB, a 1.78 dB loss. Then I rescaled the length to 3.5 MHz, retaining the #12 wire size. At that length, the field strength with copper wire was 7.04 dBi and with "steel", 4.01. If you've ever tried to get 3 dB of honest gain at 3.5 MHz, you probably won't want to put up with 3 dB of unnecessary loss.

The problem with steel is its permeability. The skin depth is inversely proportional to the square root of permeability, so a relative permeability of 100 decreases the skin depth by a factor of 10, raising the wire resistance by this factor. Zinc, with relative permeability of 1, is a whole lot better, but on typical galvanized fence wire, it's very thin -- probably much less than a skin depth, particularly at low HF, and it does weather off after a while.

If you're after strength, use Copperweld. It gives you the best of both worlds -- the RF conductivity of copper and the strength of steel.

Roy Lewallen, W7EL

Owen Duffy wrote:
>
> Jim Weir wrote:

> Skin depth is small compared to typical zinc coating thickness of new
> zinc covered wire.
>
> Nevertheless, the resistance of zinc is around 350% of copper, so the
> ohmic loss of the wire will be higher than an equivalent copper coated
> wire, but if the wire is not too thin, it won't matter too much.
>
> My estimates using Reg's WIRESKIN calculator, and adjusting for
> resistivity and permeability, are that you are probably talking
> additional loss of the order of tenths of a dB for practical wire sizes.
> In a practical sense, selection of the transmission line is probably
> more important.
>
> Reg, have you though of adding input fields for rho and mu, so as to
> model gal wire, stainless elements, aluminium etc?
>

> Owen

1469. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 21:05:35 UTC
From: richardharrison@webtv.net
Message-ID: <21590-3C4F259F-19@storefull-113.iap.bryant.webtv.net>
Source record: 150356

Roy, W7EL wrote:
"---EH antenna requires a magical inductor having 90 degree phase difference in currents at its terminals. I`m still waiting to see one of those!"

Look into most older FM receivers for a tuned discriminator transformer. These depend on a 90-degree phase difference for detection.

Best regards, Richard Harrison, KB5WZI

1470. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 21:37:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2nb6b$12ee5n$1@ID-124126.news.dfncis.de>
Source record: 150358

Owen Duffy asked
> Reg, have you thought of adding input fields for rho and mu, so as to
> model gal wire, stainless elements, aluminium etc?
==========
Yes Owen, but decided the amount of interest it would generate and the general usefulness would not be worth the extra effort involved.

Regarding material permeabilty, not surprisingly, manufacturers don't publish permeabilty of magnetic wires which can vary over a magnitude or more depending on alloy. It is not a property of a product which is kept under control. And only 1 in a 1000 even of radio hams show any interest.

It is sufficient to remember the HF resistance of a wire of the same diameter increases in proportion to

Squareroot(R*Mu) relative to copper.

at the same frequency, where R is resistivity relative to copper and Mu is relative permeability.

Incidentally the skin depth increases in exactly the same proportion.

Practical Example. Suppose resistivity is 4 times that of copper and permeabilty is 100 for an alloy of iron. WIre resistance will be Sqrt(4*100) = 20 times that of copper.

Let a copper dipole be a reasonable 97% efficient. 3% of power is lost in the wire. Increase the resistance of the wire by 20 times and about 40% of power will be lost in the wire. This is about 2dB or 1/3 of an S-unit and nobody would ever notice the difference. With a kilowatt, however, the wire would get quite warm. Soon gets rid of ice formations.

Reg

1471. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 21:57:23 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2nc42$12bmmn$1@ID-124126.news.dfncis.de>
Source record: 150359

You can have a 90-degrees phase difference in the voltage between the ends
of an inductor but the current going into one end must be exactly the same
as comes out of the other in both magnitude and phase.

There's nowhere else for it to go.

Now I suppose somebody will mention parasitic capacitance !

A transmission line has quite a lot of parasitic capacitance. That's why the
input and output currents of a 1/4-wave line differ by 90 dgrees.

Is this little modification what the EH antenna needs to make it work ?
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Richard Harrison <richardharrison@webtv.net> wrote in message
news:21590-3C4F259F-19@storefull-113.iap.bryant.webtv.net...
> Roy, W7EL wrote:
> "---EH antenna requires a magical inductor having 90 degree phase
> difference in currents at its terminals. I`m still waiting to see one of
> those!"
>
> Look into most older FM receivers for a tuned discriminator transformer.
> These depend on a 90-degree phase difference for detection.
>
> Best regards, Richard Harrison, KB5WZI
>

1472. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 21:59:14 UTC
From: richardharrison@webtv.net
Message-ID: <22080-3C4F3232-22@storefull-112.iap.bryant.webtv.net>
Source record: 150360

Roy, W7EL wrote:
"If you`re after strength, use Copperweld. It gives you the best of both worlds -- The conductivity of copper and the strength of steel."

I second Roy`s motion. We used Copperweld in all shortwave broadcast antennas and they didn`t fall. Our rhombics used for reception and temporary transmitting had the longest unsupported wire lengths, but not the largest wire. For the rhombics, the wire used was (3) No.12 wires twisted together, so that it would be flexible enough to work with. These were only rated at 10 KW, so of course we used them at 100 KW.

Best regards, Richard Harrison, KB5WZI

1473. Re: Wire Material - Galvanized Electric Fence wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 22:20:34 UTC
From: richardharrison@webtv.net
Message-ID: <22079-3C4F3732-76@storefull-112.iap.bryant.webtv.net>
Source record: 150362

I wrote:
"These were only rated at 10 KW, so of course we used them at 100 KW."

Before someone cries: "Foul!", our transmitting rhombics used 3 each of the 3X No, 12 twisted wires in their curtains for smoother impedance variation with frequency.

Best regards, Richard Harrison, KB5WZI

1474. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 22:28:05 UTC
From: stefano <sgalast@tin.it>
Message-ID: <VNG38.18650$Rv3.669635@news2.tin.it>
Source record: 150361

Hi Bill,
excuse me but I am tired to repeat the same long story...I am convinced I can tell you anything you guys want and still you could say me I am a dreamer. I am sure !

For the CFA
please read and print the "stefano's cfa experiment" on the Antennex archive.
Then BUILD IT!!!
I can support you on any problem you may encounter.
After a good construction you will find that efficiency.
The part needs improvements is related to the pattern.
But I am here to help you.

FOR the EH antenna

YOU can't make any judgement simply reading a piece of paper.
YOU must build one of it, THEN you will see...why not?
It costs nothing, you can build it in the your home safe place, what is the risk?
I know is easy criticize, simply because this antenna is not present on any antenna book in the world.
Yes is a big novelty, where is the problem?
the Man's history is full of new discover....why not?

I built a full network eh antenna
I did several installations on the country side , with flat ground, no obstacles
I compared it against a full size dipole, inverted vee , verticals 1/4 with elevated ground radials.
I used professional spectrum analyzer, field stenght meters.
all antennas were perfectely matched with the line . We did all tests to exclude hot lines.
We used baluns, tuned traps, rf transformers to isolate in DC and, at the end, we put the generator BATTERY operated connected directely to the antenna without any piece of coax...no line ok?
During all of these tests the eh antenna produced the same signal strenght of any kind of dipole antenna.

we used a rf source checking for the constant output switching between antennas under test.
any test reported the eh antenna can produce the same efficiency of a dipole.

then we performed a long series of tests ON air.
Months of testing, on different locations . The eh showed a higher s/n

ratio on rx, a very good pattern for dx and local chats.

Bill I think I can continue to the infinity but I am sure you will find
something against, always.
One of the biggest problem is that this developping comes from Italy.
I can understand very well the most common sentence:
" why the world is not full of these antennas? "
Again , many of you make confusion with Cfa. The eh antenna is ready for the
world from the last september.
having such break through novelty takes time to be accepted....is normal we
are not surprised.
In italy there are MANY hams decide to build one of it.
I have a quite long list of ham are transmitting with it.
All of them reported all claims are true.
You are skeptic and is your right, I can understand.
WHAT I can't understand is all this EFFORT to demonstrate the eh antenna
CAN'T work....
why are you so ungry?

You can believe it or not but there is no commercial on my announces. I
would like to share with you this new antenna.
for the first time in the antenna history is not another bended wire.

We decided to reveal all instructions to have one of it built. Why don't you
want test it?
I can't understand... fear? of what?

anyway ,as reported many times, we are developping a 50 and 145 mhz
model....
With these models we could have a professional test on anecoic chamber done.
In that way you will have all numbers, figures and so on....
I keep always my promises.

Ted Hart decided do not answer to all this chorus of polemic.
He will show the AM version when the tests will be over.

stefano Ik5IIr

"Bill Aycock" <baycock@hiwaay.net> ha scritto nel messaggio
news:3C4EC564.2112C2A8@hiwaay.net...
> Stefano-
> Why do you keep avoiding the issue? If there is any basis to your
> claims, there must be data to back them. You say you measured 70%
> efficiency on a CFA, and that the EH is better.
> answer these, if you can.
> 1. describe what you made.
> 2. describe the tests you made, and the parameters you measured.
> 3. describe the method and instrumentation used for the tests.
> 4. give the results of the measurements.
>
> otherwise- all your claims are junk.
>

> Bill-W4BSG
>
> stefano wrote:
> >
> > Hi Jim,
> > Nice to meet a ham still loving experimenting with no
preconceptions....you
> > are a rare person...hi .
> > So about CFA can be a long chat. I know very well Jack Stone. If you
want
> > prove your self the CFA CAN have the same efficiency of a full size
vertical
> > (with no traps) you can look for "stefano's cfa experiments" in the
antennex
> > archive.
> > I have completely descript a 40 meters CFA antenna having the efficiency
> > minimum of 70%.
> > Still today I don't understand WHY very few hams tried to have one
built.
> > I gave all measures, all hints , all....but, I am sure, only three or
four
> > hams did it....I know it can be a quite important mechanic job,using
some
> > expensive parts...but these behaviors still surprising me.
> > Of course it can be optimized, and I am still available to suggest you
how.
> >
> > BUT...
> >
> > The EH antenna is so far superior to it, hence I will be happy to guide
you
> > on a complete experiment with it.
> > You will have a lot of fun and On a simple and fast manner ,you will see
> > the antenna keep his promises.
> > Thanks , Stefano Ik5IIR
> >
> > "CooperJim" <cooperjim@aol.com> ha scritto nel messaggio
> > news:20020123015834.19053.00003049@mb-cl.aol.com...
> > > Stefano
> > >
> > > Isyour design for the EH antennea available on the web? Antennex
maybe?
> > >
> > > I would very much like a small antennea like the EH or CFA to work.
If
> > you
> > > have detailed descriptions of how to build it and how to tune it
(probably
> > the
> > > most important part), I will try it. Til then, I will stay with my

> > magloops.
> > >
> > > I played with the CFA for a couple of months and made several contacts
on
> > 40
> > > meters. I got a good 1:1 match and saw some strange hysteretic
effects
> > that
> > > might have been a sort of phase-lock-in of the field generation. But
it
> > did
> > > not work as well as my 5 foot vertical with Hustler trap. When Jack
Stone
> > of
> > > Antennex contacted me when he heard that I had made contacts, I was
amazed
> > that
> > > my mediocre results were a significant data point.
> > >
> > > One of the reasons I like to build ham radio stuff is that I dont have
to
> > be
> > > perfcet. I can try things that just look like fun, even if there is a
> > better
> > > way. And, luckily, I can afford my own time to try things that may
not
> > work
> > > (on weekends at least, during the week my company insists that my
designs
> > work
> > > hi hi).
> > >
> > > 73
> > > Jim Cooper NE6O
> > > CooperJim@aol.com

1475. Re: Basic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 22:41:36 UTC
From: richardharrison@webtv.net
Message-ID: <22079-3C4F3C20-77@storefull-112.iap.bryant.webtv.net>
Source record: 150366

Dave, K3BHJ wrote:
"I want back the part of the signal re-radiated by my receiving antenna."

Too bad! The very best you can do is to extract 1/2 the available power from an antenna with the perfect match. I`m not sure I should have used the word "available" as that has special significance when used by certain authors.

Best regards, Richard Harrison, KB5WZI

1476. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 22:44:46 UTC
From: stefano <sgalast@tin.it>
Message-ID: <y1H38.18703$Rv3.672422@news2.tin.it>
Source record: 150363

Hi Roy,
I know perfectely the Dr.Trainotti test.
I had with him a long chat via email.

He decided to use some "funny" dimensions for his CFA.
No one Cfa dimension he used was correct...

For me was a comic situation.
Think of calculate a normal dipole lenght / bandwidth using fantasy
formulas....
Roy any antenna MUST follow the right rules...CFA is not an ecception.

he invented all sizes, all proportions...Then the test was
disappointed....:-))) Yes of course !
Dr . Trainotti knows that, I told him that...
he answered me :
" yes Stefano may be could be interesting change some antenna parameters,
but that project is over ,now, I must switch to another project "....
So that test ended with wrong assumptions....

Michele Iz2EAS
I met him at one of the italian EH antenna conference I did.
Michele is teaching at the university on antennas...hence is a very skilled
guy.
is totally skeptic, but on the email you reported you can't understand all
the doubts he got after a long chat with me in front of one EH antenna.

Everybody will remain astonished hearing all the measurable eh antennas
features:

high Bw....more than 400 khz at +- 3db on 40 meters with 1% wav. antenna
NO any warm part in the antenna feeding it with 1 kw without any
coax....where the energy goes??? radiated.We are speaking of 1' and 3"
antenna long!!!!
perfect resistive 50 ohm at the input at mid band
I repeat these are measurable parameters. You just need one of it on hand.

Yes ,of course the indipendent tests...sure ,right.
In the meantime we decided to spread out the concept to allow people
experiment.
I think is honest approach.
stefano Ik5IIR

"Roy Lewallen" <w7el@eznec.com> ha scritto nel messaggio
news:3C4F1CAD.825A0D83@eznec.com...
> A scale model CFA was measured in a laboratory and the results reported
> in the September 2001 issue of the IEEE Transactions on Broadcasting in

> "Short Medium Frequency AM Antennas" by Valentin Trainotti. He found it
> to have the same performance as a vertical of the same height, if he
> kept the "D plate" open. When he excited the "D plate" as the inventors
> recommend, the efficiency dropped appreciably due to losses in the
> phasing network. These results are completely consistent with theory,
> modeling results, and experiments reported to me by private
> correspondence.
>
> The main difference between the CFA and EH antennas, as far as I can
> tell, is that the EH antenna requires a magical inductor having a 90
> degree phase difference in the currents at its two terminals. I'm still
> waiting to see one of those!
>
> I quoted a concluding paragraph from the Trainotti paper in a posting to
> this newsgroup on December 19, with the subject "Re: any info about
> EH?". You should be able to find it at groups.google.com.
>
> Roy Lewallen, W7EL
>
> Michele IZ2EAS wrote:
> >
> > Bill,
> > I am afraid you won't get any defendable figure out of them (at this
time,
> > at least)... apart from unsupported assertions like "it performs like a
> > full-size dipole", or "the efficiency is 95%", or "somebody has worked
New
> > Zealand in 40 m" etc. etc.
> > The ONLY proper and independent test (that failed..) has been carried
out by
> > Ted Hart at 1540 kHz. This was happening in October 2001; we have heard
> > nothing since... his Web site is just silent !
> > One wonders: how comes that it is taking so long to make the EH antenna
work
> > properly at MW frequencies ? Is it more difficult then expected ? Why ?
> > Oh, I can see it coming.... now Stefano will tell us that - with time -
this
> > antenna will storm the world of low frequencies, it is just too early,
etc
> > etc. ... good luck to them... I will wait for independent (and
trustable)
> > tests.. till then, sorry, but I just cannot stand snake oil !
> >
> > Michele IZ2EAS

1477. Re: Does the type of mast make a difference?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 22:46:37 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c4f4152_1@news1.prserv.net>
Source record: 150364

The Ringo series of antennas is poorly decoupled from the mast. So a PVC mast is likely to work better than a metal one. If the present configuration is working satisfactorily, leave it alone.

--
Crazy George
Remove NO and SPAM from return address
Screaming Skull <KG4IVT@hotmail.spamsucks.leaveme.alone.com> wrote in message news:PmC38.65250$n81.15900974@typhoon.southeast.rr.com...
> In an antenna installation does the type of mast used make a difference in
> how the antenna performs? I've got a Cushcraft AR-2 2m ringo in my attic
> attached to the floor of the attic with an antenna mount and a piece of PVC
> pipe holding it up. However, I have thought about switching it out with a
> piece of metal mast pipe I have laying around. Will doing this change
> anything about my antenna at all? I am mostly concerned with TVI which I
> have somewhat of a problem with but if this will hurt or improve anything I
> would like to know that. Any suggestions are welcome. Thanks!!
>
>

1478. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 22:55:44 UTC
From: stefano <sgalast@tin.it>
Message-ID: <QbH38.18745$Rv3.673603@news2.tin.it>
Source record: 150365

Hi Chip,
How are you??

we had many chats on the CFA antenna. true.
But this new adventure is young, is just born.

Again, you in the USA don't have any idea what in Italy is going on.
There are ham using the eh antenna since the last october.
For one of the rare moments is not the america ONLY leading the way.
Ted decided to stay quiete and silent. he doesn't like the polemics.
I can understand him :-)))

Next february one of the most important ham electronic magazine in Italy
will publish an indipendent test on the eh antenna.
Why?
because a lot of hams requested it....because a lot of hams built it and
experimented it works.
I am sorry In the USA there is no another "stefano" allowing this concept to
be known.

73 stefano

"Fractenna" <fractenna@aol.com> ha scritto nel messaggio
news:20020123085854.27592.00000006@mb-df.aol.com...
> >
> >"stefano" <sgalast@tin.it> wrote in message
> >news:Ol038.10122$Rv3.435190@news2.tin.it...
> >> Hi dear friends,
> >> Yes I understand all and I am agree with all of your objections...
> >> simply you don't have the needed data to judge.
> >>
> >> please, I am speaking for the EH antenna only.
> >> This antenna was announced for the first time at the world last
> >> september....is just a baby now.
> >> We are working very hard to start a production, lab tests, indipendent
> >> measurements.
> >>
> >> very soon everybody will know about. Please is not an excuse, we just
need
> >> some more time.
> >> At the moment is almost unknown...
> >> In the mean time we decided to reveal all about his building
> >> instructions...just for the curious ham loving experimenting.
> >>
> >> Thanks, 73 Ik5IIR
> >>

> >
> >From these statements: "We are working very hard to start a production,
lab
> >tests, indipendent measurements." and "Please is not an excuse, we just
need
> >some more time.", it sounds like you are the one who "don't have the
needed
> >data to judge"
> >
> >Steve VE9SRB
>
> I agree with Steve; kindly realize that these are questions any AND ALL
> scientist asks.
>
> An antenna is a finite structure, so it shouldn't take years to address
the
> matters at hand. The last time I checked into this discussion it had gone
on
> for months and months and months.
>
> Perhaps project management would help? Have you detailed your tasks and
> interlaced them on a time line? This standard practice is hardly
infallible but
> does give one a sense of progress and, more importantly,let's one know
what's
> left to do and how long it should take to do it.
>
> 73,
> Chip N1IR

1479. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 23:34:14 UTC
From: stefano <sgalast@tin.it>
Message-ID: <WLH38.18840$Rv3.678433@news2.tin.it>
Source record: 150368

Hi Steve from steve,
Believe me...it doesn't help. Normally nobody wants believe me.

If you want know how build one of it, no problem
If you want to know how tuning it, no problem.
But, then, you should see and decide by your self. I think is the best
approach.

looking on paper only you won't get satisfied. This antenna is a totally
break through.
later ,when you will understand is working, I will be happy to explain you
how it works and why.
sincerly, Stefano Ik5IIR

"VE9SRB" <srbest@att.net> ha scritto nel messaggio
news:k2z38.317493$WW.14491862@bgtnsc05-news.ops.worldnet.att.net...
>
> "stefano" <sgalast@tin.it> wrote in message
> news:cfo38.14394$hi.379407@news1.tin.it...
>
> >
> > Since you know all about it, could you ,please, tell me exactely what
you
> > tested?And how?
> > Thanks very much.
> > Stefano IK5IIR
> >
>
> Why don't you tell us exactly what you built, exactly how you tested it
and
> provide full details of the measured results so that we can make our own
> evaluation???
>
> Steve VE9SRB
>
>

1480. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 23:36:22 UTC
From: k1bqt@aol.com
Message-ID: <20020123183622.29895.00000134@mb-fs.aol.com>
Source record: 150367

>Stefano, even with the allowance of #9, you have hit 9 out of 10 to register 91% efficiency in BALONEY generation. This is exceeded only by fractal BALONEY which tips the scale at 1100%! <

Steady, Richard! There's a huge difference between "nothing special" and "nothing at all". Spare us the bear bait so we may focus on Stephano, who reveals more about magical thought than science!

Rick K!BQT

1481. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 23:48:48 UTC
From: steve <stevejfranklin@attbi.com>
Message-ID: <3C4F4A71.53081EC2@attbi.com>
Source record: 150169

If its free, and we want the ham bands to go down, go for it. Just listen to Ch6 on the cb to get an example of how it could get.

1482. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-23 23:55:57 UTC
From: stefano <sgalast@tin.it>
Message-ID: <h4I38.18873$Rv3.680225@news2.tin.it>
Source record: 150170

Yes Gilbert,
everybody in Italy were surprised of the Genoa July facts.
Actually we had three days of civil war, urban war.
I hope it will never happens ,never.
stefano

"Gilbert Mouget" <nospam@waika9.com> ha scritto nel messaggio
news:3c4f49c4$0$23521$626a54ce@news.free.fr...
> In article <QbH38.18745$Rv3.673603@news2.tin.it>,
> dated Wed, 23 Jan 2002 22:55:44 GMT,
> stefano, <sgalast@tin.it>
> says...
>
>
>
> > Again, you in the USA don't have any idea what in Italy is going on.
>
> Human rights abuses in Genoa jails
> by reader 7:34am Tue Jul 24 '01
>
>
> This is taken from the main Indymedia site.
>
> Keep putting pressure on the local consulate.
> Montreal Italian consulate fax# is 499-9471
>
> Horrible human rights abuses in Genoa jails:
>
> On Monday, July 23rd, a group of media activists were allowed to visit
> some of the Imprisoned in the jails and prisons in Genova.
> They could talk about five minutes to some of the imprisoned.
>
> Report from the jail "Vercelli"
>
> The media activists could speak to three women, five minutes each.
> The women declared that they all have been beaten, when they were
> arrested and/or in jail/at the police station. The wounds at their
> heads and in the faces emphazised the reports.
> The situation of the men seems to be much more serious.
> The three women told that they could hear the men being tortured
> and "punished" throughout the whole night.
>
> Report from another Police station in Genova:
>

> Ecxept for one women all others were sorted in nationalities and
> put into 2-3 cells. Although it seems that they were treated better
> than the people in "Vercelli", they have been beaten and kicked when
> they went to the toillet. The police shouted at them and used bad words.
> But they (the imprisoned) all told, that it could have been worse.
> Some were allowed to make phonecalls.
>
> Report from other women arrested on saturday (in jail "Vercelli"):
>
> Some of the women told that they were not beaten, but there were other
> terrible things happening in there. The police were obviously organized
> fascist, e.g. they called the imprisoned "fucking jewish gipsys" or they
> were shouting "hasta la victoria siempre" while showing the Hitlers
Greeting.
> There were Mussolini Pictures on the walls.
> Teargas was thrown into the cells, so that somebody who stood next to the
> prisoners was vomiting blood. Some of the women were forced to stand 19
hours
> with their arms lifted, without getting nothing to drink for the same
time.
> there only was one police officer, that was obviously shocked by himself
and
> brought about 200ml. of water for about nineteen people.
> One's person's leg was broken and couldn't stand up anymore. she/he was
beaten
> until she managed to stand up somehow leaning to the wall.
> The people in jail reported that the police women were much worse than the
men.
> They pulled people by their hair and the imprisoned had the. impression
they
> were "total psychopaths"!
>
>
>
>
>
> --
> "You cannot move mountains if you believe them to be mountains.
> You must think of them as collections of small stones,
> Which can be moved one at a time, and then reassembled."
> -- The Tao of Meow

1483. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 00:16:53 UTC
From: ik7565@erols.com
Message-ID: <3C4F5275.B33C36A9@erols.com>
Source record: 150171

This is the best suggestion yet! Think of all the elmering you could
do!

Ian
N8IK

'Doc wrote:
>
> Jason,
> After you look at all the things the others have suggested,
> there's one more thing to look for. Find an appartment complex
> loaded with young, unmarried females, (the license lasts for
> 10 years and is renewable...).
> 'Doc

1484. Re: Condo Isoloop RFI problems - advice? *see web page photos*

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 00:31:30 UTC
From: tegwilym@hotmail.com
Message-ID: <efb6d1ef.0201231631.6678adda@posting.google.com>
Source record: 150172

>
> Hi Tom,
> Looking at the pictures on the web sight.. looks like there are not many
> options.. couple of things.. yes ground the rig the best you can. Also i've
> found that rf travels along the control cable from my small loop. that was
> cured by placeing several ferite beads on the cable.. this could the part of
> the cause of your problems. worth a try anyway.
> Hope this is of some help.

I did think of the control cable also. I bought a few of those RF chokes from Radio Shack last night to experiment with. I put some on the power cable, antenna feedline and the isoloop control cable, but still got into my TV. I also grounded the radio with a strap made from the braid that I cut out of an old piece of coax. I wrapped the other end tightly around the cold water input pipe to the hot water heater next to the radio. I also twisted the antenna and found that on Broadcast tv, I had the minimum amount of TVI (one some channels) when I pointed the edge of the loop directly at the TV.
I also noticed that somoene across the yard was watching tv, so I found my binoculars to look across and transmit a beacon signal and see if I could see any flashing on their screen. They turned off the TV by the time I was ready, so that test failed.

Arrrrgghh! This is frustrating. I hear about people that do this same thing all the time from a condo or apartment, but can't seem to discover the magic arrangement that works!

Tom KA7VIK

1485. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 00:35:46 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <36lu4u02tn1lg97btfulkcnvmta7p8qtgc@4ax.com>
Source record: 150173

On Wed, 23 Jan 2002 22:44:46 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi Roy,
>I know perfectely the Dr.Trainotti test.
>I had with him a long chat via email.
>
>He decided to use some "funny" dimensions for his CFA.
>No one Cfa dimension he used was correct...
>
8. Is the claimant providing an explanation for the observed phenomena
or merely denying the existing explanation?
This is a classic debate strategy--criticize your opponent and never
affirm what you believe to avoid criticism. This stratagem is
unacceptable in science.

>For me was a comic situation.
>Think of calculate a normal dipole lenght / bandwidth using fantasy
>formulas....
>Roy any antenna MUST follow the right rules...CFA is not an ecception.
>
>he invented all sizes, all proportions...Then the test was
>disappointed....:-))) Yes of course !
>Dr . Trainotti knows that, I told him that...

8. Is the claimant providing an explanation for the observed phenomena
or merely denying the existing explanation?
This is a classic debate strategy--criticize your opponent and never
affirm what you believe to avoid criticism. This stratagem is
unacceptable in science.

>he answered me :
>" yes Stefano may be could be interesting change some antenna parameters,
>but that project is over ,now, I must switch to another project "....
> So that test ended with wrong assumptions....
>
8. Is the claimant providing an explanation for the observed phenomena
or merely denying the existing explanation?
This is a classic debate strategy--criticize your opponent and never
affirm what you believe to avoid criticism. This stratagem is
unacceptable in science.

>Michele Iz2EAS
> I met him at one of the italian EH antenna conference I did.
>Michele is teaching at the university on antennas...hence is a very skilled
>guy.
>is totally skeptic, but on the email you reported you can't understand all

>the doubts he got after a long chat with me in front of one EH antenna.
>
>Everybody will remain astonished hearing all the measurable eh antennas
>features:
>
>high Bw....more than 400 khz at +- 3db on 40 meters with 1% wav. antenna
>NO any warm part in the antenna feeding it with 1 kw without any
>coax....where the energy goes??? radiated.We are speaking of 1' and 3"
>antenna long!!!!

4. How does the claim fit with what we know about how the world works?

>perfect resistive 50 ohm at the input at mid band
>I repeat these are measurable parameters. You just need one of it on hand.
>
1. How reliable is the source of the claim?
figures they cite are distorted, taken out of
context or occasionally even fabricated.

>Yes ,of course the indipendent tests...sure ,right.

3. Have the claims been verified by another source?
" ...sure ,right." tells it all!

>In the meantime we decided to spread out the concept to allow people
>experiment.
>I think is honest approach.
>stefano Ik5IIR
>
Hi Stefano,

Selling ENRON stock? There's an honest approach too, if you can get
the judges to cook the books.

73's
Richard Clark, KB7QHC

1486. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 00:40:04 UTC
From: Bert Hyman <bert@visi.com>
Message-ID: <Xns919FBDE69468EVeebleFetzer@209.98.98.13>
Source record: 150174

In news:f7d9a152.0201221751.1c10033d@posting.google.com jason_hsu@my-deja.com (Jason Hsu) wrote:

> The next time I look for a new apartment, what should I look for? ...

Years ago I lucked into an incredible arrangement in an apartment.

I lived in a behemoth apartment complex that was one giant three-story building built around a courtyard with a swimming pool, volleyball courts, etc. The building itself was over a quarter-mile around and had an essentially flat roof.

I somehow managed to talk the management into letting me put antennas on the roof. I made antenna supports by sticking poles in buckets with quick-set concrete. I just dropped the feed lines over the edge and brought them in through the sliding door to the balcony.

I operated a Kenwood TS-120 and eventually a Drake C-Line with good results for the 4 years I lived there.

--
Bert Hyman St. Paul, MN bert@visi.com

1487. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 00:41:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2nm59$11ocqr$1@ID-124126.news.dfncis.de>
Source record: 150176

Prap's he's prepared to discuss it only with his peers.

1488. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 00:52:24 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <99mu4ukdqrq05s6sp1e661erqsp7dcqif6@4ax.com>
Source record: 150175

On Wed, 23 Jan 2002 22:28:05 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi Bill,
>excuse me but I am tired to repeat the same long story...I am convinced I
>can tell you anything you guys want and still you could say me I am a
>dreamer. I am sure !
>
>For the CFA
>please read and print the "stefano's cfa experiment" on the Antennex
>archive.
>Then BUILD IT!!!
>I can support you on any problem you may encounter.
>After a good construction you will find that efficiency.
>The part needs improvements is related to the pattern.
>But I am here to help you.
>
>FOR the EH antenna
>

Hi Stefano,

We will simple snip the lengthy babble of self-congratulation and I
will instead offer you the analysis from antennex (do you actually
read anything outside of your own circle of friends?)

>The EH antenna appears to be simply two Isotrons combined
>to give the effect of a single, much lower frequency Isotron.
>As such, I would expect it to radiate numbers that seem to
>average about an S unit (-20 db) down from a dipole.

>trying to tweak the phase to produce CFA-like conditions
>is doomed to failure.

Again, from the Scientific American skeptic:
>5. Has anyone gone out of the way to disprove the claim, or has only
>supportive evidence been sought?
>This is the confirmation bias, or the tendency to seek confirmatory
>evidence and to reject or ignore disconfirmatory evidence.
>

If you cannot answer to specific issues addressed by your critic at
the site you offer, you are simply blowing smoke rings.

73's
Richard Clark, KB7QHC

1489. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 01:21:27 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <lanu4u4678mij8rk03v562mpifticuj9h5@4ax.com>
Source record: 150177

On Thu, 24 Jan 2002 00:52:24 GMT, Richard Clark <kb7qhc@attbi.com>
wrote:

>On Wed, 23 Jan 2002 22:28:05 GMT, "stefano" <sgalast@tin.it> wrote:
>
>>Hi Bill,
>>excuse me but I am tired to repeat the same long story...I am convinced I
>>can tell you anything you guys want and still you could say me I am a
>>dreamer. I am sure !
>>
>>For the CFA
>>please read and print the "stefano's cfa experiment" on the Antennex
>>archive.
>>Then BUILD IT!!!
>>I can support you on any problem you may encounter.
>>After a good construction you will find that efficiency.
>>The part needs improvements is related to the pattern.
>>But I am here to help you.
>>
>>FOR the EH antenna
>>
>
>Hi Stefano,
>
>We will simple snip the lengthy babble of self-congratulation and I
>will instead offer you the analysis from antennex (do you actually
>read anything outside of your own circle of friends?)
>
>>The EH antenna appears to be simply two Isotrons combined
>>to give the effect of a single, much lower frequency Isotron.
>>As such, I would expect it to radiate numbers that seem to
>>average about an S unit (-20 db) down from a dipole.
>
>>trying to tweak the phase to produce CFA-like conditions
>>is doomed to failure.
>
>Again, from the Scientific American skeptic:
>>5. Has anyone gone out of the way to disprove the claim, or has only
>>supportive evidence been sought?
>>This is the confirmation bias, or the tendency to seek confirmatory
>>evidence and to reject or ignore disconfirmatory evidence.
>>
>
>If you cannot answer to specific issues addressed by your critic at

>the site you offer, you are simply blowing smoke rings.
>
>73's
>Richard Clark, KB7QHC

Hi All,

A follow up from the same antennex site that our friend Stefano so emphatically implores us to visit reveals far more negative reports than the single one quoted above. I won't bore you with reporting the obvious. I am equally sure that Stefano has no answers other than "the dog ate my homework" or responses of similar quality.

These negative reports consist of modeling AND field reports under scientific conditions; and not ad-hoc, jury rigged fumbling so evident in the ONLY data reported from the inventors.

In a nutshell (from another critic):
>There is (in the author's experience) an unbelievably wide divergence
>between the results of our study and the performance claimed
This of course is the conclusion following actual construction and testing and conforms fully with accepted practices and provides no departures from conventional expectations.
We can fully expect Stefano and crowd to reflexively offer to the spirit of:
>
>8. Is the claimant providing an explanation for the observed phenomena
>or merely denying the existing explanation?
>This is a classic debate strategy--criticize your opponent and never
>affirm what you believe to avoid criticism. This stratagem is
>unacceptable in science.

The best that can be said for these air-cooled resistors (in a class with the k2 fractal) is that you don't have to climb a tower to adjust these hyper-critical tuned circuits. What the inventors fail to offer is that if you do hoist this design up a tower, you should first short all elements to achieve near quarterwave performance (provided the tower is quarterwave tall that is).

73's
Richard Clark, KB7QHC

1490. Re: Autotransformer ATU

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 01:53:19 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C4F690E.24EF4B7E@att.net>
Source record: 150178

John, while this may appear to be an autotransformer, I think that it might be more instructive to think of it as a tuned circuit inserted perhaps at the base of an antenna or the feedpoint of a wire, and that the tuned circuit has taps that permit a feedline to be connected at an appropriate point for a good match.

Such arrangements are commonly used to feed 1/4 and 1/2-wave verticals, for example, with the coil tuned to resonance for the 1/2 wave use and the cap disconnected for service as a simple loading coil. In either case, the feedline, coax usually, would be connected between the bottom of the coil (braid) and a tap on the coil that gives a desired SWR on the line.

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

"owen.home" wrote:
>
> Help
> I have a Racal ATU from an HF navigation system, it's unbalanced in and out
> in the form of an autotransformer with 11 input and output tappings with
> one or two vacuum variables (8-650pF) across the whole coil which consists
> of 35 turns on a 2.5" former. I believe it's designed for the lower HF
> frequencies and perhaps to match to a short vertical. The configuration and
> use of an autotransformer isn't something I've seen in the amateur
> literature - I'd appreciate any comments as to it's capabilities and
> drawbacks as I'd like to use it or modify it for general HF use. The unit is
> very well built with EHT cable and incorporates a 5A RF current meter driven
> from a transformer in the output line.
> Any comments/suggestions appreciated.

1491. Re: saturn 6 meter 3-ring halo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 02:11:49 UTC
From: "James L. Hudson" <jlhudson@ev1.net>
Message-ID: <3C4F6D65.EC1E954D@ev1.net>
Source record: 150179

John,

I have a scan of the instruction sheets. Contact me off net if you want
to accept an email with attachments.

Jim WA5JAT

"john b. hinds" wrote:

> Need instructions for making coax length matching network for this old
> antenna that has been in my basement for 40 years.
> Thanks
> John Hinds
> PopHinds@Prodigy.net

1492. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 02:12:06 UTC
From: stefano <sgalast@tin.it>
Message-ID: <W3K38.19023$Rv3.685092@news2.tin.it>
Source record: 150180

Hi Richard,
I don't know why you are so insistent to find out any reason to prove we are wrong, we are speaking of no science and so on...I am sure all the Ng readers noted your negative mood .
Do you think I am a masochist?
Do you think I have pleasure to spend so many time playing with my name on a world wide Ng?
Do you think I am earning something?
No Richard, I have just the power of the truth.

You are so sure about me, you know all about me, you have perfectely defined what is my thought, what is my target.
I am sorry but my word is equalling your.
Are you the supreme judge?

Your interesting and ,I think, correct scientific american way to weight the claims is like a sword , has two cutting edge.
On the two last yours email I will earn a PASS no a HIT.
because I know where the Dr. Trainotti did the mistake, I know what measures must have a cfa to work, I am not just criticize,I know the answers.I hope you are agree with me this is not the proper site to make a long list of all CFA parameters and how a CFA must be built and tuned...again my word is equalling your.

About Antennex , no sarcasm please. I am a antennex subscriber since 1998.I know very well all the magazine and his editor.

You will laugh stronger ,now, because I must tell you that the Joel analisys is wrong.
BUT also HERE I have all the answers because is wrong (another PASS) . he analyzed the eh like a resonant circuit.
and eh is not. wrong assumptions.Again I can explain all, I can explain why. the day after of the publish, I sent an email to the editor explaining why the columnist was wrong. I motivated it.

The amazing thing is that for you is valid to judge my emails, the antenna , all my claims simply reading some lines on a NG...
I am astonished.
In the other side I am asking the world simply to do what any scentist normally do on his LAB:
"Ok guy you are telling me this antenna is a sort of superman. Then you are providing me all informations how to build it.
I will follow all the instructions. If at the end of the test the antenna is an hoax you will lost any credibility and you must close your mouth for ever. "...

I think this is the correct approach, in the science world , and in THE HAM
world.
The claim is for a new concept, a new application .I think must be
verified.Since is new ,must be understood , needs analysis
No what I am seeing is just sarcasm, irony and condamn
Why don't you make an objective choice?
Why so much energy to convince...who??... the antenna CAN'T work?

But looking at your email it seems you are the JUDGE and I am the
accused....
I am sorry but we are at the same level.

I would love our chats were genuine ,technical, on the antenna....
But to discuss each person must use a good amount of humilty.

Sincerly ,stefano

"Richard Clark" <kb7qhc@attbi.com> ha scritto nel messaggio
news:lanu4u4678mij8rk03v562mpifticuj9h5@4ax.com...
> On Thu, 24 Jan 2002 00:52:24 GMT, Richard Clark <kb7qhc@attbi.com>
> wrote:
>
> >On Wed, 23 Jan 2002 22:28:05 GMT, "stefano" <sgalast@tin.it> wrote:
> >
> >>Hi Bill,
> >>excuse me but I am tired to repeat the same long story...I am convinced
I
> >>can tell you anything you guys want and still you could say me I am a
> >>dreamer. I am sure !
> >>
> >>For the CFA
> >>please read and print the "stefano's cfa experiment" on the Antennex
> >>archive.
> >>Then BUILD IT!!!
> >>I can support you on any problem you may encounter.
> >>After a good construction you will find that efficiency.
> >>The part needs improvements is related to the pattern.
> >>But I am here to help you.
> >>
> >>FOR the EH antenna
> >>
> >
> >Hi Stefano,
> >
> >We will simple snip the lengthy babble of self-congratulation and I
> >will instead offer you the analysis from antennex (do you actually
> >read anything outside of your own circle of friends?)
> >
> >>The EH antenna appears to be simply two Isotrons combined
> >>to give the effect of a single, much lower frequency Isotron.
> >>As such, I would expect it to radiate numbers that seem to
> >>average about an S unit (-20 db) down from a dipole.

> >
> >>trying to tweak the phase to produce CFA-like conditions
> >>is doomed to failure.
> >
> >Again, from the Scientific American skeptic:
> >>5. Has anyone gone out of the way to disprove the claim, or has only
> >>supportive evidence been sought?
> >>This is the confirmation bias, or the tendency to seek confirmatory
> >>evidence and to reject or ignore disconfirmatory evidence.
> >>
> >
> >If you cannot answer to specific issues addressed by your critic at
> >the site you offer, you are simply blowing smoke rings.
> >
> >73's
> >Richard Clark, KB7QHC
>
>
> Hi All,
>
> A follow up from the same antennex site that our friend Stefano so
> emphatically implores us to visit reveals far more negative reports
> than the single one quoted above. I won't bore you with reporting the
> obvious. I am equally sure that Stefano has no answers other than
> "the dog ate my homework" or responses of similar quality.
>
> These negative reports consist of modeling AND field reports under
> scientific conditions; and not ad-hoc, jury rigged fumbling so evident
> in the ONLY data reported from the inventors.
>
> In a nutshell (from another critic):
> >There is (in the author's experience) an unbelievably wide divergence
> >between the results of our study and the performance claimed
> This of course is the conclusion following actual construction and
> testing and conforms fully with accepted practices and provides no
> departures from conventional expectations.
> We can fully expect Stefano and crowd to reflexively offer to the
> spirit of:
> >
> >8. Is the claimant providing an explanation for the observed phenomena
> >or merely denying the existing explanation?
> >This is a classic debate strategy--criticize your opponent and never
> >affirm what you believe to avoid criticism. This stratagem is
> >unacceptable in science.
>
> The best that can be said for these air-cooled resistors (in a class
> with the k2 fractal) is that you don't have to climb a tower to adjust
> these hyper-critical tuned circuits. What the inventors fail to offer
> is that if you do hoist this design up a tower, you should first short
> all elements to achieve near quarterwave performance (provided the

> tower is quarterwave tall that is).
>
> 73's
> Richard Clark, KB7QHC

1493. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 02:51:48 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <5FK38.16038$KC1.2718627@news20.bellglobal.com>
Source record: 150181

www.cnn.com/2002/TECH/science/01/23/ireland.invention.reut/index.html

"Irish inventor claims to discover 'free energy'

DUBLIN, Ireland (Reuters) -- It has been a pipe-dream of inventors since Leonardo da Vinci, but has the secret of free energy now been found in Ireland? ..."

<truncated - see link if you're interested...>

Must be the after affects of the fallout from Chernobyl. The higher level of background radiation throughout Europe is making 'magic' happen in various fields of study.

1494. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 03:12:29 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <91tu4uoivabhlhrjtn7anknpviomj5gvf5@4ax.com>
Source record: 150182

On Thu, 24 Jan 2002 02:12:06 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi Richard,
>I don't know why you are so insistent to find out any reason to prove we are
>wrong, we are speaking of no science and so on...I am sure all the Ng
>readers noted your negative mood .

This above is simply the continuation of:

8. Is the claimant providing an explanation for the observed phenomena
or merely denying the existing explanation?
This is a classic debate strategy--criticize your opponent and never
affirm what you believe to avoid criticism. This stratagem is
unacceptable in science.

>Do you think I am a masochist?
>Do you think I have pleasure to spend so many time playing with my name on a
>world wide Ng?
>Do you think I am earning something?

These are ego-based arguments of your own invention and do not respond
to the critical analysis.

>No Richard, I have just the power of the truth.

Never let it be said that facts got in the way of "truth." Turning to
religion hmmm?

>
>You are so sure about me, you know all about me, you have perfectely defined
>what is my thought, what is my target.
>I am sorry but my word is equalling your.
>Are you the supreme judge?

Can't respond to the criticism but you can offer psychology blurbs
from Cosmo?

>
>Your interesting and ,I think, correct scientific american way to weight the
>claims is like a sword , has two cutting edge.
>On the two last yours email I will earn a PASS no a HIT.

Too bad you can't take that logic to Monte Carlo. Turning to gambling
after religion?

>because I know where the Dr. Trainotti did the mistake, I know what measures
>must have a cfa to work, I am not just criticize,I know the answers.I hope
>you are agree with me this is not the proper site to make a long list of all

>CFA parameters and how a CFA must be built and tuned...again my word is
>equalling your.

Not the proper site?! What do you think this is?
rec.radio.bogus.antennas?

>
>About Antennex , no sarcasm please. I am a antennex subscriber since 1998.I
>know very well all the magazine and his editor.

A "subscriber?" Your statement comes with sarcasm pre-loaded.

>
>You will laugh stronger ,now, because I must tell you that the Joel analisys
>is wrong.

8. Is the claimant providing an explanation for the observed phenomena
or merely denying the existing explanation?
This is a classic debate strategy--criticize your opponent and never
affirm what you believe to avoid criticism. This stratagem is
unacceptable in science.

>BUT also HERE I have all the answers because is wrong (another PASS) . he
>analyzed the eh like a resonant circuit.
>and eh is not. wrong assumptions.Again I can explain all, I can explain why.
>the day after of the publish, I sent an email to the editor explaining why
>the columnist was wrong. I motivated it.

The whole world is against you - how sad.

>
>The amazing thing is that for you is valid to judge my emails, the antenna
>, all my claims simply reading some lines on a NG...
>I am astonished.
>In the other side I am asking the world simply to do what any scentist
>normally do on his LAB:
>"Ok guy you are telling me this antenna is a sort of superman. Then you are
>providing me all informations how to build it.
>I will follow all the instructions. If at the end of the test the antenna is
>an hoax you will lost any credibility and you must close your mouth for
>ever. "...

Au contraire mon fere. What you do with your mouth is your personal
choice.

>
>I think this is the correct approach, in the science world , and in THE HAM
>world.
>The claim is for a new concept, a new application .I think must be
>verified.Since is new ,must be understood , needs analysis
>No what I am seeing is just sarcasm, irony and condamn
>Why don't you make an objective choice?
>Why so much energy to convince...who??... the antenna CAN'T work?

>
>But looking at your email it seems you are the JUDGE and I am the
>accused....
>I am sorry but we are at the same level.
>
>I would love our chats were genuine ,technical, on the antenna....
>But to discuss each person must use a good amount of humilty.
>
>Sincerly ,stefano
>

Hi Stefano,

You offer:
>I would love our chats were genuine ,technical, on the antenna....

It is your choice in what to respond to:
>Again I can explain all, I can explain why.
However, you chose not to go down the technical road, but rather you took the self-promotion road. Look at how many times you use the personal pronoun "I" above. [I lost track after 40, but it will supply an amusing follow-on.]

Instead we are offered the pathetic bumpkin:
> I am the accused....
such a poverty of technical discussion that so often attends these matters.

73's
Richard Clark, KB7QHC

1495. Re: Vol 2? Williams" Antenna Theory and Design'"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 03:30:15 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <adL38.16072$KC1.2748533@news20.bellglobal.com>
Source record: 150183

"Fractenna"
> I am still trying to find out if Paul Williams' lovely book
> "Antenna Theory and Design" (vol 1 pub 1966, Pittman,
> London UK) had subsequent volumes and am eager to
> see if anyone has access to these. So far, in a somewhat
> leisurely and long-term fashion, I have failed to either find
> a copy of the later volumes, nor found anyone who has
> heard of them.
>
> Any help?
>
> Thanks!
>
> 73
> Chip N1IR

Through the miracle of Google...

www.google.com/search?q=Paul+Williams+Antenna+Theory+Design

1600+ hits. Fill yer boots. "Volume Two" mentioned (plain sight).

J. Harvey
VE1BLL/VE3
[still waiting for The Letter ;-)]

1496. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 03:31:23 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <j0vu4u0mn78m8v0auuhebe37ecv8m8bm9l@4ax.com>
Source record: 150184

On Thu, 24 Jan 2002 02:12:06 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi Richard,
>I don't know why
>I am sure
>I am a masochist
>I have pleasure
>my name
>I am earning something?
>I have just the power of the truth.
>my thought
>my target.
>I am sorry
>my word
>I think
>I will earn a PASS no a HIT.
>I know
>I know
>I am not just criticize,
>I know the answers.
>I hope
>my word
>I am a antennex subscriber
>I know
>I must tell you
>I have all the answers
>I can explain all
>I can explain why.
>I sent an email
>I motivated it.
>my emails
>my claims
>I am astonished.
>I am asking
>I will follow all the instructions
>I think
>I think
>I am seeing
>I am the accused....
>I am sorry
>I would love

And if there were ever a mis-applied word:

> humilty.
>
>Sincerly ,stefano
>

Hi Stefano,

It reads so much more interestingly this way.

73's
Richard Clark, KB7QHC

1497. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 03:36:17 UTC
From: Anatoly Kryazhok <anatoly@dokuch.skif.net>
Message-ID: <3c4f87f3_2@bear.skif.net>
Source record: 150185

"N4IXT" <n4ixt@arrl.net> Has informed / has informed in news the following:
news:a2kle6$11onrq$1@ID-105647.news.dfncis.de...

> Come in on a regular basis, work
> with the kids, get them interested. Not only will they have fun and maybe
> become hams, but they'll get interested in the science and math behind it
> all too.
>
> Doesn't have to be a school, could be a boys/girls club, church, daycare,
> scouting, what ever. THAT'S how to achieve your goals, NOT by lowering the
> standards and cheapening the achievement, solely because someone happens
to
> look a little different.
>
> By the way, this technique works with ANYONE!
>
> 73's,
>
> Robert / N4IXT

Completely agree with Robert. Such technology successfully works and for us
in Ukraine
It is a correct way!

73! Anatoly / UX2IB

1498. FA: 70 FT Motorized Tower with T2x rotator & Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 04:05:20 UTC
From: mike ferraro <mikeferraro@cox.net>
Message-ID: <4KL38.49188$B61.16561376@news1.rsm1.occa.home.com>
Source record: 150186

Everything works...see it at:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1326343363

1499. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 04:05:48 UTC
From: Richard Corkish <r.corkish@unsw.edu.au>
Message-ID: <a2o143$a2g$1@tomahawk.unsw.edu.au>
Source record: 150188
Cross-posted to: rec.radio.amateur.antenna,sci.physics.electromag

Thanks very much to all those who responded, although a fair bit of confusion remains in my mind, at least. Richard Harrison's explanation, below, seems to be a good summary of the equivalent circuit argument put by Balanis and many others which, it seems to me, limits the receive power efficiency to 50% of the power in the field since 50% must always be scattered (the term reradiated is also used, interchangably).

But ... There is a large literature on microwave transmission of power which claims measured overall efficiencies exceeding 50%.

Also, and closer to my own interest, there are a few publications about collecting solar energy with antenna structures instead of solar cells and they state that very high efficiencies are feasible. For example, John D. Kraus ("Antennas", 2nd edition, McGraw-Hill, 1988) proposes two orthogonal arrays of tiny dipoles and says "... 100 percent aperture efficiency is possible, in principle". In other words, all the power in the incident light wave over the physical area of the antenna can be delivered to the load, in principle.

Balanis agrees that 100% aperture efficiency is possible (ie. an amount of power equal to all the incident wave power enetering the physical aperture (of an aperture antenna) can be delivered to the load), but still says that an additional equal amount of power must be scattered (reradiated) when the load is conjugately matched to the antenna. Wher does this power come from? I assume it must come from the field beyond the aperture, so the antenna would be collecting energy from twice the area of its physical aperture. This may be OK but it does become interesting if the incident field is strongly concentrated within the physical aperture. I guess in that case the aperture efficiency must decrease to still allow an amount equal to the load power to be reradiated.

Another idea: Is there a trick embedded in all this, associated with the relative phases of the reradiated and incident waves and possible cancellation?

Thanks again,
Richard Corkish

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:11777-3C4ECF77-17@storefull-111.iap.bryant.webtv.net...
> Bill, W0IYH wrote:
> "for a conjugate match between a receive antenna and its load, "half the
> power is delivered to the load and the other half is scattered. (p77)"
> This is correct."
>

> I don`t like Balanis` use of the word "scattered".
>
> The source resistance of a receiving antenna is its radiation
> resistance. The voltage induced in the receiving antenna appears in
> series with the antenna`s radiation resistance as a generator feeding a
> receiver load resistance, disregarding reactances for simplicity.
>
> If the load matches the source, there is no reflection from the load.
> Half the energy is absorbed in the load. The other half of the energy is
> lost in the radiation resistance of the antenna. It is re-radiated
> (scattered?).
>
> Best regards, Richard Harrison, KB5WZI
>

1500. Re: Vol 2? Williams" Antenna Theory and Design'"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 04:56:28 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <%tM38.16132$KC1.2810510@news20.bellglobal.com>
Source record: 150187

An amazing the correlation between certain individuals making an appearance and my Norton Antivirus software deleting the Hubris virus from an e-mail from "HaHaHa".

I can only hope that it took longer to arrange for its issuance than the few seconds it for me and my good friend Mr. A.V. Norton to delete it.

Twit.

1501. Re: Vol 2? Williams" Antenna Theory and Design'"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 05:15:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a2o5btpoo1@nntp9.atl.mindspring.net>
Source record: 150189

Oh, oh... There's TROUBLE... Chip needs more books! Look out world!

--Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message
news:20020123112615.27579.00000033@mb-fv.aol.com...
> I am still trying to find out if Paul Williams' lovely book " Antenna
Theory
> and Design" (vol 1 pub 1966, Pittman, London UK) had subsequent volumes
and am
> eager to see if anyone has access to these. So far, in a somewhat
leisurely and
> long-term fashion, I have failed to either find a copy of the later
volumes,
> nor found anyone who has heard of them.
>
> Any help?
>
> Thanks!
>
> 73
> Chip N1IR

1502. Re: CW and light dimming??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 06:20:36 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C4FA7A5.F6D7AA73@bellatlantic.net>
Source record: 150190

Richard Harrison wrote:

<snip>

> It makes little sense to use CW in the age of satellites,

You are totally blind and totally bigoted where it comes to CW.

If people like using CW, it makes sense for them to use it. It
is pathetic that you can't see that, particularly in light of your
obvious intelligence in other maters, where your opinions are
valuable, logical and lucid.

1503. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 07:06:30 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a2obrgoqf1@slb1.atl.mindspring.net>
Source record: 150191
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

Thread:

Ahhh.... come on guys. Dissipationless Resistance, higher than 50% efficiency in a conjugate match!!! What a bunch of balderdash!!!

Ya'll know that the only way you can get higher than 50% efficiency in the operation of any transmitter, amplifier, generator, or source it to:

OPERATE WITHOUT A CONJUGATE MATCH Heh, heh... [OR EVEN AN IMAGE MATCH (Lately called a Zo match!)].

By DEFINITION, if there is a conjugate match the efficiency of the source is EXACTLY 50%. Nothing more, nothing less!

That situation is simply what a conjugate match is, namely: a conjugate match practically defines the 50% efficiency design point for any source. Internal resistance of the generator equals the external resistance of the load. Half the total power is wasted in the generator and half goes into the load. The conjugate match, pretty simple.

Of course, any given source can operate at efficiencies much higher than 50% if it is not "matched".

So why operate at a match?

The electric power company doesn't operate it's generators at a conjugate match, your car battery doesn't do so, and neither does you flashlight. And any one able to discern and understand a schematic will see that literally no practical ham HF transmitter operates at a conjugate match either.

The problem that those who are confused by this fact have, is simply a problem they have with the semantics of issues completely unconnected with efficiency considerations, those of "wave mechanics" and "reflections". KISS... Keep it simple stupid. A conjugate match defines 50% efficiency, period!

Apart from some kinds of laboratory generators and test equipment, which are generally low power devices where inefficiency doesn't matter, and where a precise termination impedance is often demanded for metrlogical reasons other than efficiency, there is no good practical reason to operate most other sources at a "match". It's simply too inefficient to do so! So as the doctor said to the patient who was hitting his thumb with the hammer, "don't do that"!

Of course, as Roy points out, many common mortals have observed that sources can be, and usually are, much more than 50% efficient. I myself have designed many such sources, and shipped them to customers in the millions to

boot.

Now consider...

No "source designer" in "her" right mind would ever seek a conjugate match, or even an image match for that matter, when striving for high efficiency. The source designer will try her best to design every Ohm of resistance out of her source. What? You want resistance in a source? Silly!

The fact is that any source that is, operating into a load, and found to be exhibiting more than 50% efficiency is definitely not conjugate matched!

Now that being said... note that "load designers" might have different objectives and challenges than "source designers".

This is because a load designer' job is to try to extract the maximum possible power from an already prescribed and invariant source. Poor souls they are faced with the basic situation that, given a generator, there is nothing that they can ever do with their loads to simultaneously extract the maximum possible power and also cause the generator efficiency to exceed 50%! Of course, if they were not careful, they might cause the generator to melt down! I remember once a long time ago in "machines lab" when I... well you don't really wanna hear that story!

The load designer simply cannot change the source impedance, "he" just has to deal with it. "He" can only change the load impedance. The load designer can do no better than a conjugate match if "he" is trying to get a prescribed source to operate at maximum efficiency. The source designer however has no such restriction and can do whatever "she" wants to increase efficiency of "her" source.

The source designer tries to deliver the prescribed power to the load at the maximum possible efficiency, using three important principals: (1) eliminate resistance, (2) eliminate resistance, (3) eliminate resistance... conjugate match be damned.

Period, end of story!

(I'm sorry but I just can't bring myself to use that NBS/NIST invented phrase "Zo match", when for many decades we already had the fine name "image match" for the same damned thing!

For a conjugate match the load is the complex conjugate of the source impecance, e.g. if the source impedance is Zin=Rin+jXin, then the load impedance is Zo=Rin-jXin. For an image match the load impedance equals the source impecance, e.g. it is Zo=Rin+jXin.

Other than supporting the design theory of "image matched filter design" I have found the concept of the image match to be of minor importance. Anyone remember m-derived sections, constant-k sections, etc...?

Best,

--Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C4E39A2.E657F4EF@eznec.com...
> Balanis makes the assumption that the internal resistance of the
> transmitter consists of a resistor or other invariant resistance, as in
> a Thevenin or Norton source. This is convenient for analysis and is an
> accurate representation of a laboratory signal generator, but is not an
> accurate model for a transmitter. Conventional AM broadcast
> transmitters, for example, have for many decades routinely achieved
> significantly greater than 50% efficiency. That is, more than half the
> power applied to the output stage of the transmitter is delivered to the
> load. I've personally designed and built CW transmitters with over 85%
> efficiency. It's because the dissipation is determined largely by the DC
> resistance of the output device, while the output resistance is
> determined by the dynamic resistance. (This is, admittedly, quite a
> simplification.) Tubes and transistors are nonlinear devices in which
> these two can be dramatically different. (Some have taken to calling
> part or all of the output resistance of transmitters "dissipationless
> resistance" but I personally don't like the term, choosing instead to
> seek explanations that don't require it.)
>
> It's not surprising that an academic person specializing in antennas
> would make the assumption that "transmitters" are like laboratory signal
> generators, with which he was apparently much more familiar. But it's a
> shame that this kind of misinformation makes its way into otherwise
> respectable books without even cursory scrutiny from anyone who has
> actually seen and used a transmitter. Any technician ever involved with
> the adjustment of AM or most FM transmitters could have pointed out at
> least that the statement couldn't be true in light of everyday
> experience.
>
> Roy Lewallen, W7EL
>
> Richard Corkish wrote:
> >
> > I have noticed what seems to me to be a basic discrepancy in the antenna
> > literature and would appreciate your comments. Probably it is just my
> > misunderstanding.
> >
> > "Antenna Theory Analysis and Design" by C. Balanis (2nd edition) clearly
and
> > explicitly states that for a transmitting antenna (at best, with a
conjugate
> > match of the antenna to the transmitter) "half of the total power
supplied
> > by the generator is radiated by the antenna during conjugate matching,
and
> > the other half is dissipated by heat in the generator. (p. 75)".
Similarly,
> > for a conjugate match between a receive antenna and its load, "half the
> > power is delivered to the load and the other half is scattered. (p.
77)".

> > This suggests to me that a microwave free-space power transmission
system
> > (eg. W.C. Brown, IEEE Trans. Microwave Theory and Techniques, MTT-32
(9),
> > 1230 (1984)) would lose half the input power at the transmit stage and
half
> > again at the receive stage, giving upper efficiency limit of 25%. Yet,
> > Brown claims measured DC-microwave-transmission-reception-DC
efficiencies
> > exceeding 50%.
> >
> > Other antenna theory books, such as Kraus (1950), King (1956) and Wolff
> > (1966) support Balanis' position but two others, S.Silver (1949), p. 40
and
> > Ramo, Whinnery and Van Duzer (1994) do not. The latter goes so far as
to
> > say (p. 669), "... one would conclude that as much power is scattered
under
> > a condition of perfect match as is absorbed in the load. This conclusion
is
> > not true, except in special cases where the current distribution may be
the
> > same for reception as for transmission."
> >
> > I'd be grateful if any reader could please help me clarify this
apparrent
> > confusion/conflict or point me towards relevant literature.
> >
> > Thanks in advance,
> > Dr Richard Corkish
> > University of New South Wales

1504. Re: how to construct a matching circut for a ramdom wire for 40 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 07:42:45 UTC
From: ok1sip@atlas.cz
Message-ID: <8f3e93b5.0201232342.600d3413@posting.google.com>
Source record: 150192
Cross-posted to: rec.radio.amateur.antenna,rec.radio.homebrew

Hi Ralph and all,
I found I had an old version of HamCalc. You can download the 32.0 version e.g. from http://www.qsl.net/wz1v/ now. Then open menu D selection 05 - Short off-centre loaded dipole and also selection 03 - Short centre loaded dipole. See other useful calculations, too !

BR from Ivan

1505. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 08:10:02 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a2ofgq$8tq$6@quark.scn.rain.com>
Source record: 150193

Reg Edwards <g4fgq.regp@btinternet.com> wrote:
> You can have a 90-degrees phase difference in the voltage between the ends
> of an inductor but the current going into one end must be exactly the same
> as comes out of the other in both magnitude and phase.

> There's nowhere else for it to go.

How about a magnetic field?

--
Bill Nelson (billn@peak.org)

1506. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 08:29:59 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a2ogm7$8tq$7@quark.scn.rain.com>
Source record: 150194

stefano <sgalast@tin.it> wrote:

> I would love our chats were genuine ,technical, on the antenna....

How about presenting some technical data, then - rather than a bunch
of claims about an antenna that has not been completely described?

--
Bill Nelson (billn@peak.org)

1507. Re: Vol 2? Williams" Antenna Theory and Design'"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 08:38:18 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a2oh5p$8tq$8@quark.scn.rain.com>
Source record: 150195

Fractenna <fractenna@aol.com> wrote:
> I am still trying to find out if Paul Williams' lovely book " Antenna Theory
> and Design" (vol 1 pub 1966, Pittman, London UK) had subsequent volumes and am
> eager to see if anyone has access to these. So far, in a somewhat leisurely and
> long-term fashion, I have failed to either find a copy of the later volumes,
> nor found anyone who has heard of them.

> Any help?

Try Google.

--
Bill Nelson (billn@peak.org)

1508. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 09:19:19 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a2ojlp$m6q$1@newsserver.cilea.it>
Source record: 150196

>
> Ted Hart decided do not answer to all this chorus of polemic.
> He will show the AM version when the tests will be over.
>

Honestly, I am looking forward to seeing his results - at least Ted Hart
hired an independent consultant engineer to do the tests properly... I only
hope I don't have to wait too long.
Till then, I simply will not believe any unsubstantiated claim... sorry !

Michele IZ2EAS

1509. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 09:50:21 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a2olct$56b$1@serra.unipi.it>
Source record: 150197

stefano <sgalast@tin.it> wrote:
> Hi Chip,
> How are you??

> we had many chats on the CFA antenna. true.
> But this new adventure is young, is just born.

> Again, you in the USA don't have any idea what in Italy is going on.
> There are ham using the eh antenna since the last october.

Hello Stefano,
I asked for some good theory explanation many times, but yet I didn't get
any real equation to deal with (and yet Maxwell equations are valid...).
I5LHY also build an EH antenna which I've seen working and it never
seemed to be better than -20 dB over a simple dipole.
I only whish to see some real explanation, in terms of equations that
are still valid.

> Next february one of the most important ham electronic magazine in Italy
> will publish an indipendent test on the eh antenna.

Which magazine? I don't think any ham magazine in Italy has an enough valid
technical level. IEEE magazines are the right place to publish new discovers.

73

Francesco IZ5DWF

1510. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 10:05:26 UTC
From: richardharrison@webtv.net
Message-ID: <18368-3C4FDC66-180@storefull-115.iap.bryant.webtv.net>
Source record: 150198

Richard Corkish wrote:
"But ...There is a large literature on microwave transmission of power which claims measured overall efficiencies exceeding 50%."

The problem with antenna receiving antenna efficiencies of more than 50% is reciprocity. An antenna has the same characteristics receiving as it has transmitting. There is no one-way path. It`s difficult to sneak energy through a slit and trap it inside a container.

You may convert energy from microwave to heat, then trap the heat within a thermos bottle (Dewar flask?), or something of the sort. Light to electricity?

A parabola concentrates parallel rays through a focal point, coming or going.

Best regards, Richard Harrison, KB5WZI

1511. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 10:45:16 UTC
From: richardharrison@webtv.net
Message-ID: <21590-3C4FE5BC-43@storefull-113.iap.bryant.webtv.net>
Source record: 150199

Peter, K1PO wrote:
A conjugate match defines 50% efficiency period!"

Wrong! in general. Right, in the case of Peter`s dry cell. The dry cell has only the kind of resistance a resistor uses. It is the kind that dissipates energy.

A transmission line has a surge impedance (it`s a pure resistance in a perfect transmission line) which limits current to a specific value for a specific value of applied voltage. It`s the 50, 75, or so ohms value of coax, for example.

Apply some voltage to one end of a coax and terminate the far end in a matching resistor. There is no reflection when energy from our source arrives at our resistor. Energy is 100% absorbed by the resistor. 0% is eaten by our perfect, for practical purposes, coax. Why?
"Dissipationless resistance" in the coax.

The off and on switching in a Class C amplifier is another type of "dissipationless resistance".

Best regards, Richard Harrison, KB5WZI

1512. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 11:26:23 UTC
From: richardharrison@webtv.net
Message-ID: <22079-3C4FEF5F-120@storefull-112.iap.bryant.webtv.net>
Source record: 150200

Richard Corkish wrote:
"But ... There is a large literature on microwave transmission of power which claims measured efficiencies exceeding 50%."

Collimate antenna radiation well enough and all the energy exchanged between antennas is trapped. No loss in free space means efficiencies exceeding 50%. This would be like a lossless transmission line with reflections.

Best regards, Richard Harrison, KB5WZI

1513. Re: Vol 2? Williams" Antenna Theory and Design'"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 12:27:50 UTC
From: fractenna@aol.com
Message-ID: <20020124072750.25916.00000201@mb-fx.aol.com>
Source record: 150201

>Try Google.
>
>--
>Bill Nelson

Thanks Bill;

I, too, used google a while back(nothing then) , and tried again at your suggestion.

It's great that there now is evidence that others have heard (and referenced) the second volume; so let me re-word my request:

Anyone know how I can obtain a copy to borrow or buy?

I do not have access to the stacks at the University of Western Ontario for example.

E-mail response should be fine.

73,
Chip N1IR

1514. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 12:33:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C4FFF0A.6FBDDC84@eznec.com>
Source record: 150202
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

Even with a Thevenin or Norton source, it's possible to get any efficiency you want (as long as it's less than 100%). For example, let's say you have a 100 volt voltage source in series with a 10 ohm source resistance. If you connect this to a 10 ohm load, 250 watts is dissipated in each resistor, for an efficiency of 50%. But if you use a load resistance of 90 ohms instead, you'll have 10 watts in the source resistance and 90 in the load resistance, for an efficiency of 90%. The efficiency keeps improving as you increase the load resistance (or decrease the source resistance). As someone mentioned earlier, power companies depend on this in order to supply power at high efficiency.

How about receiving antennas? The same principle holds. Here's what Kraus says, in _Antennas_, Second Edition, p. 34, or in the First Edition, p. 46:

"For conditions of maximum power transfer and zero antenna losses, the scattering ratio is unity. If the terminal resistance is increased, both the scattering aperture and the effective aperture decrease, but the scattering aperture decreases more rapidly so that the scattering ratio becomes smaller. By increasing the terminal resistance, the ratio of the scattered power to power in the load can be made as small as we please, although by so doing the power in the load is also reduced."

The scattering ratio os the ratio of scattering aperture to the effective aperture, or the ratio of power scattered from an incident wave to the power delivered to a load at the antenna terminals.

I highly recommend a careful reading of Chapter 3 of the First Edition or Chapter 2 of the Second Edition of _Antennas_ for anyone interested in receiving antenna concepts.

Roy Lewallen, W7EL

1515. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 13:04:16 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a2p0ob0vnb@enews3.newsguy.com>
Source record: 150203

"stefano" <sgalast@tin.it> wrote in message
news:y1H38.18703$Rv3.672422@news2.tin.it...
> Everybody will remain astonished hearing all the measurable eh antennas
> features:
>
> high Bw....more than 400 khz at +- 3db on 40 meters with 1% wav. antenna
> NO any warm part in the antenna feeding it with 1 kw without any
> coax....where the energy goes??? radiated.We are speaking of 1' and 3"
> antenna long!!!!
> perfect resistive 50 ohm at the input at mid band
> I repeat these are measurable parameters. You just need one of it on hand.

I repeat my offer... send me one and I'll measure it here and compare to a variety of vertical and horizontal antennas and report to the group, then if you like my results you can publish them. I don't want to spend the time to build one because there would always be the question (like the cfa example you cite) about how I built it and did I tune it properly. You build it, tune it, test it there, and then send it to me and I'll see what kind of results I get.

1516. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 13:29:21 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2p2t1$12hkob$1@ID-124126.news.dfncis.de>
Source record: 150204
Cross-posted to: rec.radio.amateur.antenna,sci.physics.electromag

Richard Corkish wrote -
> Another idea: Is there a trick embedded in all this,
> associated with the relative phases of the reradiated
> and incident waves and possible cancellation?
==========
There are no tricks. The field in the neighbourhood of a receiving antenna is distorted. It is the resultant (the sum) of the original and re-radiated fields.

In some directions the original field will be reinforced, in other directions there will be partial cancellation.

Distortion depends on orientation of the antenna relative to the original field.

Greatest field distortion occurs when the receiver is short-circuited and ALL intercepted energy is re-radiated.

1517. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 13:39:38 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <u8U38.273$mU4.18474@bgtnsc06-news.ops.worldnet.att.net>
Source record: 150205

"stefano" <sgalast@tin.it> wrote in message
news:WLH38.18840$Rv3.678433@news2.tin.it...

> later ,when you will understand is working, I will be happy to explain you
> how it works and why.
> sincerly, Stefano Ik5IIR
>

I know exactly how it works.

You have been talking about this antenna for some time and claim that its a new discovery and no one understands how it works. To make these claims you must have some measured data.

So, to support your claims please provide the following information. Maybe then we can evaluate your claims and decide for ourselves.

1) Please provide a drawing of the antenna with dimensions.

2) Please provide a description of the measurement setup.

3) How high was the antenna above ground?

4) What were the ground conditions?

5) What was the test frequency?

6) What impedance did you measure without the "matching network"?

6) What impedance did you measure with the "matching network"?

7) Provide a description of the matching network and component values?

8) How did you account for ground impedance affects and common mode currents?

This should get us off to a good start for discussion.

Steve VE9SRB

1518. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 13:40:15 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a2p2v2oae1@newsserver.cilea.it>
Source record: 150206

Well done David,

this is the best approach to this problem, to try and have a clearer vision
of the potentials of this antenna. This is a GREAT opportunity that Stefano
should NOT miss, unless he definitely fears the results of these tests....

Michele IZ2EAS

"David Robbins" <k1ttt@arrl.net> ha scritto nel messaggio
news:a2p0ob0vnb@enews3.newsguy.com...
>
> I repeat my offer... send me one and I'll measure it here and compare to a
> variety of vertical and horizontal antennas and report to the group, then
if
> you like my results you can publish them. I don't want to spend the time
to
> build one because there would always be the question (like the cfa example
> you cite) about how I built it and did I tune it properly. You build it,
> tune it, test it there, and then send it to me and I'll see what kind of
> results I get.
>
>

1519. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 13:48:39 UTC
From: Ed Cregger <663jlm@vei.net>
Message-ID: <u503u45akt6a4e@corp.supernews.com>
Source record: 150207

I used the same excuses and was dead wrong while doing it.
All of the money that I paid in rent was lost, versus
gaining equity in my own property.

In today's world, the landlord expects you to pay ALL of his
expenses (including a mortgage) AND pay him a profit. It is
business. That is how it works.

I don't know where you live, Jason, and maybe that is the
problem. But here in the US, if you can rent, you can own.
You may have to be creative in your financing (Carlton
Sheets real estate course is fantastic), but it CAN be done
if one works at it. Selling property is not difficult if you
buy carefully to begin with.

Anyway, good luck in your apartment ham shack (shudder! -
BTDT).

Ed Cregger
nm2k@adoublerl.net (wink)

"Jason Hsu" <jason_hsu@my-deja.com> wrote

(snip)
> Now, if you're willing to lend me a few hundred thousand
dollars with
> no fees and a 1% interest rate, I will buy a house and
enjoy QSOs on
> the air with you. :)
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

1520. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 14:06:06 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a2p4cejme1@serra.unipi.it>
Source record: 150208

Michele IZ2EAS <iz2eas@libero.it> wrote:
> Well done David,

> this is the best approach to this problem, to try and have a clearer vision
> of the potentials of this antenna. This is a GREAT opportunity that Stefano
> should NOT miss, unless he definitely fears the results of these tests....

for what is worth, I'm sure there are many hams even closer to Stefano who
would like to test a "well made EH", even I could do it,
I'm a telecommunication engineer and of course I can compare the
antenna with the presence of a lot of other hams and technical qualified
peoples.

73
Francesco IZ5DWF

1521. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 15:14:25 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c5028a2_1@news1.prserv.net>
Source record: 150209

Jason:
Here are a couple of points I don't think anyone else mentioned, in addition to the height and clear location.

1. Check each possible location with a portable SW receiver, preferably day on 20 M and at night on 40 or 75 M for noise and signals. Pay attention to computer and power line noises, as these won't go away. An AM/FM receiver isn't going to tell you much. The transmit/receive balance is wrong. Hams use low power and receive weak signals, while commercial broadcasting uses 100 or more times as much power and insensitive receivers.

2. Drive around the immediate area with a mobile receiver on 75 or 40 and listen for loud power line noises. Again, the likelihood of these getting fixed are slim these days, and with a good antenna at your apartment, you will hear these from a distance. Preferably, the location would be in an area with underground power feeds.

--
Crazy George
Remove NO and SPAM from return address
Jason Hsu <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0201221751.1c10033d@posting.google.com...
> The next time I look for a new apartment, what should I look for? My
> current QTH is miserable because it is on the ground floor, and the
> location is at a low land elevation.
>
> I know that apartments are miserable compared to houses. I just want
> to do better next time. Also, I am more willing to pay extra for a
> better QTH in the future than I was in the past. (I was a lowly
> No-Code Tech when I moved into my current QTH. I was expecting a
> career in fiber optics instead of antennas/RF/microwave. There were
> so few apartments to choose from, and the nonham issues won me over.)
>
> While being at a higher elevation won't necessarily help for HF
> skywave, it will help for line-of-sight communications on VHF, UHF,
> and microwave (a part of the hobby I would like to enter) and possibly
> even ground wave on HF. I know I also want to be at least 1 floor
> above the ground, as I would feel free to keep my antennas (especially
> the more expensive and bulky DK3 Screwdriver antenna for HF) on the
> outside balcony without concerns about theft. This would be MUCH more
> convenient. (Obviously, the apartment must have a balcony to begin
> with.)
>
> So what should I do next time? Some of my ideas:
> 1. I will try out my Yaesu FT-50R radio and at least listen to all

> the local repeaters. The more repeaters I can use (especially among
> those far away), the better for line-of-sight.
> 2. I will bring an AM/FM radio and see how many local FM and AM radio
> stations I can listen to. The more FM stations I can listen to and
> the more AM stations I get during the day, the better.
> 3. I will also use the AM part of the radio (on frequencies between
> broadcast stations) and check for noise sources (in case power line
> problems cause interference).
>
> Are there any other factors I should look for? More importantly, are
> there red flags to watch out for? (Examples: metal instead of wood
> railings, metal structures at close range, metal roofing or siding
> just above a top-floor apartment, etc.)
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

1522. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 15:17:36 UTC
From: richardharrison@webtv.net
Message-ID: <11777-3C502590-122@storefull-111.iap.bryant.webtv.net>
Source record: 150213

Roy, W7EL wrote:
"By increasing the terminal resistance, the ratio of the scattered power to power in the load can be made as small as we please, although the power in the load is reduced."

If the load matches the antenna, no power is reflected by the load to be re-radiated, but the antenna is excited by the wave sweeping by and divides its power equally between equal parallel loads, the receiver`s input resistance and the antenna`s radiation resistance.

Radiation resistance is a function of antenna length.

If an antenna doesn`t receive much energy, it can`t re-radiate much.

An account of energy acceptance is given by John E. Cunningham in "The Complete Broadcast Handbook": "As construction progressed (on a nearby microwave tower), the current in one tower (of a 4-tower directional array) continued to drop as each new section was added to the microwave tower. The current continued to drop until it nearly reached zero. But, as more sections were added to the microwave tower, the current began to rise. When the microwave tower reached its full height, all the tower currents of the broadcast antenna, as well as its pattern were normal."

A grounded tower near the broadcast array accepts the most energy at 1/4-wave resonamnce as illustrated by Cunningham`s story.

Were the microwave tower erected on a base insulator and not cionnected with the earth, it would have become resonant when it reached 1/2-wavelength.

Resonnant structures sited near a broadcast station must be detuned so as to not interfere with the broadcast signal.

Let`s say we want maximum excitation of our receiving antenna. We make it resonant. The only way to get maximum power from the antenna is in a matched load.

A higher load resistance may produce higher voltage but the current we can draw is reduced so that the product of volts times amps is smaller than we can get from a matched load.

If the load resistance is made smaller than a match to the antenna, the current may increase but not enough to offset lower voltage across the load. The load loses power and reflected power from the mismatched load increases re-radiation.

Re-radiated power can be reduced by reduced excitation.

Reradiated power can be increased by greater mismatch of the antenna`s load

An open-circuit 1/2-wave and a short-circuit (grounded) 1/4-wave may be highly excited but are completely mismatched. They re-radiate all of the energy they receive.

Best regards, Richard Harrison, KB5WZI

1523. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 15:20:39 UTC
From: Alan Boswell <alan.boswell@baesystems.com>
Message-ID: <3C502647.BB0FFEF3@baesystems.com>
Source record: 150210
Cross-posted to: rec.radio.amateur.antenna,sci.physics.electromag

Richard Corkish wrote:
>
> Balanis agrees that 100% aperture efficiency is possible (ie. an amount of
> power equal to all the incident wave power enetering the physical aperture
> (of an aperture antenna) can be delivered to the load), but still says that
> an additional equal amount of power must be scattered (reradiated) when the
> load is conjugately matched to the antenna. Wher does this power come from?
> I assume it must come from the field beyond the aperture, so the antenna
> would be collecting energy from twice the area of its physical aperture.
> This may be OK but it does become interesting if the incident field is
> strongly concentrated within the physical aperture. I guess in that case
> the aperture efficiency must decrease to still allow an amount equal to the
> load power to be reradiated.

Richard

You can get an angle on this problem by first considering a plane wave
normally incident on a conducting plate. The total power in the field
is unchanged by introducing the plate, but there are two main region of
scattered field, one back towards the source (the reflected field) and
the other continuing in the original direction (the forward-scattered
field). Each of these scattered fields has a main lobe and a set of
sidelobes of the usual sin(x)/x type (at any point the scattered field
is defined as the actual field minus the original field that would have
existed without the plate).

Both the reflected field and the forward scattered field have the same
total power, equal to the area of the plate times the power density of
the incident plane wave. The total field power is the same with or
without the plate.

NOW put a dipole array on the forward side of the plate, all dipoles
feeding matched loads. The loads then (ignoring practical effects like
ohmoc losses) absorb a power equal to the area of the plate times the
power density. Furthermore the reflected field no longer exists, so
that the power that was in the reflected field is now absorbed in the
load.

BUT the forward scattered field is still there unchanged. However, the
total field power is reduced by the amount of power absorbed in the
loads. This is possible because there are regions behind the plate
where the total field is reduced, e.g. immediately behind the plate the
scattered field is in opposite phase to the original field, so that
there is no field at all. Therefore the original field added to the
forward-scattered field has a total power equal to the original power

minus the power absorbed in the loads.

The situation is thus:

1. power in loads: area times power density,

2. forward scattered field power: area times power density,

3. reduction in total field power: area times power density.

This is how Balanis conjures up a scattered field without violating energy conservation.

Alan

1524. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 15:27:39 UTC
From: rbmccammon@mmm.com
Message-ID: <3C5027EB.ADA2613A@mmm.com>
Source record: 150211
Cross-posted to: rec.radio.amateur.antenna,sci.physics.electromag

Richard Corkish wrote:
>
> Thanks very much to all those who responded, although a fair bit of
> confusion remains in my mind, at least. Richard Harrison's explanation,
> below, seems to be a good summary of the equivalent circuit argument put by
> Balanis and many others which, it seems to me, limits the receive power
> efficiency to 50% of the power in the field since 50% must always be
> scattered (the term reradiated is also used, interchangably).
>
> But ... There is a large literature on microwave transmission of power
> which claims measured overall efficiencies exceeding 50%.
>
> Also, and closer to my own interest, there are a few publications about
> collecting solar energy with antenna structures instead of solar cells and
> they state that very high efficiencies are feasible. For example, John D.
> Kraus ("Antennas", 2nd edition, McGraw-Hill, 1988) proposes two orthogonal
> arrays of tiny dipoles and says "... 100 percent aperture efficiency is
> possible, in principle". In other words, all the power in the incident
> light wave over the physical area of the antenna can be delivered to the
> load, in principle.
>
> Balanis agrees that 100% aperture efficiency is possible (ie. an amount of
> power equal to all the incident wave power enetering the physical aperture
> (of an aperture antenna) can be delivered to the load), but still says that
> an additional equal amount of power must be scattered (reradiated) when the
> load is conjugately matched to the antenna. Wher does this power come from?
> I assume it must come from the field beyond the aperture, so the antenna
> would be collecting energy from twice the area of its physical aperture.
> This may be OK but it does become interesting if the incident field is
> strongly concentrated within the physical aperture. I guess in that case
> the aperture efficiency must decrease to still allow an amount equal to the
> load power to be reradiated.
>
> Another idea: Is there a trick embedded in all this, associated with the
> relative phases of the reradiated and incident waves and possible
> cancellation?

Lets try a sanity check. An EM wave is an EM wave is
an EM wave, so lets consider a hollow sphere with a
small hole in it with the inside coated with lamp
black. Shine a narrow beam laser into the hole and
pretty near 100% will be absorbed.

So, it is possible. What is special about this
case? My guess is it is that the aperture is enough
larger than the beam. A similar situation could
apply to a microwave beam and a recttenna farm.

I believe Balanis refers to the case of an antenna
in a plane wave field where the extend of the field
is much wider than the antenna aperture.

--
Thank you for reading and or replying

If you are one in a million, there are 6000 people just like
you.

Opinions expressed herein are my own and may not represent those of my employer.

1525. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 15:31:43 UTC
From: Max <ve3tmtNOSPAM@rac.ca>
Message-ID: <ZNV38.11326$bu6.2981775@news20.bellglobal.com>
Source record: 150212

"Ed Cregger" <663jlm@vei.net> wrote in message
news:u4tq0s4584te37@corp.supernews.com...
> I know that Dennis' advice sounds harsh, but it is the
> truth, Jason. Play with the toys after you have taken care
> of business.
>
> Ed Cregger, NM2K
> nm2k@adoublerl.net (wink)

I have to agree. I am in the same position as Jason now. Apartment complex with absolutely no chance of an outside anttenna. I know because I asked. I was forced to remove my satellite dish or face eviction. I can't put anything on the roof, because they recently re tarred the roof, so not everyone can afford that luxury. I am content with my mobile operation for now, but during a 48 hour contest it just doesn't cut it. With what I am paying for rent I can easily afford a comfortable home. But I haven't quite saved enough for the down payment. I have an area in mind (no power line noise) so it is only a matter of time before I will have enough to put down on a house.

Good luck Jason,

1526. Estimating ground plane efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 15:59:03 UTC
From: zygo@azstarnet.com
Message-ID: <zygo-2401020859040001@10.0.0.2>
Source record: 150214

I'm trying to estimate as closely as possible the efficiency (pwr radiated over pwr delivered by feedline)
of my 14 MHz ground plane. This antenna has 9 "drooping" radials (c. 40 deg. below the horizontal) to raise its
impedance to 50 ohms, and the SWR is 1.0:1 The base of the vertical radiator is one quarter wave above ground
(which is dry desert stuff). I'm just guessing perhaps 90 percent, but can anyone with experience or references
in this area help out?

73, Jim KF7A, Tucson, AZ

1527. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 16:46:12 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <ZThQPLysB347y91Fi178VJc8gIGW@4ax.com>
Source record: 150215

"Max" <ve3tmtNOSPAM@rac.ca> wrote:

>
>"Ed Cregger" <663jlm@vei.net> wrote in message
>news:u4tq0s4584te37@corp.supernews.com...
>> I know that Dennis' advice sounds harsh, but it is the
>> truth, Jason. Play with the toys after you have taken care
>> of business.
>>
>> Ed Cregger, NM2K
>> nm2k@adoublerl.net (wink)
>
>I have to agree. I am in the same position as Jason now. Apartment complex
>with absolutely no chance of an outside anttenna. I know because I asked. I
>was forced to remove my satellite dish or face eviction.

You might want to check with the FCC on the satellite dish. I was under the impression that, to help the satellite companies compete with cable, the FCC has mandated anyone can put up a satellite dish, regardless of where they live. The snazzy apartment complex I was last in, in Houston, had user-installed dishes all over the place.

Bob
k5qwg

> I can't put
>anything on the roof, because they recently re tarred the roof, so not
>everyone can afford that luxury. I am content with my mobile operation for
>now, but during a 48 hour contest it just doesn't cut it. With what I am
>paying for rent I can easily afford a comfortable home. But I haven't quite
>saved enough for the down payment. I have an area in mind (no power line
>noise) so it is only a matter of time before I will have enough to put down
>on a house.
>
>Good luck Jason,
>
>
>

1528. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 16:58:42 UTC
From: John O'Flaherty <wewelcomespam@blackhole.net>
Message-ID: <3C503D42.5CB73ADA@blackhole.net>
Source record: 150216
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

"William E. Sabin" wrote:
>
> Richard Corkish wrote:
>
> >
> > "Antenna Theory Analysis and Design" by C. Balanis (2nd edition) clearly and
> > explicitly states that for a transmitting antenna (at best, with a conjugate
> > match of the antenna to the transmitter) "half of the total power supplied
> > by the generator is radiated by the antenna during conjugate matching, and
> > the other half is dissipated by heat in the generator. (p. 75)".
>
> This is one Balanis error.
>
> > for a conjugate match between a receive antenna and its load, "half the
> > power is delivered to the load and the other half is scattered. (p. 77)".
>
> This is correct. An incoming wave has a certain
> "available power" and a 377 ohm space (generator)
> impedance. The receive antenna can, at best,
> therefore only deliver the power that is
> "available" from the wave, which is one-half the
> power in the wave. The rest is re-radiated.

Is any part of that 377 ohm impedance actual resistance, so that there
is dissipation or conversion to heat at the interface between the
antenna and space?
As to what is re-radiated, is that at the same frequency as the
original wave, and what would prevent putting up another antenna to
capture what was re-radiated and combining it with the original to get
more than 50%?

--
john

1529. Re: Estimating ground plane efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 17:14:46 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2pfnb$12m42f$1@ID-124126.news.dfncis.de>
Source record: 150217

Jim, SWR on the feedline has nothing to do with radiating efficiency of the antenna.

Assuming no loading coils and the aluminium antenna conductors have diameters large enough to be self-supporting, loss in the antenna itself is absolutely negligible. (thin wire antenna loss is higher, crudely 3 %)

Above 'dry desert stuff', at that antenna height above ground, considering the large number of radials, and assuming there are no other structures in the vicinity, power loss in the environment is negligible. But to give it a number, let's say 2 percent.

So the radiating efficiency of the antenna + ground is about 98 percent.

Considering the system as a whole, depending on type and length of feedline, most of the loss almost certainly occurs in the feedline. A line attenuation of 1 dB corresponds to a 20 % power loss.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

Jim Mandaville <zygo@azstarnet.com> wrote in message
news:zygo-2401020859040001@10.0.0.2...
> I'm trying to estimate as closely as possible the efficiency (pwr radiated
> over pwr delivered by feedline)
> of my 14 MHz ground plane. This antenna has 9 "drooping" radials (c. 40
> deg. below the horizontal) to raise its
> impedance to 50 ohms, and the SWR is 1.0:1 The base of the vertical
> radiator is one quarter wave above ground
> (which is dry desert stuff). I'm just guessing perhaps 90 percent, but
> can anyone with experience or references
> in this area help out?
>
> 73, Jim KF7A, Tucson, AZ

1530. Re: Condo Isoloop RFI problems - advice? *see web page photos*

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 17:28:00 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <fpg05uo3l1688pbj7hpmssp6jvvbfu06gq@4ax.com>
Source record: 150218

On 23 Jan 2002 16:31:30 -0800, tegwilym@hotmail.com (Tom) wrote:

>
>Arrrrgghh! This is frustrating. I hear about people that do this
>same thing all the time from a condo or apartment, but can't seem to
>discover the magic arrangement that works!
>
>Tom KA7VIK

Hi Tom,

You are doing your best when it comes to checking the radiative path of interference, but there is also the conductive path.

That is, if your TV and transmitter share the same 120VAC circuit (they go to the same breaker), there is every chance that is the means of coupling.

Move the TV's or the transmitter's power connection to a separate circuit (breaker). If this clears up the problem, you might be able to reconnect to the original circuit (if a necessity of the apartment layout or other consideration) and use snap on suppressors around the power lead(s). Snubbing the transmitter's lead is preferred (stop the interference at the source).

73's
Richard Clark, KB7QHC

1531. Re: WTB: hotstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 18:04:22 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C504C94.8BF82E80@icok.net>
Source record: 150269

Richard,
Your correct in what you said, but a 'shorting' stick is
the exact opposite of a 'hot stick'.
'Doc

1532. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 18:51:24 UTC
From: richardharrison@webtv.net
Message-ID: <11778-3C5057AC-66@storefull-111.iap.bryant.webtv.net>
Source record: 150270

John O`Flaherty wrote:
"Is any part of that 377 ohm impedance actual resistance, so that there is dissipation or conversion to heat at the interface between the antenna and space?"

No.

The loss in energy as distance from the transmitter grows, all comes from a constant power spread over a larger surface area as the radiation bubble grows, in free space.

Now, as a radio wave travels along the surface of the earth, it is sapped by the imperfect conductivity of the earth`s surface. Earth loss adds to the attenuation caused by the expanding energy bubble. But, the earth has already boosted power in the bubble over what would have occurred in free space by reflection of the energy which is blocked by the earths surface. Access to a hemisphere down there is denied. So this reflected energy adds to direct radiation from the transmitter.

377 ohms in free space is like 50 ohms in lossless coax. It is a lossless voltage to current ratio that can be depended on.

John also wrote:
"As to what is re-radiated, is that at the same frequency as the original wave, and what would prevent putting up another antenna to capture what was re-radiated and combining it with the original to get more than 50%?"

Good thoughts!

Unless there is loss resistance in a receiving antenna, re-radiation is all at the original frequency. Loss in a resistor converts r-f to heat which may be radiated along with remaining r-f. Heat is energy of a different frequency from the r-f.

Parasitic arrays have elements not directly connected with the feedline to a transmitter or a receiver. These disconnected elements re-radiate their intercepted energy to combine with that of the directly connected elements. This configuration is made with the intent of enhancing performance.There are other entries in this thead about multi-elemnt arrays. They concentrate enrgy but don`t create energy.

Best regards, Richard Harrison, KB5WZI

1533. Re: WTB: hotstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 19:17:49 UTC
From: richardharrison@webtv.net
Message-ID: <11777-3C505DDD-146@storefull-111.iap.bryant.webtv.net>
Source record: 150276

Doc, W5LZ wrote:
"---a "shorting" stick is the exact opposite of a "hot stick".

That`s right, but I said I used it backwards!

A hot stick is what the power company uses to operate switches and breakers on those utility poles where there`s high voltage. It is also what I used to open and close ammeter shorting switches where there was very high r-f voltage.

There are interlock circuits to keep transmitter operators from encountering live circuits. When trouble-shooting, you bypass those interlocks, enter the transmitter, and poke and probe with the best you have, and that is usually that shorting stick used in reverse. That grounded hook in your hand (you keep the other hand in your pocket) makes the insulated grounding stick very safe to contact high-voltage parts. Even if there is current leakage it will go to ground through the hook ground cable and not through the operator.

Best regards, Richard Harrison, KB5WZI

1534. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 19:20:21 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201241120.5b3c932d@posting.google.com>
Source record: 150271

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:<3c5028a2_1@news1.prserv.net>...
> Jason:
> Here are a couple of points I don't think anyone else mentioned, in addition
> to the height and clear location.
>
> 1. Check each possible location with a portable SW receiver, preferably day
> on 20 M and at night on 40 or 75 M for noise and signals. Pay attention to
> computer and power line noises, as these won't go away. An AM/FM receiver
> isn't going to tell you much. The transmit/receive balance is wrong. Hams
> use low power and receive weak signals, while commercial broadcasting uses
> 100 or more times as much power and insensitive receivers.
>
> 2. Drive around the immediate area with a mobile receiver on 75 or 40 and
> listen for loud power line noises. Again, the likelihood of these getting
> fixed are slim these days, and with a good antenna at your apartment, you
> will hear these from a distance. Preferably, the location would be in an
> area with underground power feeds.
>
Thanks for the shortwave receiver suggestion. Speaking of shortwave
receivers, are there any cheap models you recommend? I'm now thinking
of buying the MFJ 8100K ($70) or 8121 ($40).

Jason Hsu, AG4DG
jason_hsu_802701@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

1535. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 19:35:30 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201241135.3f4005d8@posting.google.com>
Source record: 150273

Ed and Dennis:

You are ABSOLUTELY correct that as a ham, I need to buy a house.

Would you lend me $300,000 for 500 years at an interest rate of 1%
with no money down?

Jason Hsu, AG4DG
jason_hsu_802701@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

1536. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 19:37:02 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C50625E.78C41940@coqui.net>
Source record: 150272

Jason Hsu wrote:
>
> >
> Thanks for the shortwave receiver suggestion. Speaking of shortwave
> receivers, are there any cheap models you recommend? I'm now thinking
> of buying the MFJ 8100K ($70) or 8121 ($40).
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

You can get a nice, used digital radio in that range. I paid $40
postpaid for a Radio Shack DX-375 and its a superb little radio for that
price.
-Bill WX4A

1537. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 19:39:56 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <v7o05ucdjtouvc5t2m38qr2mm2llrfba4g@4ax.com>
Source record: 150274

On 24 Jan 2002 11:20:21 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>Thanks for the shortwave receiver suggestion. Speaking of shortwave
>receivers, are there any cheap models you recommend? I'm now thinking
>of buying the MFJ 8100K ($70) or 8121 ($40).
>
>Jason Hsu, AG4DG

Hi Jason,

This is simply a prejudice, but I would suspect that those models
under $200 are suitable in Europe only where there is a high density
of SW traffic (large signal, low sensitivity receiver). Try finding a
Radio Shack DX-440, or its Sangean label, or similarly spec'd
receiver. Do not count on the whip, but rather use the external
antenna connection of about 20' of wire (tossed across the carpet is
enough care for a casual inspection of HF frequencies; especially for
the BBC, VOA or DW). I would also suggest checking the standard
frequencies for WWV(H) as they are clear channel and spaced throughout
HF to give a simple propagation snapshot.

The DX440 (many years ago) cost $200 and is what I would consider the
low end. You might find one at half that price (as well as its
similarly performing kin) at a swap meet, but that may take some
hunting.

73's
Richard Clark, KB7QHC

1538. PAR OMNI HORZOTAL UHF ANTENNAS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 19:40:55 UTC
From: WILLIAM C FORVIK <n0mnb@email.msn.com>
Message-ID: <ejrS6fdpBHA.1504@cpimsnntpa03>
Source record: 150127
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.scanner

4 SALE USED 1 MONTH TWO PAR 432 ANTENNAS WITH CO-PHASING HARNESS
WORK GREAT BOTH MOBLIE AND FIXED
3DB GAIN SEE IT AT E-BAY
1326292265

SEE PICTURE

1539. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 19:42:25 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201241142.65875c67@posting.google.com>
Source record: 150275

ik7565@erols.com wrote in message news:<3C4F5275.B33C36A9@erols.com>...
> This is the best suggestion yet! Think of all the elmering you could
> do!
>
> Ian
> N8IK
>
> 'Doc wrote:
> >
> > Jason,
> > After you look at all the things the others have suggested,
> > there's one more thing to look for. Find an appartment complex
> > loaded with young, unmarried females, (the license lasts for
> > 10 years and is renewable...).
> > 'Doc

Doc certainly has a point here. There aren't very many
late-20-something women in ham radio.

Jason Hsu, AG4DG
jason_hsu_802701@@@yahoo.com

1540. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 20:17:53 UTC
From: rge11x@netscape.net
Message-ID: <b4e32a30.0201241217.3b25960b@posting.google.com>
Source record: 150277
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

"Richard Corkish" <r.corkish@unsw.edu.au> wrote in message
news:<a2l5rphhg1@tomahawk.unsw.edu.au>...
> I have noticed what seems to me to be a basic discrepancy in the antenna
> literature and would appreciate your comments. Probably it is just my
> misunderstanding.
>
> "Antenna Theory Analysis and Design" by C. Balanis (2nd edition) clearly and
> explicitly states that for a transmitting antenna (at best, with a conjugate
> match of the antenna to the transmitter) "half of the total power supplied
> by the generator is radiated by the antenna during conjugate matching, and
> the other half is dissipated by heat in the generator. (p. 75)". Similarly,
> for a conjugate match between a receive antenna and its load, "half the
> power is delivered to the load and the other half is scattered. (p. 77)".
> This suggests to me that a microwave free-space power transmission system
> (eg. W.C. Brown, IEEE Trans. Microwave Theory and Techniques, MTT-32 (9),
> 1230 (1984)) would lose half the input power at the transmit stage and half
> again at the receive stage, giving upper efficiency limit of 25%. Yet,
> Brown claims measured DC-microwave-transmission-reception-DC efficiencies
> exceeding 50%.

I disagree with this interpretation. The way I look at it, and I will
be happy to hear your opinion on this, is that free space is a
transmission line of wave impedance Zo = 377 ohms to which the
transmit antenna acts as a matching transformer between the
transmission line and the generator. The receiver antenna does the
same for the load.

Of course, this "transmission line" is directional in the sense that
in each specific direction there is a specific TEM mode propagating
and there is a secondary and a line associated with it. So actually we
have not one but an infinity of transmission lines all in parallel and
connected to transformers whose turn ratios are proportional to the
directivity. The higher the antenna gain, the narrower the beam is,
the more this picture represents a single "dominant" transmission
line.

When you have matched the antenna properly, the return loss from the
generator or load end is very high. From this point of view a matched
antenna does not scatter the received wave at all, on the contrary, it
capture everything incident to its effective surface area and delivers
that to the load.

If you think of it this way then you see that half the power has
already been eaten in the source impedance of the transmit antenna's

generator. Free space being the medium of transfer only and not being an internal impedance of any generator, will not absorb any part of the power incident to the receive antenna if that is matched. But bear in mind that matching is directional, that is if it radiates with its source in a perfect match in one direction d1 and not at all in another, say d2, then it will not scatter an incident wave from direction d1 but will scatter one from d2.

You can see this also by the following argument based on a "gedanken" experiment. Take a pair of long and gently sloping waveguide horns with matched probes. Wnen they touch there is a perfect match. Now separate them beyond the Rayleigh distance. There will be a frequency band where despite the separation they will transmit and receive if they were still touching.

1541. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 20:28:46 UTC
From: Ed Cregger <663jlm@vei.net>
Message-ID: <u50rca5293eg97@corp.supernews.com>
Source record: 150278

I know I should just let this go, but then I remember how I felt when I found out how easy it was to buy a home of my own after thinking it took a lot of money. It did not. If you can afford to pay rent, you can afford to buy.

Ed Cregger
nm2k@adoublerl.net

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message news:f7d9a152.0201241135.3f4005d8@posting.google.com...
> Ed and Dennis:
>
> You are ABSOLUTELY correct that as a ham, I need to buy a house.
>
> Would you lend me $300,000 for 500 years at an interest rate of 1%
> with no money down?
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

1542. Re: Directional remote control antenna - Pls help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 20:30:57 UTC
From: Gollywog <_eng@ilos.net>
Message-ID: <5a_38.596$8i2.18936@news2.mts.net>
Source record: 150279

Thanks for the suggestions/help.

I'm not sure I'm following you. I seem to have a different interpretation of what this gain limitation (i.e. Industry Canada's RSS210 Section 6.1.4 Part (3)) means. I have been viewing the whole thing from the perspective of directivity. As I understand it, if you shape, etc an antenna so that it's emissions cover only half the area covered by an omni-directional radiator, then you have created an antenna with a gain of 3bB. The further you reduce the area into which you confine you're emissions, the higher the gain of your antenna. The efficiency of the antenna (at converting transmitter power to RF energy) can go right down the tubes, the antenna itself has an "inherent" gain value determined solely by the way it focuses whatever power it does manage to radiate.

If I understand what you're saying, (and I probably don't), I need to be adjusting efficiency, etc so that at some distance away, in the most favored direction I guess, the signal strength does not exceed what it would if I were using a half wave dipole with the same transmitter power. Problem is RSS-210 specifies lots of specs regarding what the signal levels shall be, at what distance, within what band width, etc. At the moment I think the what they mean is the "inherent" gain figure associated with the type of antenna being used. I'm still wondering if the gain of a small loop antenna isn't greater than that of a half wave dipole because it confines more of the energy it emits into a smaller area around it. There is no doubt however that it is much less efficient at producing RF energy from a given amount of transmitter power.

I guess what I really want to know is:

If I walk into the Industry Canada lab (or FCC lab since I'm pretty sure the regulations are identical) and say I want the OK to produce and distribute this thing as license free RF device, would they say :

a) No. It has a small-loop (.08 wavelength) antenna and regulations say you must use an antenna with a gain less than a half wave dipole.

b) No. By surrounding the antenna with all that shielding you created something other than a small-loop radiator. That thing has a directivity (i.e. a gain) much greater than a dipole and it's illegal.

or
c) We'll need to take field strength and spectrum analyzer measurements first.

Again, suggestions appreciated,

Mike Whitfield

********* \\\\lll//// *********
********** \ -- -- / **********
********** (\@ @/) **********
*** --oOOOo---(_)---oOOOo-- ***

N.B.
I've posted as Gollywog since I've notice there's a Mike W. with several
posts in rec.radio.amateur.homebrew

1543. Re: Estimating ground plane efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 20:52:47 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201241252.51d6db27@posting.google.com>
Source record: 150280

zygo@azstarnet.com (Jim Mandaville) wrote in message
news:<zygo-2401020859040001@10.0.0.2>...
> I'm trying to estimate as closely as possible the efficiency (pwr radiated
> over pwr delivered by feedline)
> of my 14 MHz ground plane. This antenna has 9 "drooping" radials (c. 40
> deg. below the horizontal) to raise its
> impedance to 50 ohms, and the SWR is 1.0:1 The base of the vertical
> radiator is one quarter wave above ground
> (which is dry desert stuff). I'm just guessing perhaps 90 percent, but
> can anyone with experience or references
> in this area help out?
>
> 73, Jim KF7A, Tucson, AZ

It's going to be fairly high. With 9 radials at a 1/4 wl up, you are
about equal to having a ground mount with 120 radials. I had a 40m gp
at a 1/4 wl up with 4 radials. On that one , I came to the conclusion
it was about equal to a ground mount with 60 radials. So you should be
doing very well. As far as the exact number , it's kind of hard to
guess on this end. But it should be in the 90's % range. MK

1544. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 20:56:09 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3C5074E9.3060808@mwci.net>
Source record: 150281
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

robert egri wrote:

>
>
>
> I disagree with this interpretation. The way I look at it, and I will
> be happy to hear your opinion on this, is that free space is a
> transmission line of wave impedance Zo = 377 ohms to which the
> transmit antenna acts as a matching transformer between the
> transmission line and the generator. The receiver antenna does the
> same for the load.

My receive antenna, while it is the act of
receiving, is also a transmitting antenna.

My received signal sets up (excites) a wave motion
in the wire. This wave motion is free to radiate
exactly the same as if it were created by my
transmitter.

In equilibrium, the previous statement is true.
The received signal power that is delivered to my
receiver input terminals is equal to the
received signal power that is re-radiated.

An equivalent statement is that the receive
antenna is a kind of "reflector" for the incoming
wave. If a receive dipole is shorted at the center
the reflection is 100 percent. If the right
resistor value is there the reflection is 50 percent.

Bill W0IYH

1545. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 21:46:08 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <Ag%38.1591$Qt1.151569@news1.east.cox.net>
Source record: 150282

I've had a few broadcasters tell me the reason the FCC 1st Telephone requirements were lifted was to allow more minorities the opportunity to become employed in broadcasting. Can't say it is true or not, but it purportedly came from a few anonymous FCC sources.

Pete

"Dave" <wd0hwx@nospamplease.swbell.net> wrote in message news:xJf38.342$9o2.203698230@newssvr30.news.prodigy.com...
> I don't know if this was meant as a joke or not. In case
> it wasn't...
>
> Do you think minorities are too dumb to pass the standard test like
> everyone else? I don't! How demeaning to blacks, etc... to suggest
> that they need an easier test. If I were black, I'd be offended at the
> idea.
>
> Dr. King suggested that men be judged on the content of their
> character, not on the color of their skin. I doubt that he would
> have agreed with this ridiculous suggestion.
>
> Dave
>
>
> "KB9TMP" <NoMoreSpam4Me@antisocial.com> wrote in message
> My ideas of remedies for past
> > > discrimination include DROPPING THE CODE REQUIREMENT FOR MINORITY
> APPLICANTS
> > > and possibly WAIVING SOME SECTIONS OF THE EXAMS.
>
>

1546. Re: Estimating ground plane efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 22:04:34 UTC
From: aa1ll@email.com
Message-ID: <e85be400.0201241404.45de517c@posting.google.com>
Source record: 150283

Hi Guys, 2 things to reduce the guessing:

1. Measure the feedline loss by putting a GOOD short circuit on the
feedline
where it connects to the antenna and measure the return loss at the
other end
in the shack. It should be about a dB or two as Reg said but you
didn't specify any length or type; it could be lossy.

2. Determine the validity of the low loss assumption for the radials
by removing them one by one and measuring the impedance of the
antenna. If you ideed have an effective zero loss ground plane (which
I doubt) pruning one or two radials shouldn't change the antenna
resistance.

This is really a lot of trouble to go to to find out something that
you
probably don't want to know in the first place. If it works, don't
fix
it. So, _does_ it work? Or is that why you're asking!! Keep in
touch,

73, Paul, AA1LL
Mason, NH
http://www.qsl.net/aa1ll

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<a2pfnb$12m42f$1@ID-124126.news.dfncis.de>...
> Jim, SWR on the feedline has nothing to do with radiating efficiency of the
> antenna.
>
> Assuming no loading coils and the aluminium antenna conductors have
> diameters large enough to be self-supporting, loss in the antenna itself is
> absolutely negligible. (thin wire antenna loss is higher, crudely 3 %)
>
> Above 'dry desert stuff', at that antenna height above ground, considering
> the large number of radials, and assuming there are no other structures in
> the vicinity, power loss in the environment is negligible. But to give it a
> number, let's say 2 percent.
>
> So the radiating efficiency of the antenna + ground is about 98 percent.
>
> Considering the system as a whole, depending on type and length of feedline,
> most of the loss almost certainly occurs in the feedline. A line
> attenuation of 1 dB corresponds to a 20 % power loss.
> --

> **************************
> Regards, Reg G4FGQ
> Free Radio Modelling Programs
> Http://www.g4fgq.com
> **************************
>
> Jim Mandaville <zygo@azstarnet.com> wrote in message
> news:zygo-2401020859040001@10.0.0.2...
> > I'm trying to estimate as closely as possible the efficiency (pwr radiated
> > over pwr delivered by feedline)
> > of my 14 MHz ground plane. This antenna has 9 "drooping" radials (c. 40
> > deg. below the horizontal) to raise its
> > impedance to 50 ohms, and the SWR is 1.0:1 The base of the vertical
> > radiator is one quarter wave above ground
> > (which is dry desert stuff). I'm just guessing perhaps 90 percent, but
> > can anyone with experience or references
> > in this area help out?
> >
> > 73, Jim KF7A, Tucson, AZ

1547. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 22:25:14 UTC
From: richardharrison@webtv.net
Message-ID: <24697-3C5089CA-218@storefull-118.iap.bryant.webtv.net>
Source record: 150288

Bill, W0IYH wrote:
"The received signal power that is delivered to my receiver input terminals is equal to the signal power that is re-radiated."

Exactly. Bill already said his system was in equilibrium. It is matched.

There is no infinity of transamission lines or previously attenuated signal out there as speculated by another contributor. What you see is what you get.

Best regards, Richard Harrison, KB5WZI

1548. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 22:28:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C508A89.15B96A49@eznec.com>
Source record: 150284
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

The 377 (120*pi) ohm impedance of free space is a pure resistance. It is not a resistor. It's the ratio of the E field (volts/meter) to the H field (amps/meter) of a plane wave traveling in it, so it has the dimension of ohms. Similarly, the characteristic impedance of a lossless transmission line is a pure resistance, but isn't a resistor. Another example of a resistance that's not a resistor is the transimpedance of an amplifier, the output voltage divided by the input current.

No part of a traveling wave is converted to heat by moving through free space or a lossless transmission line, because it isn't current passing though a resistance or resistor.

Roy Lewallen, W7EL

John O'Flaherty wrote:
> Is any part of that 377 ohm impedance actual resistance, so that there
> is dissipation or conversion to heat at the interface between the
> antenna and space?
> As to what is re-radiated, is that at the same frequency as the
> original wave, and what would prevent putting up another antenna to
> capture what was re-radiated and combining it with the original to get
> more than 50%?
>
> --
> john

1549. need suggestions for base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 22:28:44 UTC
From: George Sambataro <wxperson@pcwp.com>
Message-ID: <pS%38.57423$Y17.4232141@e3500-atl2.usenetserver.com>
Source record: 150285

HI.

Although I have done HF for quite a while this 2m stuff is new to me.

I recently purchased a ICOM T2H handheld and I would like to hook up a 2m antenna at home.

My questions are these.

1. Can I use an antenna up in the attic for VHF?

2. What kind of lead should I use to connect the antenna to the radio. With outputing only 6 watts, I can't afford to lose much.

I figure if I "get into this" 2m stuff more I can look at a more suitable base station but for now does this make sense?

Thanks for any help.

George

1550. Re: Estimating ground plane efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 22:41:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C508DAB.B53C253A@eznec.com>
Source record: 150286

EZNEC will give you a very good estimate, and the free demo program would be adequate. You can get it at http://eznec.com.

For the efficiency of the antenna itself, compare the feedpoint resistance of the model antenna over ground to the feedpoint resistance of the antenna modeled in free space. If what you want to know is what fraction of the power makes it to distant points after being subject to ground reflection, look at the "Average Gain" value, which is the total power arriving at distant points divided by the power applied to the antenna. If you make changes in the antenna that affect efficiency (such as raising or lowering it, or changing the number of radials), these changes in efficiency will cause a corresponding change in the "Average Gain".

Another way to get the efficiency of the antenna itself would be to look at the "Average Gain" with the antenna high above the ground, where the efficiency should be near 100%, and compare this to the "Average Gain" at its actual height. The difference represents ground loss near the antenna.

Roy Lewallen, W7EL

Jim Mandaville wrote:
>
> I'm trying to estimate as closely as possible the efficiency (pwr radiated
> over pwr delivered by feedline)
> of my 14 MHz ground plane. This antenna has 9 "drooping" radials (c. 40
> deg. below the horizontal) to raise its
> impedance to 50 ohms, and the SWR is 1.0:1 The base of the vertical
> radiator is one quarter wave above ground
> (which is dry desert stuff). I'm just guessing perhaps 90 percent, but
> can anyone with experience or references
> in this area help out?
>
> 73, Jim KF7A, Tucson, AZ

1551. Re: need suggestions for base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 22:45:34 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C508E8E.C66C2E41@dialpoint.net>
Source record: 150287

Unless the roof is metal you can put the antenna in it if you want.
Sometimes there is lots of metal objucts in the attic and that might
need to be looked at but if no big objects there you should be allright.

If the run is not to long (under 50 feet) you might want to use the
rg-8X type cable. If longer then use the larger rg-8 type cable. You
probably want to use a few feet of smaller cabel from the HT to the
large coax to keep from breaking the connector on the HT.

For an antenna in the attic, you might just want to try a simple ground
plane. Strip off about 19 to 20 inches from the end of the coax so only
the center conductor is left, then where the braid is use 3 or 4 stiff
wires connected to the braid about 21 inches long and slope them down
about a 45 degree angle.

For working repeaters it does not usually take very much of a station.

George Sambataro wrote:
>
> HI.
>
> Although I have done HF for quite a while this 2m stuff is new to me.
>
> I recently purchased a ICOM T2H handheld and I would like to hook up a 2m
> antenna at home.
>
> My questions are these.
>
> 1. Can I use an antenna up in the attic for VHF?
>
> 2. What kind of lead should I use to connect the antenna to the radio.
> With outputing only 6 watts, I can't afford to lose much.
>
> I figure if I "get into this" 2m stuff more I can look at a more suitable
> base station but for now does this make sense?
>
> Thanks for any help.
>
> George

1552. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 22:54:01 UTC
From: richardharrison@webtv.net
Message-ID: <24698-3C509089-91@storefull-118.iap.bryant.webtv.net>
Source record: 150289

Robert Egri wrote:
"---free space is a transmission line of wave impedance Zo = 377 ohms---"

Consider that a transmission line has an attenuation of a certain number of db per mile regardless of the distance from the sender.

Out of a sender`s near field, the attenuation due to radiated signal spread in free space grows by 6 db every time the distance from the sender doubles. At two miles the attenuation of a radiated signal has grown by 6 db from the attenuation of that signal at one mile`s distance. Fortunately, at 200 miles distance, the attenuation of a radiated signal has grown by only 6 db from the attenuation of that signal at 100 mile`s distance from the sender.

The farther we get from the sender in space, the more miles per db loss we get. Not so with a transmission line.

Best regards, Richard Harrison, KB5WZI

1553. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-24 23:51:09 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a2q6l80vlk@enews4.newsguy.com>
Source record: 150290

if it is so easy why hasn't someone done it and answered the questions on here with specific descriptions of the test arrangement and results?

"Francesco Messineo" <frank@ares.ccii.unipi.it> wrote in message news:a2p4cejme1@serra.unipi.it...
> Michele IZ2EAS <iz2eas@libero.it> wrote:
> > Well done David,
>
> > this is the best approach to this problem, to try and have a clearer vision
> > of the potentials of this antenna. This is a GREAT opportunity that Stefano
> > should NOT miss, unless he definitely fears the results of these tests....
>
> for what is worth, I'm sure there are many hams even closer to Stefano who
> would like to test a "well made EH", even I could do it,
> I'm a telecommunication engineer and of course I can compare the
> antenna with the presence of a lot of other hams and technical qualified
> peoples.
>
> 73
> Francesco IZ5DWF

1554. Re: Vol 2? Williams" Antenna Theory and Design'"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 00:28:06 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a2q8qmkpd1@slb6.atl.mindspring.net>
Source record: 150291

Frac:

What's the problem with UWO? I happen to like UWO!

Why not just drive on up to UWO, in London on the Thames, Ontario, and make a copy of the pages you want.

It's a short hop by car from MA to ON. Neither US nor CDN customs will object to you taking copies across the border.

Such is "fair use" if it is meant for personal education purposes!

Of course if it was meant for purposes of industrial plagiarism, why... that would be a different matter, "don't ask, don't tell" should work.

--Peter K1PO

"Fractenna" <fractenna@aol.com> wrote in message news:20020124072750.25916.00000201@mb-fx.aol.com...
> >Try Google.
> >
> >--
> >Bill Nelson
>
> Thanks Bill;
>
> I, too, used google a while back(nothing then) , and tried again at your
> suggestion.
>
> It's great that there now is evidence that others have heard (and referenced)
> the second volume; so let me re-word my request:
>
> Anyone know how I can obtain a copy to borrow or buy?
>
> I do not have access to the stacks at the University of Western Ontario for
> example.
>
> E-mail response should be fine.
>
> 73,
> Chip N1IR

1555. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 00:44:07 UTC
From: Richard Corkish <r.corkish@unsw.edu.au>
Message-ID: <a2q9lv$r47$1@tomahawk.unsw.edu.au>
Source record: 150292
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

Thanks. Kraus and Balanis (and others) agree that "for conditions of maximum power transfer and zero antenna losses the scattering ratio is unity". In other words, as much power is scattered as is delivered to the load. However, it does not follow that only half the power entering the aperture of an aperture antenna can be delivered to the load. Balanis (2nd edition, p. 86) states that the aperture efficiency can be up to 100% but "even though the aperture efficiency is greater than 50%, for a lossless antenna under conjugate matching only half of the captured power is delivered to the load and the other half is scattered. Hence, the full captured power must be extracted from an area twice as large as the physical aperture. Hence, an aperture antenna must "shade" an area twice its own size. So if I want an array of collecting apertures (to collect solar energy, say) would they need to be spaced apart, covering only half the ground, to collect maximum energy (which is half the energy falling on the total ground area, since half of the collected energy from each aperture is reradiated).

Note that Samuel Silver (1949, p. 43) and Ramo, Whinnery and van Duzer (1994, p. 669) reject this idea of an equal amount of power being reradiated.

Roy's example well demonstrates the problem of using the Thevenin equivalent circuit here. The problem is that as we change the load or generator impedances, the power being supplied to the circuit varies. But that is not what we want to model when considering a receive antenna in a field with constant power flux. Varying the load away from the matched condition, as in Roy's example, can improve the fraction of the generator power delivered to the load but only at the expense of reducing the amount of power delivered to the load (since the power produced by the generator reduces as the total impedance increases and current decreases).

Richard Corkish

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C4FFF0A.6FBDDC84@eznec.com...
> Even with a Thevenin or Norton source, it's possible to get any
> efficiency you want (as long as it's less than 100%). For example, let's
> say you have a 100 volt voltage source in series with a 10 ohm source
> resistance. If you connect this to a 10 ohm load, 250 watts is
> dissipated in each resistor, for an efficiency of 50%. But if you use a
> load resistance of 90 ohms instead, you'll have 10 watts in the source
> resistance and 90 in the load resistance, for an efficiency of 90%. The
> efficiency keeps improving as you increase the load resistance (or
> decrease the source resistance). As someone mentioned earlier, power

> companies depend on this in order to supply power at high efficiency.
>
> How about receiving antennas? The same principle holds. Here's what
> Kraus says, in _Antennas_, Second Edition, p. 34, or in the First
> Edition, p. 46:
>
> "For conditions of maximum power transfer and zero antenna losses, the
> scattering ratio is unity. If the terminal resistance is increased, both
> the scattering aperture and the effective aperture decrease, but the
> scattering aperture decreases more rapidly so that the scattering ratio
> becomes smaller. By increasing the terminal resistance, the ratio of the
> scattered power to power in the load can be made as small as we please,
> although by so doing the power in the load is also reduced."
>
> The scattering ratio os the ratio of scattering aperture to the
> effective aperture, or the ratio of power scattered from an incident
> wave to the power delivered to a load at the antenna terminals.
>
> I highly recommend a careful reading of Chapter 3 of the First Edition
> or Chapter 2 of the Second Edition of _Antennas_ for anyone interested
> in receiving antenna concepts.
>
> Roy Lewallen, W7EL

1556. MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 01:18:56 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <2o248.869$0Q5.308653@paloalto-snr2.gtei.net>
Source record: 150293

OK, here's the deal...

I'm wanting to construct a mobile antenna for 7.2 mhz with an efficiency of 70% or better (relative to a reference dipole). I need a PHYSICAL overall length of about 11 feet - to be composed of a 5 foot lower section 3/8" fiber-glass shaft, a loading coil, and an upper section of 6 feet or so of the same material as the lower section, or part shaft, part whip... Measurements are SOMEWHAT flexible, but overall length is not, if I am to keep it outta the trees and overhead wires.

NOW, available ï¿½puter programs tell me I need an ELECTRICAL lower length of 6 feet, a 3 inch diameter coil of 12 ga. wire, and a top section with an ELECTRICAL length of 8 feet to reach my goal - and by the way, I am running a 6-700 watt PEP amp in my mobile as well...

SOooo, I am in serious need of a pointer, or info on helical winding as commonly used in antennas of this type, not necessarily as the loading coil itself, but as a tool to electrically alter the electrical length of other system components - is it practical, can I expect to wind enough wire or similar material on the upper and lower sections of my antenna to "fool" the system into thinking and functioning as tho' it is a physically longer system?

Is it practical or possible to merely employ a CB or ham band monoband whip, such as 17 meters in a system like mine to electrically simulate a longer length? It would be great if a standard existing monoband antenna could serve as both the top element of a 40 meter setup, and also be used on it's basic band as well! (Not in the same physical configuration, of course...)

Does helical winding, such as used on Hamstick and similar antennas provide actual INDUCTIVE loading, longer ELECTRICAL length, or BOTH? And at what point do I reach tradeoffs that start defeating my goals? Is there ANY reliable, accepted source of helical RF facts and guidelines I can access via the internet?

I'm really looking for actual, proven feedback or info here, not off-hand guesses or wild speculation - surely there is SOME source of program or test data to provide a basis for intelligent choice...

Any help?

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining

about "Too much government"

1557. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 01:53:22 UTC
From: rge11x@netscape.net
Message-ID: <b4e32a30.0201241753.c41e8c8@posting.google.com>
Source record: 150294
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

"William E. Sabin" <sabinw@mwci.net> wrote in message news:<3C5074E9.3060808@mwci.net>...
> robert egri wrote:
>
> >
[...]
> My receive antenna, while it is the act of
> receiving, is also a transmitting antenna.

Only if it is mismatched but it can be matched so it does not
reradiate anything.

>
> My received signal sets up (excites) a wave motion
> in the wire. This wave motion is free to radiate
> exactly the same as if it were created by my
> transmitter.

> In equilibrium, the previous statement is true.
> The received signal power that is delivered to my
> receiver input terminals is equal to the
> received signal power that is re-radiated.

If you are talking about a resonating system in thermal equilibrium
then yes this is how harmonic oscillators behave. But an incident
coherent radiation, say a plane wave, is not thermal radiation and
does not have to be in equilibrium with anything: the reradiation does
not have to be the same going in the opposite direction. As an
analogy, recall Huygens's principle, that is that every point of a
wavefront acts as a source of secondary wave but these sources
"radiate miraculously" in only the direction of the propagation.
>
> An equivalent statement is that the receive
> antenna is a kind of "reflector" for the incoming
> wave. If a receive dipole is shorted at the center
> the reflection is 100 percent. If the right
> resistor value is there the reflection is 50 percent.

but if the resistor is even "righter" the reflection is zero (at least
at one frequency)!

>
> Bill W0IYH

1558. Re: Estimating ground plane efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 02:14:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2qfac$12s9sd$1@ID-124126.news.dfncis.de>
Source record: 150295

Roy, I am not happy about including in an antenna radiating efficiency budget, loss/gain involved in upward reflections from the ground, in the near vicinity of an antenna.

That particular mode of loss/gain is OBVIOUSLY just as much a part of the radio path loss as is the loss in passage through the ionosphere plus distant losses involved in more distant reflections from the ground which occur in multi-hop ionospheric radio paths.

I know EZNEC is programmed to include the moderate loss/gain due to upward reflections from the local ground when predicting overall Tx to Rx field strength on very long paths. It is, of course, a valuable facility provide users are aware of the limitations.

But the facility should NOT be involved in the radiating efficiency of the antenna itself. It under-estimates antenna efficiency because it ignores the considerable very low angle ground wave radiation which propagates to distances far beyond the antenna near field. It is the vital principle on which LF and MF broadcasters depend.

Errors in predicting antenna efficiency may not be large because most power is radiated at higher angles. But when predicting ground wave propagation EZNEC invariably predicts zero-angle radiation, the groundwave, to be zero, which is obviously incorrect. A considerable error exists up to elevation angles of 5 or 10 degrees.

Provided users are aware that EZNEC predicts field strength only beyond the one-hop skip distance, usually long after the ground wave has fizzled out, all is well.

But I suggest most users would prefer an antenna modelling program which predicts the TRUE radiation pattern in the vertical plane, just outside the near field, and allow the user himself, if he so desires, to deal with path losses in the ground wave, in the ionosphere, in multiple-hop ground reflections and in the ground reflection loss/gains at the receiving antenna.

Ideally, the field strength at 1 km, in dB relative to a radiated power of 1 kW, at any elevation angle, is what is wanted to remove all confusion.

It makes me cringe to see EZNEC-produced radiation patterns of vertical antennas falling back to zero field strength at zero elevation angle. (Believe me I am not decrying EZNEC's usefulness. I have no wish to incite riots. ;o))

It may be that later versions of NEC programs allow correct interpretation of radiation patterns. In this day and age such programs must already

exist. I'm sure the Germans, Russians, Chinese, Indians, Japanese and others
have had them for years.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

Roy Lewallen <w7el@eznec.com> wrote in message
news:3C508DAB.B53C253A@eznec.com...
> EZNEC will give you a very good estimate, and the free demo program
> would be adequate. You can get it at http://eznec.com.
>
> For the efficiency of the antenna itself, compare the feedpoint
> resistance of the model antenna over ground to the feedpoint resistance
> of the antenna modeled in free space. If what you want to know is what
> fraction of the power makes it to distant points after being subject to
> ground reflection, look at the "Average Gain" value, which is the total
> power arriving at distant points divided by the power applied to the
> antenna. If you make changes in the antenna that affect efficiency (such
> as raising or lowering it, or changing the number of radials), these
> changes in efficiency will cause a corresponding change in the "Average
> Gain".
>
> Another way to get the efficiency of the antenna itself would be to look
> at the "Average Gain" with the antenna high above the ground, where the
> efficiency should be near 100%, and compare this to the "Average Gain"
> at its actual height. The difference represents ground loss near the
> antenna.
>
> Roy Lewallen, W7EL
>
> Jim Mandaville wrote:
> >
> > I'm trying to estimate as closely as possible the efficiency (pwr
radiated
> > over pwr delivered by feedline)
> > of my 14 MHz ground plane. This antenna has 9 "drooping" radials (c. 40
> > deg. below the horizontal) to raise its
> > impedance to 50 ohms, and the SWR is 1.0:1 The base of the vertical
> > radiator is one quarter wave above ground
> > (which is dry desert stuff). I'm just guessing perhaps 90 percent, but
> > can anyone with experience or references
> > in this area help out?
> >
> > 73, Jim KF7A, Tucson, AZ

1559. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 03:19:16 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201241919.4eb1ccfa@posting.google.com>
Source record: 150296

Richard Clark <kb7qhc@attbi.com> wrote in message
news:<v7o05ucdjtouvc5t2m38qr2mm2llrfba4g@4ax.com>...
>
> Hi Jason,
>
> This is simply a prejudice, but I would suspect that those models
> under $200 are suitable in Europe only where there is a high density
> of SW traffic (large signal, low sensitivity receiver). Try finding a
> Radio Shack DX-440, or its Sangean label, or similarly spec'd
> receiver. Do not count on the whip, but rather use the external
> antenna connection of about 20' of wire (tossed across the carpet is
> enough care for a casual inspection of HF frequencies; especially for
> the BBC, VOA or DW). I would also suggest checking the standard
> frequencies for WWV(H) as they are clear channel and spaced throughout
> HF to give a simple propagation snapshot.
>
> The DX440 (many years ago) cost $200 and is what I would consider the
> low end. You might find one at half that price (as well as its
> similarly performing kin) at a swap meet, but that may take some
> hunting.
>
I don't consider myself a hardcare shortwave listener - in fact, I
have never owned a shortwave radio. My reasons for buying one are for
casual shortwave listening and for hunting noise sources. A digital
frequency display would be an added bonus, as it would allow me to
listen to myself (and thus correct any transmit audio problems I may
have). I don't want to pay a lot of money for a shortwave radio, as I
already have a transceiver for HF, and the Icom 706 MKIIG I intend to
replace it with also has shortwave listening capabilities.

I'll certainly consider a used Radio Shack shortwave receiver as well
as the MFJ receivers. Since the MFJ radios don't have the digital
display, I should probably lean towards the used Radio Shack models.

Jason Hsu, AG4DG
jason_hsu_802701@@@@@@@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

1560. NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 03:24:37 UTC
From: k3vr@hotmail.com
Message-ID: <4bfc7bb.0201241924.4fdd5373@posting.google.com>
Source record: 150297
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

Get this: I send a package to Colorado via UPS. I label the package with the printed Label ups.com gives you when you have an account with them. I drop off the package at an "Authorized UPS Shipping Center" because it is insured for $3,400 and that is what UPS requires. I get a receipt from the shipping center stating that the item has been properly packed and labeled. OK so far... Four days later a guy in New Jersey at a communications business calls me. "We have your package and we don't know why it came here, but we opened it and read your letter inside. Looks like it is supposed to go to Colorado, what should we do with it?" I tell the guy thanks for calling me and I will call UPS and get back to him. I call 1-800-pickups. The first "support" person hangs up on me. The second says I "should take it up with the shipping center" (all they did was hold it for the truck pickup, the UPS driver in reality should have scanned it upon pickup). I ask to speak to a supervisor. The supervisor is cooperative and I tell her I want the thing overnighted from New Jersey to Colorado since it is "Guaranteed" to be there tomorrow by UPS. She says, "OK, I will call NJ UPS and set that up, they will call you in one hour or less." I thank her VERY much and ask for her name, title, and location. She complies. I am a happy camper. One hour passes, no call, two hours pass, no call. I call UPS back and ask to speak to this individual and... No such individual exists!! By this time it is late so I call and get another person in the morning who tells me to "take it up with the shipper..." I ask to speak to HER Supervisor. Her Supervisor says she will investigate and get back to me.... 7 hours go by. I call her and ask for a status report. Luckily, "she exists." Her answer? "Sir, since the package arrived in NJ and it was signed for; it is considered a completed delivery." I ask, incredulous... "What about my package?" "Sir," she says, "You need to contact the individual in NJ who has your package and ask him to forward it to Colorado for you. Since it was never scanned into our system there will be no charge." UPS at no time took responsibility for this transaction, despite my signed receipt. At no time did they offer a viable solution to a problem they created. At one time I received FALSE information from a UPS employee just to get me off the phone. Hence; I WILL NEVER DEAL WITH UPS AGAIN, and I would urge all persons to carefully consider all other alternatives before trusting anything of value to UPS. Only through the kindness and honesty of an individual in NJ was I able to locate and send my package to its proper destination. Rest assured, when it gets to Colorado, it will not have passed through UPS hands.

1561. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 03:30:10 UTC
From: richardharrison@webtv.net
Message-ID: <18377-3C50D142-1@storefull-115.iap.bryant.webtv.net>
Source record: 150299

Richard Corkish wrote:
"Kraus and Balanis (and others) agree that "for conditions of maximum power transfer and zero antenna losses the scattering ratio is unity." In other words, as much power is scattered as is delivered to the load."

In yet other words, for maximum power transfer into a receiver under ideal conditions, as much power is re-radiated by an antenna as is absorbed in the receiver`s resistance.

Roy gave us an example of a 100-volt source in series with its internal resistance of 10 ohms. Maximum power transfer delivered 250 watts into a matching 10-ohm load. This gives an efficiency of 50%.

The same generator delivered 90 watts into a 90-ohm load for an efficiency of 90%.

No surprises. The 10-ohm internal resistance could have been antenna radiation resistance, and the 10-ohm and 90-ohm loads could have been receiver resistances.

The receiver designer usually wants all the signal he can get from an antenna, and he gets it from maximum power transfer. High efficiency does not give him the most signal.

Corkish may be interested in wireless power transmission. If so, antennas on the generator and receiver need to collimate the radiation so tightly that the receiving antenna captures all the energy in the column and none spills over the edge. A similar antenna on the sending end would capture all the re-radiated energy from the receiver. Thus, no energy escapes in space.

Corkish may be interested in capturing an r-f spectrum band of energy from the sun falling on a descrete area. In this case, the area neads to be shaded with a parabola large enough to confine the reception beamwidth to a disk exactly covering the sun`s disk. No larger and no smaller, to get the maximum energy from the sun at these frequencies on this area. 1/2 the received energy will be returned to the sun, but the best solution to more received solar power in this case is probably a second similar dish over a second plot of earth.

A solar-electric panel doesn`t necessarily reflect half its received light energy (insolation?) towards the sun or elsewhere because it converts the sun`s rays to electricity which isn`t reflected.

Your "Radar Range" converts microwaves to heat which isn`t instantly re-radiated. Change of the energy`s form is a way to trap energy for a while, but does not stop an excited antenna from re-radiating at least

1/2 of the energy it receives.

Best regards, Richard Harrison, KB5WZI

1562. Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 03:33:03 UTC
From: John Reed <jreed@NOSPAM.thor.atl.ga.us>
Message-ID: <u51kfht28dm935@corp.supernews.com>
Source record: 150298

Here's a fun one:

My friend has a Ford Explorer. On the left rear, just near the "gas cap" he's got a ball mount. The ball mount is mounted thru the hull of the vehicle. He has 50 ohm coax coming off the ball mount to his radio. The cable is good. The connections are good - no shorts. There is good ground available.

Now here's the catch:

He's tried several antennas - a "whippet" 10/11m base loaded thing, a 10m "hamstick", a 10m quarterwave whip, and a 6m "hamstick'.

I used an MFJ meter and a different mount - a mag mount temporarily stuck to the middle of the hood and tuned all the antennas to minimum SWR.

When the whippet and the hamsticks are put on the ball mount, we can get no better than 3:1 SWR on the bands they are rated for. The 8 foot whip gets us down to around 1.6:1 on
10m.

Any reason why we're getting these goofy SWR readings? Again, if I take these antennas and put them on my vehicle, or on the magmount on his truck, they tune fine - but on the ball mount, the SWR goes to pot.

There was an on-glass antenna (2m/440) on the window right by the ball mount - but we've disconnected the antenna and the feedline, leaving just the on-glass thing.

So - why would an antenna that's tuned as good as it can get and performs well on other mounts display poor SWR when placed on the ballmount?

Anything we should be looking for? Could the on-glass thing be screwing up the antenna? We even took off all roof-mount antennas, too, just to make sure they weren't doing something odd to the equation.

Thanks in advance. Replies here to the newsgroup, or direct to me in email (remove the NOSPAM from my email address) are fine.

73 de John, n4tii

1563. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 03:47:06 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C50D528.338529AC@icok.net>
Source record: 150300

And to sum it all up very simply, "Put up or shut up!". So
far, it seems like "shut up"...
'Doc

1564. Re: Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 03:52:09 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <ED448.20707$KC1.3425397@news20.bellglobal.com>
Source record: 150302

"John Reed" asked:
> My friend has a Ford Explorer. On the left rear,
> just near the "gas cap" he's got a ball mount...
> ...no better than 3:1 SWR...

Next time the truck tips over (for whatever reason - some blame the tires), try to get it to come to rest on the right hand side (so that the left hand side of the truck, with the antenna ball mount, is facing skyward). Then clamber out, dust yourself off, and adjust the ball mount so that the antenna points upward - directly away from the ground plane, I mean, directly away from the truck's left hand side. Then retest your assorted whips. Good luck.

1565. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 03:55:22 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C50D717.4B42EA49@icok.net>
Source record: 150304

Gary,
You said, "Does helical winding, such as used on Hamstick
and similar antennas provide actual INDUCTIVE loading, longer
ELECTRICAL length, or BOTH?". They are basically the same thing,
so the answer is yes. I can understand wanting to build your
own antenna, but there are enough commercially made mobile
antennas around that would fill your requirements, that it's
sort of like re-inventing the wheel. Using 'standard' masts,
coils, and whips, you should be able to put together a 40 meter
mobile antenna very easily.
When you say you want 70% efficiency out of a mobile antenna,
I'm afraid you dreaming...
'Doc

1566. Re: Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 03:57:15 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C50D79B.235BA30A@dialpoint.net>
Source record: 150303

How far and how close is the antenna to the side of the Explorer. I am
not faniliar with that vehical and where the gas cap is located. If the
antenna is close to the metal then that could be the problem.

John Reed wrote:
>
> Here's a fun one:
>
> My friend has a Ford Explorer. On the left rear, just near the "gas cap"
> he's got a ball mount. The ball mount is mounted thru the hull of the
> vehicle. He has 50 ohm coax coming off the ball mount to his radio. The
> cable is good. The connections are good - no shorts. There is good ground
> available.
>
> Now here's the catch:
>
> He's tried several antennas - a "whippet" 10/11m base loaded thing, a 10m
> "hamstick", a 10m quarterwave whip, and a 6m "hamstick'.
>
> I used an MFJ meter and a different mount - a mag mount temporarily stuck to
> the middle of the hood and tuned all the antennas to minimum SWR.
>
> When the whippet and the hamsticks are put on the ball mount, we can get no
> better than 3:1 SWR on the bands they are rated for. The 8 foot whip gets
> us down to around 1.6:1 on
> 10m.
>
> Any reason why we're getting these goofy SWR readings? Again, if I take
> these antennas and put them on my vehicle, or on the magmount on his truck,
> they tune fine - but on the ball mount, the SWR goes to pot.
>
>

1567. Re: Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 03:58:28 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C50D7D0.60065335@icok.net>
Source record: 150305

John,
Your readings aren't 'goofy', they are normal for antennas
mounted in different locations/environments. Use your MFJ
meter and tune the antenna ~on~ the ball mount.
'Doc

1568. Re: Estimating ground plane efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:10:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C50DA9A.C59F3894@eznec.com>
Source record: 150306

Reg, that memory problem is really getting noticeable. You'd do yourself a favor by mentioning it to your physician. Hopefully, it's treatable.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> . . .
> It makes me cringe to see EZNEC-produced radiation patterns of vertical
> antennas falling back to zero field strength at zero elevation angle.
> (Believe me I am not decrying EZNEC's usefulness. I have no wish to incite
> riots. ;o))
> . . .

1569. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:12:45 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C50DB3D.18C3CC78@coqui.net>
Source record: 150307

Jason Hsu wrote:
>
> I'll certainly consider a used Radio Shack shortwave receiver as well
> as the MFJ receivers. Since the MFJ radios don't have the digital
> display, I should probably lean towards the used Radio Shack models.
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@@@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

Here's one
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1326125547
They seem to top out at around $50-60 on ebay.
I've got SW radios scattered from one end of the house to the other and
this is a hard model to beat for the price. It lacks SSB and an alarm
clock. I bought mine because I was looking for a replacement for my
throwaway cheapo 19.99 chinese model analog 'yard' radio which crapped
out. A replacement for it (Coby) would have still cost $20 and is a
really crappy radio.
This DX-375 is the cat's meow in the price range. I have a 5kw AM-BC
station about 1/4mi away that drives many ss radios nuts...not this
one. And even tho its single conversion, you have to struggle to find
images on it. Great as a piece of test gear for calibrating the sig
gen, checking HF osc circuits, etc. too!
-Bill

1570. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:12:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C50DB49.830F0668@eznec.com>
Source record: 150308
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

I've been using UPS air services for around 10 years now. Everything I've ever sent has been delivered to the intended recipient. Only one package I know of was delivered late -- by a day -- and UPS refunded the shipping charge when I brought it to their attention.

Roy Lewallen, W7EL

1571. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:15:59 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C50DBFF.884BD888@coqui.net>
Source record: 150309
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

Brian wrote:
>
> Get this:
I would urge all persons
> to carefully consider all other alternatives before trusting anything
> of value to UPS.

Maybe they should lower their standards so that deserving minorities
could obtain these jobs.

:-)

Bill

1572. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:17:30 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C50DC5A.CA2F133@IEEE.org>
Source record: 150310

Jason Hsu wrote:
> I don't consider myself a hardcare shortwave listener - in fact, I
> have never owned a shortwave radio. My reasons for buying one are for
> casual shortwave listening and for hunting noise sources.

Jason, I bought a used Grundig Yacht Boy 400 from a friend of mine.
It is superb for tracking down noise sources. It not only covers
commercial AM and FM but LW and most of HF including a BFO for
CW and SSB so it can even be an emergency backup ham receiver.
--
cheers, CAM http://www.qsl.net/w5dxp

1573. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:18:33 UTC
From: richardharrison@webtv.net
Message-ID: <11779-3C50DC99-37@storefull-111.iap.bryant.webtv.net>
Source record: 150314

Robert Egri wrote:
"William E. Sabin ---wrote---:
My receive antenna, while it is in the act of receiving, is also a transmitting antenna."

Robert Egri also wrote:
"Only if it is mismatched but it can be matched so it does not radiate anything."

Bill Sabin got it right. Every receiving antenna re-radiates at least 1/2 the energy it receives. The 50% minimum re-radiation occurs with a perfect match.

The reason is clear. The antenna doesn`t care where the energy exciting it came from. The antenna doesn`t know if it is supposed to collect energy or emit energy, so it does both.
When the receiver load is mismatched to the antenna, it reflects some of the energy presented to it and this reflected energy adds to that available for re-radiation.

Best regards, Richard Harrison, KB5WZI

1574. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:21:03 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3C50DD2F.DB4322B7@hiwaay.net>
Source record: 150311
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

Fed-ex is fine if you are a business, have a city address, are in the
yellow pages, and have a sign out front. If you do not qualify, it's
just TS.
I live in a rural area- UPS found out how to find us country folk, a
long time ago. The first delivery FedEx tried, they got lost three
times, and I finally had to get them to sit still so I could find them,
instead of the other way.
The worst is RPS- they sent a semi to deliver a two pound package, and
got where they couldnt turn around.
Bill-W4BSG

Murray Neece wrote:
>
> I have only been using them two months, but so far, even though they lost
> a set of tubes...Im much more impressed....UPS damaged about 1 out of 8
> packages over 35 lbs. that I sent....THEY SUCK and now YOU KNOW....BOYCOTT
> em..use fedex they are pretty good so far..73 Murray
>
> Brian wrote:
>
> > Get this: I send a package to Colorado via UPS. I label the package
> > with the printed Label ups.com gives you when you have an account with
> > them. I drop off the package at an "Authorized UPS Shipping Center"
> > because it is insured for $3,400 and that is what UPS requires. I get
> > a receipt from the shipping center stating that the item has been
> > properly packed and labeled. OK so far... Four days later a guy in New
> > Jersey at a communications business calls me. "We have your package
> > and we don't know why it came here, but we opened it and read your
> > letter inside. Looks like it is supposed to go to Colorado, what
> > should we do with it?" I tell the guy thanks for calling me and I will
> > call UPS and get back to him. I call 1-800-pickups. The first
> > "support" person hangs up on me. The second says I "should take it up
> > with the shipping center" (all they did was hold it for the truck
> > pickup, the UPS driver in reality should have scanned it upon pickup).
> > I ask to speak to a supervisor. The supervisor is cooperative and I
> > tell her I want the thing overnighted from New Jersey to Colorado
> > since it is "Guaranteed" to be there tomorrow by UPS. She says, "OK, I
> > will call NJ UPS and set that up, they will call you in one hour or
> > less." I thank her VERY much and ask for her name, title, and
> > location. She complies. I am a happy camper. One hour passes, no call,
> > two hours pass, no call. I call UPS back and ask to speak to this
> > individual and... No such individual exists!! By this time it is late
> > so I call and get another person in the morning who tells me to "take

> > it up with the shipper..." I ask to speak to HER Supervisor. Her
> > Supervisor says she will investigate and get back to me.... 7 hours go
> > by. I call her and ask for a status report. Luckily, "she exists." Her
> > answer? "Sir, since the package arrived in NJ and it was signed for;
> > it is considered a completed delivery." I ask, incredulous... "What
> > about my package?" "Sir," she says, "You need to contact the
> > individual in NJ who has your package and ask him to forward it to
> > Colorado for you. Since it was never scanned into our system there
> > will be no charge." UPS at no time took responsibility for this
> > transaction, despite my signed receipt. At no time did they offer a
> > viable solution to a problem they created. At one time I received
> > FALSE information from a UPS employee just to get me off the phone.
> > Hence; I WILL NEVER DEAL WITH UPS AGAIN, and I would urge all persons
> > to carefully consider all other alternatives before trusting anything
> > of value to UPS. Only through the kindness and honesty of an
> > individual in NJ was I able to locate and send my package to its
> > proper destination. Rest assured, when it gets to Colorado, it will
> > not have passed through UPS hands.

1575. Re: Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:30:29 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C50DF65.40FCA454@IEEE.org>
Source record: 150312

John Reed wrote:
> So - why would an antenna that's tuned as good as it can get and performs
> well on other mounts display poor SWR when placed on the ballmount?

How much vehicle body is there parallel to the bottom of the antenna
and how close is it to the antenna? The large magnetic field at the
bottom of the antenna may be coupling to the vehicle body.
--
cheers, CAM http://www.qsl.net/w5dxp

1576. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:34:33 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <tf548.2067$P32.675207@paloalto-snr1.gtei.net>
Source record: 150313

"'Doc" SEZ:

I can understand wanting to build your
> own antenna, but there are enough commercially made mobile
> antennas around that would fill your requirements, that it's
> sort of like re-inventing the wheel.

REALLY? Have you ever run the commonly used mobile antennas like the Screwdriver or Hamstick/Hustler
thru any of the available antenna software to investigate their theoretical efficiency - or more
importantly, a good antenna shootout or side-by-side comparison with a well refined custom setup?
I'll put my 90% efficiency homebuilt 20 meter monobander up against anyone else's out there - sure,
a few other custom jobs WILL beat me, but mine will outperform the VAST majority in common use! I'm
not attempting to "reinvent the wheel", only trying to apply well established antenna fact and
theory into an antenna that will truly operate in an efficient manner... And that's what ham radio
is all about, finding a BETTER way, or adapting and improvising in order to obtain best performance
and efficiency from a given system.

Using 'standard' masts,
> coils, and whips, you should be able to put together a 40 meter
> mobile antenna very easily.

Sure, and you WILL make contacts with such a system - just as you'll probably make a few with a wet
noodle in a windstorm - but we're ony kidding ourselves if we suggest standard, off-the-shelf stuff
is the best and most efficient method available to us.

> When you say you want 70% efficiency out of a mobile antenna,
> I'm afraid you dreaming...

I'm afraid, given my parameters, you are probably right - at least for 40 meters and lower bands -
but I'll keep trying - and at least may do better than what is commercially available. I already
have Hamstick and Hustler monobanders, a Don Johnson Screwdriver antenna, an SGC autotuner, and
several other such commercial jobs - but the BEST antenna so far, and BY FAR, is the hybrid Hamstick

mast/Texas Bugcatcher style center loaded coil and 5 1/2 foot whip I currently use on 20 meters with
an extended base section - I'll put that up against ANY "standard", commercially available monobander currently available...

NOW, if I could just do as well on 40 meters... :-)

> 'Doc

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

1577. Re: Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:48:59 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3C50E3C1.A3367449@worldnet.att.net>
Source record: 150315

Get some flat braid cable about one inch in size and connect that from the base
of the antenna to the vehicle body.
What you are describing is a common problem with many mobile installations.

73's...Dick K7RNZ

John Reed wrote:

> Here's a fun one:
>
> My friend has a Ford Explorer. On the left rear, just near the "gas cap"
> he's got a ball mount. The ball mount is mounted thru the hull of the
> vehicle. He has 50 ohm coax coming off the ball mount to his radio. The
> cable is good. The connections are good - no shorts. There is good ground
> available.
>
> Now here's the catch:
>
> He's tried several antennas - a "whippet" 10/11m base loaded thing, a 10m
> "hamstick", a 10m quarterwave whip, and a 6m "hamstick'.
>
> I used an MFJ meter and a different mount - a mag mount temporarily stuck to
> the middle of the hood and tuned all the antennas to minimum SWR.
>
> When the whippet and the hamsticks are put on the ball mount, we can get no
> better than 3:1 SWR on the bands they are rated for. The 8 foot whip gets
> us down to around 1.6:1 on
> 10m.
>
> Any reason why we're getting these goofy SWR readings? Again, if I take
> these antennas and put them on my vehicle, or on the magmount on his truck,
> they tune fine - but on the ball mount, the SWR goes to pot.
>
> There was an on-glass antenna (2m/440) on the window right by the ball
> mount - but we've disconnected the antenna and the feedline, leaving just
> the on-glass thing.
>
> So - why would an antenna that's tuned as good as it can get and performs
> well on other mounts display poor SWR when placed on the ballmount?
>
> Anything we should be looking for? Could the on-glass thing be screwing up
> the antenna? We even took off all roof-mount antennas, too, just to make
> sure they weren't doing something odd to the equation.
>
> Thanks in advance. Replies here to the newsgroup, or direct to me in email

> (remove the NOSPAM from my email address) are fine.
>
> 73 de John, n4tii

1578. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:56:16 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2qp4n$13eke2$1@ID-124126.news.dfncis.de>
Source record: 150318

Gary, if you havn't already done so, download program LOADCOIL from website below. Choose coil dimensions and slide the coil up and down the antenna to find maximum efficiency. The program automatically adjusts the number of coil turns to resonate the antenna to your chosen frequency at whatever height the coil may be.

To reduce coil loss increase length of coil to enable thicker wire to be used.. Or increase coil diameter to enable thicker wire to be used with fewer turns. Or both.

You may find for an antenna overall height of 11 feet, at 7 MHz, and a big coil, the best place to locate the coil is, mechanically very conveniently, at the bottom.

Or it may occur that although maximum efficiency occurs half way up, the loss in efficiency by placing the coil at the base is so small that the disadvantage is more than outweighed by the mechanical conveneience.

In any coil loaded antenna design the last thing to decide is height of the coil for maximum efficiency. The program will allow you to experiment with a very long, small diameter coil - a helix ! But at 7MHz you will probably end up with a shortish, fat coil wound with quite thick wire or even copper pipe. The program will allow you to suck it and see before obtaining the materials.

There is seldom any advantage in placing the coil in a short vertical at a height greater than 50 or 60 percent of overall height, especially if a good ground connection is available. With a very good ground the best place is always at or near the bottom. If it's at the bottom consider locating it inside the tuner box inside the vehicle.

Don't be surprised if your pre-conceived ideas have to changed. If you set yourself a very high efficiency target you may end up with a coil former the same size as a 50-gallon oil drum wound with 2" diameter copper pipe. ;o)

In addition to program LOADCOIL you may find programs HELICAL3 and VERTLOAD interesting.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

Gary - KJ6Q <davison7@gte.net> wrote in message
news:2o248.869$0Q5.308653@paloalto-snr2.gtei.net...
> OK, here's the deal...

>
> I'm wanting to construct a mobile antenna for 7.2 mhz with an efficiency
> of 70% or better (relative to a reference dipole). I need a PHYSICAL
overall
> length of about 11 feet - to be composed of a 5 foot lower section 3/8"
fiber-
> glass shaft, a loading coil, and an upper section of 6 feet or so of the
same
> material as the lower section, or part shaft, part whip... Measurements
are
> SOMEWHAT flexible, but overall length is not, if I am to keep it outta the
> trees and overhead wires.
>
> NOW, available 'puter programs tell me I need an ELECTRICAL lower length
> of 6 feet, a 3 inch diameter coil of 12 ga. wire, and a top section with
an
> ELECTRICAL length of 8 feet to reach my goal - and by the way, I am
running
> a 6-700 watt PEP amp in my mobile as well...
>
> SOooo, I am in serious need of a pointer, or info on helical winding as
> commonly used in antennas of this type, not necessarily as the loading
> coil itself, but as a tool to electrically alter the electrical length of
other
> system components - is it practical, can I expect to wind enough wire or
> similar material on the upper and lower sections of my antenna to "fool"
the
> system into thinking and functioning as tho' it is a physically longer
system?
>
> Is it practical or possible to merely employ a CB or ham band monoband
> whip, such as 17 meters in a system like mine to electrically simulate a
> longer length? It would be great if a standard existing monoband antenna
> could serve as both the top element of a 40 meter setup, and also be used
> on it's basic band as well! (Not in the same physical configuration, of
> course...)
>
> Does helical winding, such as used on Hamstick and similar antennas
provide
> actual INDUCTIVE loading, longer ELECTRICAL length, or BOTH? And
> at what point do I reach tradeoffs that start defeating my goals? Is there
ANY
> reliable, accepted source of helical RF facts and guidelines I can access
via
> the internet?
>
> I'm really looking for actual, proven feedback or info here, not off-hand
> guesses or wild speculation - surely there is SOME source of program or
> test data to provide a basis for intelligent choice...
>

> Any help?
>
> --
> Gary - KJ6Q
> **********
> Two things we'll never see:
> 1. Perpetual motion...
> 2. A liberal Democrat complaining
> about "Too much government"
>

1579. Re: Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 04:59:22 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C50E618.273447D0@icok.net>
Source record: 150316

PS - Ground the bed to the frame too.

1580. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 05:01:28 UTC
From: Long Island Joe <joe@GETOUTverizon.net>
Message-ID: <IE548.24584$hp6.13778@nwrddc01.gnilink.net>
Source record: 150317
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

>Murray Neece wrote snip:
>UPS damaged about 1 out of 8

Well Murray that pretty good for "OOPs"
Them SOB's just smashed a empty anvil flight case coming back from the R-390
(non A) buyer.
Looks like Godzilla took a big bite then a big _
2 huge holes with this black muck and red oil saturating the foam ...(fork
lift ?)
The YL rep say's it was improperly packed...WHAT ?
I dont know, Perhaps this is the new R-390 ventilation mod.
.......Boy am I pissed off !
I cant ship the other radio now

-jOE

Murray Neece wrote in message <3C50F029.5FBB21D2@cableone.net>...
>I have only been using them two months, but so far, even though they lost
>a set of tubes...Im much more impressed....UPS damaged about 1 out of 8
>packages over 35 lbs. that I sent....THEY SUCK and now YOU KNOW....BOYCOTT
>em..use fedex they are pretty good so far..73 Murray
>
>Brian wrote:
>
>> Get this: I send a package to Colorado via UPS. I label the package
>> with the printed Label ups.com gives you when you have an account with
>> them. I drop off the package at an "Authorized UPS Shipping Center"
>> because it is insured for $3,400 and that is what UPS requires. I get
>> a receipt from the shipping center stating that the item has been
>> properly packed and labeled. OK so far... Four days later a guy in New
>> Jersey at a communications business calls me. "We have your package
>> and we don't know why it came here, but we opened it and read your
>> letter inside. Looks like it is supposed to go to Colorado, what
>> should we do with it?" I tell the guy thanks for calling me and I will
>> call UPS and get back to him. I call 1-800-pickups. The first
>> "support" person hangs up on me. The second says I "should take it up
>> with the shipping center" (all they did was hold it for the truck
>> pickup, the UPS driver in reality should have scanned it upon pickup).
>> I ask to speak to a supervisor. The supervisor is cooperative and I
>> tell her I want the thing overnighted from New Jersey to Colorado
>> since it is "Guaranteed" to be there tomorrow by UPS. She says, "OK, I
>> will call NJ UPS and set that up, they will call you in one hour or
>> less." I thank her VERY much and ask for her name, title, and
>> location. She complies. I am a happy camper. One hour passes, no call,

>> two hours pass, no call. I call UPS back and ask to speak to this
>> individual and... No such individual exists!! By this time it is late
>> so I call and get another person in the morning who tells me to "take
>> it up with the shipper..." I ask to speak to HER Supervisor. Her
>> Supervisor says she will investigate and get back to me.... 7 hours go
>> by. I call her and ask for a status report. Luckily, "she exists." Her
>> answer? "Sir, since the package arrived in NJ and it was signed for;
>> it is considered a completed delivery." I ask, incredulous... "What
>> about my package?" "Sir," she says, "You need to contact the
>> individual in NJ who has your package and ask him to forward it to
>> Colorado for you. Since it was never scanned into our system there
>> will be no charge." UPS at no time took responsibility for this
>> transaction, despite my signed receipt. At no time did they offer a
>> viable solution to a problem they created. At one time I received
>> FALSE information from a UPS employee just to get me off the phone.
>> Hence; I WILL NEVER DEAL WITH UPS AGAIN, and I would urge all persons
>> to carefully consider all other alternatives before trusting anything
>> of value to UPS. Only through the kindness and honesty of an
>> individual in NJ was I able to locate and send my package to its
>> proper destination. Rest assured, when it gets to Colorado, it will
>> not have passed through UPS hands.
>

1581. Re: Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 05:06:32 UTC
From: richardharrison@webtv.net
Message-ID: <11777-3C50E7D8-225@storefull-111.iap.bryant.webtv.net>
Source record: 150219

John, N4TII wrote:
"Anything we should be looking for?"

With a ballmount, it is important to ensure a good bite into the metal car body so that both ends of your coax are well grounded.

It is important that the coax is perfect.

You got a 1.6:1 SWR on 10m with an 8 ft whip. Remember that the 1/4-wave whip may be resonant and have a drivepoint impedance of 25 to 30 ohms. You are connecting it with a 50-ohm cable. Don`t expect a 1:1 match. The SWR can`t be helped without a network at the whip for a better match. but the radio match may be improved by changing the cable length.

Best regards, Richard Harrison, KB5WZI

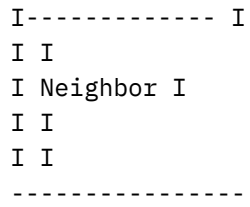
1582. Re: Condo Isoloop RFI problems - advice? *see web page photos*

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 05:41:40 UTC
From: tegwilym@hotmail.com
Message-ID: <efb6d1ef.0201242141.1ae981bb@posting.google.com>
Source record: 150220

> Hi Tom,
>
> You are doing your best when it comes to checking the radiative path
> of interference, but there is also the conductive path.
>
> That is, if your TV and transmitter share the same 120VAC circuit
> (they go to the same breaker), there is every chance that is the means
> of coupling.
>
> Move the TV's or the transmitter's power connection to a separate
> circuit (breaker). If this clears up the problem, you might be able
> to reconnect to the original circuit (if a necessity of the apartment
> layout or other consideration) and use snap on suppressors around the
> power lead(s). Snubbing the transmitter's lead is preferred (stop the
> interference at the source).
>
> 73's
> Richard Clark, KB7QHC

Someone on another board that I have been asking about suggested that
I might have short range magnetic interferrence to my TV.
Last night I tuned up on 20 meters and set my keyer to send out a
beaconing signal so I could step away from it and look out the window.
I peeked across the lawn at my nieghbor's tv (which was on) and
didn't see anything unusual from about ~80 feet away. I was only
putting out about 20 watts, and my tv was flashing on and off.
I'm wondering if this is just a short range thing to my own tv, and
the problem may not show up next door? I guess I should try it with
50 watts or something higher, and see if it shows up next door. I
guess if it's clear, I'm good to go.
I live in kind of a T-shaped building. Kind of looks like this (if
this comes across right) Looking down from the top.

```
-------------- ---------------
| Pation | | X Patio | The 'x' is my Isoloop
location
--------------------------------------
I I I
I Neighbor I My Unit I
I I I
--------------------------------------
I I
I I
I Neighbor I
I I
```



So my main concern are the 2 adjoining neighbors behind me and next to me. all the units are 2 floors so I just have the coner shared with neighbors.
The other units are across the lawn and across the parking lot.

Thanks again for the ideas!

Tom KA7VIK

1583. FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 05:42:01 UTC
From: Murray Neece <radioranch@cableone.net>
Message-ID: <3C50F029.5FBB21D2@cableone.net>
Source record: 150301
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna
Body handling: Binary attachment payload not displayed: radioranch.vcf

I have only been using them two months, but so far, even though they lost
a set of tubes...Im much more impressed....UPS damaged about 1 out of 8
packages over 35 lbs. that I sent....THEY SUCK and now YOU KNOW....BOYCOTT
em..use fedex they are pretty good so far..73 Murray

Brian wrote:

> Get this: I send a package to Colorado via UPS. I label the package
> with the printed Label ups.com gives you when you have an account with
> them. I drop off the package at an "Authorized UPS Shipping Center"
> because it is insured for $3,400 and that is what UPS requires. I get
> a receipt from the shipping center stating that the item has been
> properly packed and labeled. OK so far... Four days later a guy in New
> Jersey at a communications business calls me. "We have your package
> and we don't know why it came here, but we opened it and read your
> letter inside. Looks like it is supposed to go to Colorado, what
> should we do with it?" I tell the guy thanks for calling me and I will
> call UPS and get back to him. I call 1-800-pickups. The first
> "support" person hangs up on me. The second says I "should take it up
> with the shipping center" (all they did was hold it for the truck
> pickup, the UPS driver in reality should have scanned it upon pickup).
> I ask to speak to a supervisor. The supervisor is cooperative and I
> tell her I want the thing overnighted from New Jersey to Colorado
> since it is "Guaranteed" to be there tomorrow by UPS. She says, "OK, I
> will call NJ UPS and set that up, they will call you in one hour or
> less." I thank her VERY much and ask for her name, title, and
> location. She complies. I am a happy camper. One hour passes, no call,
> two hours pass, no call. I call UPS back and ask to speak to this
> individual and... No such individual exists!! By this time it is late
> so I call and get another person in the morning who tells me to "take
> it up with the shipper..." I ask to speak to HER Supervisor. Her
> Supervisor says she will investigate and get back to me.... 7 hours go
> by. I call her and ask for a status report. Luckily, "she exists." Her
> answer? "Sir, since the package arrived in NJ and it was signed for;
> it is considered a completed delivery." I ask, incredulous... "What
> about my package?" "Sir," she says, "You need to contact the
> individual in NJ who has your package and ask him to forward it to
> Colorado for you. Since it was never scanned into our system there
> will be no charge." UPS at no time took responsibility for this
> transaction, despite my signed receipt. At no time did they offer a
> viable solution to a problem they created. At one time I received
> FALSE information from a UPS employee just to get me off the phone.
> Hence; I WILL NEVER DEAL WITH UPS AGAIN, and I would urge all persons

> to carefully consider all other alternatives before trusting anything
> of value to UPS. Only through the kindness and honesty of an
> individual in NJ was I able to locate and send my package to its
> proper destination. Rest assured, when it gets to Colorado, it will
> not have passed through UPS hands.

[One or more binary attachments are retained only in the source text.]

1584. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 05:42:46 UTC
From: Neoklis <neoklis@users.sourceforge.net>
Message-ID: <Pine.LNX.4.33.0201250732220.1194-100000@localhost.localdomain>
Source record: 150221

On Thu, 24 Jan 2002, Murray Neece wrote:

> I have only been using them two months, but so far, even though they lost
> a set of tubes...Im much more impressed....UPS damaged about 1 out of 8
> packages over 35 lbs. that I sent....THEY SUCK and now YOU KNOW....BOYCOTT
> em..use fedex they are pretty good so far..73 Murray

Here is my experience with FedEx

I oerdered a 2.4 Ghz grill type antenna for AO40 from a firm in the USA (I live in Cyprus, East Mediterranean). The dish cost $129 and FedEx shipment $162!!. I don't know how I missed this on the proforma, nevermind. It was shipped very soon after payment apparently but after 2 weeks I had not received it and I was about to write an email to the sender when I received one from them telling me the antenna was returned because my address was wrong! I faxed them a copy of the order with a correct address, turned out to be a typo by them, typed my street as Freakon instead of Feakon!

Eventually they sent it back to me with no extra charge but how much would it cost local FedEx to call or email the sender about this so they could tell me to pick it up or call them? Utter irresopnsibility and disinterest by the employees is all I can think of.

Data Post (express mail) always works best for me.

--
Regards My Ham Radio callsign: 5B4AZ QTH Loc: KM64MR
My website (with some Linux software):
Neoklis http://leonardo.spidernet.net/Copernicus/22420/

1585. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 05:50:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2qrvm$12l03j$1@ID-124126.news.dfncis.de>
Source record: 150222

Gary wrote-
> And that's what ham radio is all about,
> finding a BETTER way, or adapting and
> improvising in order to obtain best performance
> and efficiency from a given system.
==========

Gary, I couldn't agree more!

So I feel extemely guilty about computerising the whole business and then cloning and giving away the tools. It reduces the many enjoyable months of experimenting in the workshop, shack and vehicle, the never-ending search for makeshift materials, throwing the results onto the ever mounting junk heap, to an hour of shoving numbers into a software program via a keyboard while sipping California dry red and nibbling potato crisps (UK equivalent of pretzels).

Sad to consider I have become obese and strive to obtain some intellectual satisfaction at other people's expense. Is that progress ?

Regards, Reg. G4FGQ

1586. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 07:38:33 UTC
From: rickm <rickm_msn@email.msn.com>
Message-ID: <ubglMNXpBHA.388@cpimsnntpa03>
Source record: 150223
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

Actually, you don't need a business address for Fed Ex.

Fed Ex now has a ground service that I've been using for a couple of years. Haven't had any problems with it at all, and it's a heck of a lot cheaper than UPS.

Several years ago, when I owned my own business, I had UPS deliver some C.O.D. packages. I made a mistake and paid for them with cash. A few weeks later, UPS comes back to me and tells me they lost my check and asks me to rewrite the check. When I explained that I paid in cash, they told me I was mistaken, and demanded another check. This went on for a couple of months and then I started getting harrasing phone calls from attorneys representing UPS. It was a total mess, and ended up costing me several thousand dollars. I agree, I'll never use UPS again.

Rick, K6SIX

"Bill Aycock" <baycock@hiwaay.net> wrote in message news:3C50DD2F.DB4322B7@hiwaay.net...
> Fed-ex is fine if you are a business, have a city address, are in the
> yellow pages, and have a sign out front. If you do not qualify, it's
> just TS.
> I live in a rural area- UPS found out how to find us country folk, a
> long time ago. The first delivery FedEx tried, they got lost three
> times, and I finally had to get them to sit still so I could find them,
> instead of the other way.
> The worst is RPS- they sent a semi to deliver a two pound package, and
> got where they couldnt turn around.
> Bill-W4BSG
>
> Murray Neece wrote:
> >
> > I have only been using them two months, but so far, even though they
lost
> > a set of tubes...Im much more impressed....UPS damaged about 1 out of 8
> > packages over 35 lbs. that I sent....THEY SUCK and now YOU
KNOW....BOYCOTT
> > em..use fedex they are pretty good so far..73 Murray
> >

1587. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 07:47:03 UTC
From: Donovan Smith <donovan@integratasolutions.com>
Message-ID: <MPG.16babb66aa6cd8e3989680@news.cis.dfn.de>
Source record: 150224
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

In article <4bfc7bb.0201241924.4fdd5373@posting.google.com>,
k3vr@hotmail.com says...
> Get this: I send a package to Colorado via UPS. I label the package
> with the printed Label ups.com gives you when you have an account with
> them. I drop off the package at an "Authorized UPS Shipping Center"
> because it is insured for $3,400 and that is what UPS requires. I get
> a receipt from the shipping center stating that the item has been
> properly packed and labeled. OK so far... Four days later a guy in New
> Jersey at a communications business calls me. "We have your package
> and we don't know why it came here, but we opened it and read your
> letter inside. Looks like it is supposed to go to Colorado, what
> should we do with it?" I tell the guy thanks for calling me and I will
> call UPS and get back to him. I call 1-800-pickups. The first
> "support" person hangs up on me. The second says I "should take it up
> with the shipping center" (all they did was hold it for the truck
> pickup, the UPS driver in reality should have scanned it upon pickup).
> I ask to speak to a supervisor. The supervisor is cooperative and I
> tell her I want the thing overnighted from New Jersey to Colorado
> since it is "Guaranteed" to be there tomorrow by UPS. She says, "OK, I
> will call NJ UPS and set that up, they will call you in one hour or
> less." I thank her VERY much and ask for her name, title, and
> location. She complies. I am a happy camper. One hour passes, no call,
> two hours pass, no call. I call UPS back and ask to speak to this
> individual and... No such individual exists!! By this time it is late
> so I call and get another person in the morning who tells me to "take
> it up with the shipper..." I ask to speak to HER Supervisor. Her
> Supervisor says she will investigate and get back to me.... 7 hours go
> by. I call her and ask for a status report. Luckily, "she exists." Her
> answer? "Sir, since the package arrived in NJ and it was signed for;
> it is considered a completed delivery." I ask, incredulous... "What
> about my package?" "Sir," she says, "You need to contact the
> individual in NJ who has your package and ask him to forward it to
> Colorado for you. Since it was never scanned into our system there
> will be no charge." UPS at no time took responsibility for this
> transaction, despite my signed receipt. At no time did they offer a
> viable solution to a problem they created. At one time I received
> FALSE information from a UPS employee just to get me off the phone.
> Hence; I WILL NEVER DEAL WITH UPS AGAIN, and I would urge all persons
> to carefully consider all other alternatives before trusting anything
> of value to UPS. Only through the kindness and honesty of an
> individual in NJ was I able to locate and send my package to its
> proper destination. Rest assured, when it gets to Colorado, it will
> not have passed through UPS hands.

I just use the US Postal Service. Not always the most gentle, the fastest, or the cheapest but it is the most convenient and reliable. I have heard too many horror stories about FedEx and UPS to want to use them for anything. And at least USPS can truly deliver anywhere in the country.

--
Donovan Smith
ICQ: 101193930
http://www.integratasolutions.com

1588. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 08:07:43 UTC
From: cooperjim@aol.com
Message-ID: <20020125030743.12124.00000576@mb-cl.aol.com>
Source record: 150225

I LIKE IT !!!!!

I didnt know that you worked in marketing.

73
Jim Cooper NE6O

>Subject: Re: EH / Crossfield Antennas
>From: Roy Lewallen w7el@eznec.com
>Date: 1/23/02 9:42 AM !!!First Boot!!!
>Message-id: <3C4E8569.6EE99668@eznec.com>
>
>Jim Cooper NE6O says about the EH antenna:
>
>". . .made several contacts. . . got a good match and saw. .
>phase-lock-in of the field generation. . .a significant data point. .
>.perfect. . .fun. . .a better way. . .designs work!"
>
>If you're looking for information about the EH or CFA antenna, I'm
>afraid this is what you're going to have to settle for.
>
>Roy Lewallen, W7EL
>

1589. Re: Directional remote control antenna - Pls help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 08:19:41 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3C51151D.7BB5C401@ipeg.com>
Source record: 150226

<SNIP>

Have you thought about something as simple as a tuned L-C circuit (something akin to a Bilal Isotron) stuck in the bottom of some sort of tube? Put a matching circuit in a shielded box outside the tube. That ought to meet your requirements.

marty...
N7MX

1590. Minibean Antenna I looking for

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 08:38:21 UTC
From: Jose Manuel <jm_barbera@terra.es>
Message-ID: <1Q848.47918$MO1.182060@telenews.teleline.es>
Source record: 150239

Waht is the best minibeam antenna??
--
www.ea8ee.es.fm

1591. Re: Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 08:49:28 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3C511C18.52F7EA53@ipeg.com>
Source record: 150227

"Richard A. Miles" wrote:
>
> Get some flat braid cable about one inch in size and connect that from the base
> of the antenna to the vehicle body.
> What you are describing is a common problem with many mobile installations.
>
> 73's...Dick K7RNZ

Ground cannot be overstressed. Many (all?) vehicles have a protective coating on the inside of the body panels which prevents a good RF ground from being formed. Scrape the inside of the panel to bare metal and use big, herky, nasty star washers to make your ground connection. Then do the same thing from the body panel to the frame of the vehicle. I personally prefer a spot of weld for the connection, but most folks buy vehicles to resell instead of to use and are loathe to let a welder next to the vehicle.

The other thing to consider is to recognize that mounted low on that big, metal body there is bound to be some interaction between the antenna and the body. Tune the antenna to resonance on the roof or hood or whatever high, clear surface you can find, then mount it and use a tuning circuit to bring the indicated reflected power down to whatever level makes you happy. Until the coil (or the major radiating portion) of the antenna is substantially above the roofline of the vehicle you will most likely experience little joy.

marty...
N7MX

<SNIP>

1592. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 09:18:31 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <dj725uc8hg10acj430gn3hir0jffh73e6b@4ax.com>
Source record: 150228
Cross-posted to: sci.engr.radar+sonar,rec.radio.amateur.antenna

On Fri, 25 Jan 2002 11:44:07 +1100, "Richard Corkish"
<r.corkish@unsw.edu.au> wrote:

> Ramo, Whinnery and van Duzer
>(1994, p. 669) reject this idea of an equal amount of power being
>reradiated.

Hi Richard,

"...except in special cases where the current distribution may be
the same for reception as for transmission."

Or so they say after pages of dense math that barely goes into the
matter of the exception (the simple dipole?), which I suspect relates
to the preponderance of "large aperture" antenna coverage in the text.

Still and all, there is discussion that is freely mixing the two
"basis" of match to support arguments that are thus tainted by the
consequent misapplication. Further, aperture antennas are normally
very large in comparison to simple loops or dipoles and this also does
not freely translate (they are distinct as traveling wave antennas
whereas the dipole is a standing wave antenna). As such, confusion is
not unnatural as you have many countervailing issues disguised as one.

73's
Richard Clark, KB7QHC

1593. Mast Issues

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 09:30:06 UTC
From: Ken Coghill III <WB4ZOH@ARRL.NET>
Message-ID: <3C5124E8.10C44B96@ARRL.NET>
Source record: 150229

HI
I've completed building a 'copper cactus' J-Pole for 2 meters.
Temporarily I want to mount the antenna on a 10' pole secured to our
wooden fence. I have been told this type of antenna performs better if
you use 1 1/2" PVC pipe instead of traditional TV masts. Comment &
suggestions are most welcome.

73's
--
Ken Coghill III, WB4ZOH

This message has been scanned for viruses: NONE FOUND!

1594. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 09:35:38 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <qs825u0bsdn5ej0qs2v2s2sr4rg460h3bu@4ax.com>
Source record: 150230

On Thu, 24 Jan 2002 22:18:33 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Robert Egri wrote:
>"William E. Sabin ---wrote---:
>My receive antenna, while it is in the act of receiving, is also a
>transmitting antenna."
>
>Robert Egri also wrote:
>"Only if it is mismatched but it can be matched so it does not radiate
>anything."
>
>Bill Sabin got it right. Every receiving antenna re-radiates at least
>1/2 the energy it receives. The 50% minimum re-radiation occurs with a
>perfect match.
>
>The reason is clear. The antenna doesn`t care where the energy exciting
>it came from. The antenna doesn`t know if it is supposed to collect
>energy or emit energy, so it does both.
>When the receiver load is mismatched to the antenna, it reflects some of
>the energy presented to it and this reflected energy adds to that
>available for re-radiation.
>
>Best regards, Richard Harrison, KB5WZI

Hi All,

This is far simpler than trotting out Huygen or using Thevenin as a
crutch and was a lesson taught to me in introductory circuit analysis.

Every load is also a source. If the signal impressed upon your
antenna system develops some voltage across a load, that same load is
indistinguishable from a source that replaces it presenting the same
voltage back toward the antenna. [Actually, this is a dumbed down
version of Thevenin, but serves quite well and conforms explicitly to
Kirchhoff's sum of the voltages in a circuit.]

73's
Richard Clark, KB7QHC

1595. Re: Bassic antenna power reception efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 09:57:35 UTC
From: Jos R Bergervoet <antispam@nospam.com>
Message-ID: <3C512C0F.6DAA@nospam.com>
Source record: 150231
Cross-posted to: rec.radio.amateur.antenna,sci.physics.electromag

Roy McCammon wrote:
>
> Richard Corkish wrote:
>> Balanis agrees that 100% aperture efficiency is possible (ie. an
>> amount of power equal to all the incident wave power enetering the
>> physical aperture (of an aperture antenna) can be delivered to the
>> load), but still says that an additional equal amount of power must
>> be scattered (reradiated) when the load is conjugately matched to
>> the antenna. Wher does this power come from?

> Lets try a sanity check. An EM wave is an EM wave is
> an EM wave, so lets consider a hollow sphere with a
> small hole in it with the inside coated with lamp
> black. Shine a narrow beam laser into the hole and
> pretty near 100% will be absorbed.

The problem (insanity perhaps?) is in the definition of
scattering. Non-scattering is defined as the situation
where the EM beam is proceding unaltered. In your example
the beam is altered (it vanishes behind the receiver) so
there must be scattering.

Scattered field is defined as: "outgoing field minus the
field that would be outgoing for an unaltered beam".

Incoming and outgoing fields can be defined by decomposition
in spherical waves. There's no problem with that. It's
purely in the definition of "scattering". In your example
there is field coming in and absolutely no field going out,
but still there is "scattering". Cool, isn't it?

-- Jos

Dr. Jozef R. Bergervoet Integrated Transceivers
Philips Research Laboratories, Eindhoven, The Netherlands
Building WAY5 83 Phone: +31-40-2742643
E-mail: NoSpamPlease@I_said_No_Spam! FAX: +31-40-2744657

1596. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 09:57:42 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C512C02.A84A5D24@icok.net>
Source record: 150232

Gary,
Yes, I have run the commonly used mobile antennas you named, both through one of the modeling programs, and from the back of my car. The antenna modeling programs usually show what I've seen in actual use (within reason). Speaking of 40 meters only, you will be very lucky to see something approaching 3-9% efficiency from any of them. (Encluded in that list of antennas is an 11 foot 'BugCatcher' using both the old 'standard' coil and the larger 8" coil, not that much differnce.)
Even using the 'BugCatcher', the efficiency on the higher HF bands is ~well~ below 25% efficiency. If you have a mobile antenna that is anywhere close to 90% efficient on 20 meters, you better patent that thing!
'Doc

1597. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 10:06:54 UTC
From: stefano <sgalast@tin.it>
Message-ID: <27a48.23217$Rv3.818592@news2.tin.it>
Source record: 150233

Hi Francesco,
I officially invite you to test/verify the antenna.
Just send me an email, we will arrange a meeting.
stefano

"Francesco Messineo" <frank@ares.ccii.unipi.it> ha scritto nel messaggio
news:a2p4cejme1@serra.unipi.it...
> Michele IZ2EAS <iz2eas@libero.it> wrote:
> > Well done David,
>
> > this is the best approach to this problem, to try and have a clearer
vision
> > of the potentials of this antenna. This is a GREAT opportunity that
Stefano
> > should NOT miss, unless he definitely fears the results of these
tests....
>
> for what is worth, I'm sure there are many hams even closer to Stefano who
> would like to test a "well made EH", even I could do it,
> I'm a telecommunication engineer and of course I can compare the
> antenna with the presence of a lot of other hams and technical qualified
> peoples.
>
> 73
> Francesco IZ5DWF

1598. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 10:29:58 UTC
From: DeWayne <ke9k@indy.rr.com>
Message-ID: <Gsa48.50347$yy3.9655256@typhoon.neo.rr.com>
Source record: 150234
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

> > Get this: I send a package to Colorado via UPS. I label the package
> > with the printed Label ups.com gives you when you have an account with
> > them. I drop off the package at an "Authorized UPS Shipping Center"
> > because it is insured for $3,400 and that is what UPS requires. I get
> > a receipt from the shipping center stating that the item has been
> > properly packed and labeled. OK so far... Four days later a guy in New
> > Jersey at a communications business calls me. "We have your package
> > and we don't know why it came here, but we opened it and read your
> > letter inside. Looks like it is supposed to go to Colorado, what
> > should we do with it?" I tell the guy thanks for calling me and I will
> > call UPS and get back to him. I call 1-800-pickups. The first
> > "support" person hangs up on me. The second says I "should take it up
> > with the shipping center" (all they did was hold it for the truck
> > pickup, the UPS driver in reality should have scanned it upon pickup).
> > I ask to speak to a supervisor. The supervisor is cooperative and I
> > tell her I want the thing overnighted from New Jersey to Colorado
> > since it is "Guaranteed" to be there tomorrow by UPS. She says, "OK, I
> > will call NJ UPS and set that up, they will call you in one hour or
> > less." I thank her VERY much and ask for her name, title, and
> > location. She complies. I am a happy camper. One hour passes, no call,
> > two hours pass, no call. I call UPS back and ask to speak to this
> > individual and... No such individual exists!! By this time it is late
> > so I call and get another person in the morning who tells me to "take
> > it up with the shipper..." I ask to speak to HER Supervisor. Her
> > Supervisor says she will investigate and get back to me.... 7 hours go
> > by. I call her and ask for a status report. Luckily, "she exists." Her
> > answer? "Sir, since the package arrived in NJ and it was signed for;
> > it is considered a completed delivery." I ask, incredulous... "What
> > about my package?" "Sir," she says, "You need to contact the
> > individual in NJ who has your package and ask him to forward it to
> > Colorado for you. Since it was never scanned into our system there
> > will be no charge." UPS at no time took responsibility for this
> > transaction, despite my signed receipt. At no time did they offer a
> > viable solution to a problem they created. At one time I received
> > FALSE information from a UPS employee just to get me off the phone.
> > Hence; I WILL NEVER DEAL WITH UPS AGAIN, and I would urge all persons
> > to carefully consider all other alternatives before trusting anything
> > of value to UPS. Only through the kindness and honesty of an
> > individual in NJ was I able to locate and send my package to its
> > proper destination. Rest assured, when it gets to Colorado, it will
> > not have passed through UPS hands.
>
> I just use the US Postal Service. Not always the most gentle, the

> fastest, or the cheapest but it is the most convenient and reliable. I
> have heard too many horror stories about FedEx and UPS to want to use
> them for anything. And at least USPS can truly deliver anywhere in the
> country.

I just ordered from Universal in Ohio. I asked them to ship via USPS as I have had problems with UPS as I stated in another recent thread. I did have a RS DX-398 stolen by USPS and the box was returned empty! Just so happened I was in a hurry and didn't insure it. Makes me wonder if an uninsured packages are targets for theft, since that's the only one stolen. I filed a complaint but to no avail. They told me there are some dishonest people working for them. :(
DeWayne KE9K

>
> --
> Donovan Smith
> ICQ: 101193930
> http://www.integratasolutions.com

1599. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 11:00:32 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201250300.523b5199@posting.google.com>
Source record: 150235

"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<2o248.869$0Q5.308653@paloalto-snr2.gtei.net>...
clip...
>
> Does helical winding, such as used on Hamstick and similar antennas provide
> actual INDUCTIVE loading, longer ELECTRICAL length, or BOTH? And
> at what point do I reach tradeoffs that start defeating my goals? Is there ANY
> reliable, accepted source of helical RF facts and guidelines I can access via
> the internet?
>
> I'm really looking for actual, proven feedback or info here, not off-hand
> guesses or wild speculation - surely there is SOME source of program or
> test data to provide a basis for intelligent choice...
>
> Any help?

I use a lot of "hamstick bugcatcher" type antennas here. As far a
determining the efficiency, I would need to know the ground loss as a
reference. According to Reg's vertload, my present all band bugstick
on 40m in it's longest form has about 70% efficiency "IF" I had a 2
ohm ground loss. That may be hard to get.
Shows about 57% at 4 ohms . 48% at 6 ohms, and so on. Sure, the
helical windings will add to the total electrical length, but there is
a hang. You are really better of just using the large coils alone as
they will be less lossy than the narrow extra windings. I have two
versions for 40m use. My all band antenna, which is a 5 ft firestick
helical CB antenna which I cut a section out in the middle and added a
large loading coil for 80/40 meters. On 80/40m, the stinger is 5 ft
tall and thin flexible whip.For 30-10 m, I bypass the coils and vary
the stingers to tune. I can also add a 3 ft solid mast below this
antenna.
So I'm at 12 ft for this "extended" version. I also have another 6 ft
20m hamstick which I just add the 5 ft stinger to the top and it works
40m also very well. And I can add the mast to it also for 13 ft total.
Either one works like a hose and the 2nd antenna has no large hi-Q
coil at this time. I may add one later and strip off narrow windings
to further improve it. But it works great as is.
I don't know what my ground losses are, but on 40m I've NEVER had any
problem talking to anyone. In fact, from Houston to FLA at night, my
mobile is louder than my home dipole at 40 ft. We tested this many
times from here to JAX. In the day, I always get good reports. Usually
S9 plus to most, and I never run an amp. So my antennas for 40m are
about the same as what you use on 20m. I do have a bit of helical
winding below the coil, and 2 ft worth above the coil, but on the low

bands I don't think it amounts to a whole lot of inductance. Maybe some though as it's above the coil. I've found the best way to boost efficiency is by raising the coil up with lower mast. The difference is quite large. If I run only my 8 ft antenna on 40m, and had a 4 ohm ground loss, my efficiency is about 35%. Just by adding that lower 3 ft solid mast and leaving the rest the same, I jump to 57%. Now if I left the base as is with the coil about 2 ft above the base, and then add 3 ft above the coil, I only jump up to 47%. So you can see it's best to add below the coil. The best place to mount the coil in most cases is about the 2/3 to 3/4 way up the antenna. Reg's programs will tell you the best place. So for me to get the most bang for 11 ft, I would use about a 6 ft mast, a good high Q coil, and then the rest whip. I wouldn't worry too much about the narrow helical windings such as a hamstick mounted on top. You would be better of with a regular hat, not narrow winding/lossy inductance.
All inductance should be had with the less lossy hi-Q coil. So I'd stick with plain stinger whip above the coil if no hat. So to sum it all up, the best 11 ft antenna bar none, would be a regular old bugcatcher with a TALL lower mast, good 3-4 inch or larger coil, and the rest whip. In my lowly opinion anyway...MK

1600. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 11:16:33 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201250316.25354259@posting.google.com>
Source record: 150236

"Gary - KJ6Q" <davison7@gte.net> wrote in message news:<2o248.869

I might add that for my preferred antenna being the bugcatcher with a tall mast, adding a capacity hat would be the best for ultimate performance over using a another narrow loaded whip. So the "ultimate" super duper 11 ft antenna would be the tall 6 ft or so mast, hi-Q bugcatcher coil, and a capacity hat and stinger. I can see no other practical antenna beating it. It's alway better to use more capacitance above the coil than more inductance. If you add narrow wound inductance, you are taking off hi-Q lower loss windings and replacing them with higher loss windings higher up on the antenna. No bueno...:(MK

1601. Re: need suggestions for base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 11:34:44 UTC
From: Larry Deitcher <kb9ksr@adelphia.net>
Message-ID: <opb48.10318$Xw4.2258378@news1.news.adelphia.net>
Source record: 150237

I have used a 1/4 wave ground plane ant. Its a so239 with 5 12 guage wire attached to it. If you look in the arrl handbook or the now your talking book it will tell you how to build it. It should only take about 30 mins to build and cost less then $10.00 the biggest expense will be the coax cable I use rg 8m or rg8 u and lmr 400. Remember height is yor friend if you want to go some distance.

Larry
KB9KSR/PIO/OES/ORS
George Sambataro <wxperson@pcwp.com> wrote in message
news:pS%38.57423$Y17.4232141@e3500-atl2.usenetserver.com...
> HI.
>
> Although I have done HF for quite a while this 2m stuff is new to me.
>
> I recently purchased a ICOM T2H handheld and I would like to hook up a 2m
> antenna at home.
>
> My questions are these.
>
> 1. Can I use an antenna up in the attic for VHF?
>
> 2. What kind of lead should I use to connect the antenna to the radio.
> With outputing only 6 watts, I can't afford to lose much.
>
> I figure if I "get into this" 2m stuff more I can look at a more suitable
> base station but for now does this make sense?
>
> Thanks for any help.
>
> George
>
>
>

1602. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 11:46:27 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a2rgijqpm1@serra.unipi.it>
Source record: 150238

stefano <sgalast@tin.it> wrote:
> Hi Francesco,
> I officially invite you to test/verify the antenna.
> Just send me an email, we will arrange a meeting.
> stefano

Ok Stefano,
give me some time to organize people and find all necessary equipment.
More info via email shortly.

In the meanwhile, if anybody as good suggestions on test methods (that might
not all come on my mind) please contact me.

73
Francesco IZ5DWF

1603. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 12:33:25 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a2rjal$b5$1@serra.unipi.it>
Source record: 150240

Francesco Messineo <frank@ares.ccii.unipi.it> wrote:

> In the meanwhile, if anybody as good suggestions on test methods (that might

sorry, I meant "has".

Francesco IZ5DWF

1604. Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 13:20:53 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <VYc48.22725$im4.1986553961@newssvr17.news.prodigy.com>
Source record: 150242

I have had ongoing problems with swr on my HF6 and now seem to have fixed those by proper grounding. I get anywhere from 1.6:1 on 40 and 10 meters and 1.9:1 on 15 meters. 80 meters I get a 1.9:1 on a very narrow frequency when measured at the antenna.

I am using 35 feet of RG8x as transmission line. measured from the feedline point my swr is 1 point higher. I have tried an RG8 AU with the same readings.
The HF6 directions say to use a 11'2" length of 75 ohm transmission line connected to any 50 ohm coax. Friends of mine say that shouldn t make much difference in efficiency.

What are my likely problems here? I don t want to use a tuner if I don t have to use one. Is that 75 ohm line going to make that much diference? Instructions say that line is for matching in the 10 meter band.

1605. Re: Directional remote control antenna - Pls help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 13:27:27 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201250527.143cd976@posting.google.com>
Source record: 150241

Why 75 MHz?

Why not a higher frequency? The antennas would be a lot smaller and
they may allow directional antennas.

Jim
N8EE

1606. Re: Mast Issues

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 13:30:10 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C515DE0.91EDDC3C@tampabay.rr.com>
Source record: 150243

hey ken
i think if you attach the Jpole to the PVC pipe below the bottom of the J
then it doesnt matter what the mast is made of

Ken Coghill III wrote:

> HI
> I've completed building a 'copper cactus' J-Pole for 2 meters.
> Temporarily I want to mount the antenna on a 10' pole secured to our
> wooden fence. I have been told this type of antenna performs better if
> you use 1 1/2" PVC pipe instead of traditional TV masts. Comment &
> suggestions are most welcome.
>
> 73's
> --
> Ken Coghill III, WB4ZOH
>
> This message has been scanned for viruses: NONE FOUND!

1607. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 13:37:19 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <jcd48.22734$Lw4.1987233966@newssvr17.news.prodigy.com>
Source record: 150244

Correction: the 75 ohm line to be connected to any length of 50 ohm coax.
This antenna is on the ground with 24 radials ranging from 16 feet to 25
feet. Antenna is 26 feet in height. Kenwood 450S @ 100 watts.
"Jerry" <jerryaa@prodigy.net> wrote in message
news:VYc48.22725$im4.1986553961@newssvr17.news.prodigy.com...
> I have had ongoing problems with swr on my HF6 and now seem to have fixed
> those by proper grounding. I get anywhere from 1.6:1 on 40 and 10 meters
and
> 1.9:1 on 15 meters. 80 meters I get a 1.9:1 on a very narrow frequency
when
> measured at the antenna.
>
> I am using 35 feet of RG8x as transmission line. measured from the
feedline
> point my swr is 1 point higher. I have tried an RG8 AU with the same
> readings.
> The HF6 directions say to use a 11'2" length of 75 ohm transmission line
> connected to any 50 ohm coax. Friends of mine say that shouldn t make
much
> difference in efficiency.
>
> What are my likely problems here? I don t want to use a tuner if I don t
> have to use one. Is that 75 ohm line going to make that much diference?
> Instructions say that line is for matching in the 10 meter band.
>
>
>
>

1608. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 13:39:48 UTC
From: richardharrison@webtv.net
Message-ID: <12240-3C516024-10@storefull-113.iap.bryant.webtv.net>
Source record: 150245

Reg wrote
"---while sipping California red and nibbling potato crisps (UK
equivalent of pretzels)."

Sounds good to me. George W. needs to switch to the UK equivalent.
Actually, potato crisps are probably a substitute for the pretzel for
which our Pennsylvania German communities are famous.

The UK crisp is called a chip in the US. The UK chip is called a fry, or
French fry, in the US. One of the joys of patronizing a McDonalds in
England was not being asked: "Do you want fries with that?"

Best regards, Richard Harrison, KB5WZI

1609. Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 14:04:51 UTC
From: avatar <avatar@frii.com>
Message-ID: <3c516676$0$2196$7586b60c@news.frii.com>
Source record: 150246

I have installed two ground rods over the years and they both have been eaten away to a small spike in just a few years. These were copper cladded steel rods. I was recently told that a pure copper rod won't be affected by the chemical reaction. I'd like to use a 3/4 inch copper pipe, but driving a 10 foot length into the ground is a problem, especially with some clay in the soil. While a copper pipe is fairly rigid, it won't withstand a sledge hammer. I'm looking for solutions to accomplish this task.

Dave
WMAY

1610. Re: Directional remote control antenna - Pls help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 14:27:52 UTC
From: Gollywog <_eng@ilos.net>
Message-ID: <IXd48.603$8i2.19119@news2.mts.net>
Source record: 150247

Martin Hibbs <mhibbs@ipeg.com> <snip>

> Have you thought about something as simple as a tuned L-C circuit
> (something akin to a Bilal Isotron) stuck in the bottom of some sort of
> tube?<snip>
> marty...
> N7MX

I checked out http://www.rayfield.net/isotron/ (i.e. the Bilal Isotron home page I think)

This thing looks interesting. Kind of reduces the whole antenna+tank problem to it's essentials. Do the magazine reviews and promo text on the site tend to understate it's directional characteristics? Have you fooled around with one yourself?

My first impression is that there's a lot of theory at work here and Mr. Bilal probably spent many hours with a calculator before he built the first one. It can't possibly be as easy as finding the right size, shape, etc for two (capacitive) plates, mount them the right distance, orientation, etc inside an aluminum tube, then connect a "dual duty" inductor/radiator coil of suitable design between them and couple in the feed power (one way or another). Generating an RF beam like this sounds too good to be true/easy. In the past I've found this means it isn't/isn't. Have you ever seen something like this in action?

Great pointer, thanks,

Mike

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*** --oOOOo---(_)---oOOOo-- ***

1611. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 15:06:05 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <B9309ACA0DA109C0.E74BD4992F3FF5F1.47D73E905E660813@lp.airnews.net>
Source record: 150248

On 22 Jan 2002 17:51:06 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>2. I will bring an AM/FM radio and see how many local FM and AM radio
>stations I can listen to. The more FM stations I can listen to and
>the more AM stations I get during the day, the better.
>3. I will also use the AM part of the radio (on frequencies between
>broadcast stations) and check for noise sources (in case power line
>problems cause interference).

Use a shortwave receiver, and note which WWV signals you can
get...don't forget to check for noise in that range.

>Are there any other factors I should look for? More importantly, are
>there red flags to watch out for?

Built-in dimmers - even if you don't use yours, it's going to be hard
to stop the neighbors, and you won't hear their RFI during the day, so
it's hard to check for. Don't count on any apartment complex going to
the extra expense of using good ones, either...I've been thinking
about keying and tuning our dining room dimmer to see if I can get
some CW contacts from other galaxies.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net

1612. Re: Directional remote control antenna - Pls help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 15:15:48 UTC
From: Gollywog <_eng@ilos.net>
Message-ID: <EEe48.607$8i2.18971@news2.mts.net>
Source record: 150249

JLB <jim.bolinger@lintek.aeroflex.com> wrote

> Why 75 MHz? Why not a higher frequency? <snip>
> Jim
> N8EE

The real problem with changing frequency is the clock signal which is being transmitted at the same time from a quarter wave vertical on the top of the receiving small loop array. In a sentence or less - The two signals (Clock and Object) need to be related in frequency such that the clock interval undersamples the object wave to produce an alias "wave" when the sample stream is considered as sequences of n samples. OK two sentences - This requires that the ratio of the two contain prime factorizations with a limited number of commonalties. To make a very long story short, the best combo is 27.198MHz and 75.55MHz with a backup pair at 27.1476MHz and 75.41MHz. This way I get a 25:27 ratio and a 9 point alias wave being generated from each of the four points of the receiving tetrahedron (i.e. pyramid shape) for phase analysis by the DSP. The 27.1476 is an allowable 2600Hz off channel center and the 27.198 is an allowable 3000Hz. If I can solve the transmitter directivity problem I think this is where this thing belongs . Everything in bands designated for remote control (by Joe Q. Public and his kids).

Mike

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*********** (\@ @/) ***********
*** --oOOOo---(_)---oOOOo-- ***

1613. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 15:17:53 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <67C875251B376EAB.2124488AA4D8F3B3.B32B4A6906FFBFB4@lp.airnews.net>
Source record: 150250

On Thu, 24 Jan 2002 19:39:56 GMT, Richard Clark <kb7qhc@attbi.com>
wrote:

>This is simply a prejudice, but I would suspect that those models
>under $200 are suitable in Europe only where there is a high density
>of SW traffic (large signal, low sensitivity receiver).

Well, while they're hardly the match for some of the pricier models,
I've got a RS DX-398 (rebranded ATS-909, $150) and a DX-398 (rebranded
ATS-818CS, bought used for ~$100) here in my apartment, and I'm using
metal raingutters for an antenna with fair-to-good results for both
shortwave and AM broadcast band DX. Due to the electrically noisy
conditions, (apartment, and KRLD's 50kW signal nearby) and the strange
nature of the antenna connections, I had to build a good preselector
for them, but that's a one-evening, under $10 project.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net

1614. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 15:26:57 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2sgvk$13j42j$1@ID-124126.news.dfncis.de>
Source record: 150130

Ground rods make very inefficient radio ground electrodes. They are no
better than buried horizontal radials of the same length.

Save yourself the trouble of driving more rods by laying half dozen or more,
20 or 30-feet long, shallow-buried radials. You will probably notice a
change for the better.

Reg, G4FGQ

avatar <avatar@frii.com> wrote in message
news:3c516676$0$2196$7586b60c@news.frii.com...
> I have installed two ground rods over the years and they both have been
> eaten away to a small spike in just a few years. These were copper cladded
> steel rods. I was recently told that a pure copper rod won't be affected
by
> the chemical reaction. I'd like to use a 3/4 inch copper pipe, but driving
a
> 10 foot length into the ground is a problem, especially with some clay in
> the soil. While a copper pipe is fairly rigid, it won't withstand a sledge
> hammer. I'm looking for solutions to accomplish this task.
>
> Dave
> W�MAY
>
>
>

1615. Re: Directional remote control antenna - Pls help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 15:34:13 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a2rttf0edp@enews3.newsguy.com>
Source record: 150252

what you are describing is basically using the isotron to drive an open ended waveguide. the pattern will not depend on the properties of the isotron but on the size and shape of the tube. open ended waveguides are generally not very directional as the waves generated by the fields at the open end are much like simple dipole fields. a tapered horn of the proper size and shape will provide a much better pattern, maybe exciting with the isotron will provide enough loss to keep the gain down, but a short monopole or loop probe is much simpler and easier to control.

"Gollywog" <_eng@ilos.net> wrote in message
news:IXd48.603$8i2.19119@news2.mts.net...
>
> Martin Hibbs <mhibbs@ipeg.com> <snip>
>
> > Have you thought about something as simple as a tuned L-C circuit
> > (something akin to a Bilal Isotron) stuck in the bottom of some sort of
> > tube?<snip>
> > marty...
> > N7MX
>
> I checked out http://www.rayfield.net/isotron/ (i.e. the Bilal Isotron
home
> page I think)
>
> This thing looks interesting. Kind of reduces the whole antenna+tank
problem
> to it's essentials. Do the magazine reviews and promo text on the site
tend
> to understate it's directional characteristics? Have you fooled around
with
> one yourself?
>
> My first impression is that there's a lot of theory at work here and Mr.
> Bilal probably spent many hours with a calculator before he built the
first
> one. It can't possibly be as easy as finding the right size, shape, etc
for
> two (capacitive) plates, mount them the right distance, orientation, etc
> inside an aluminum tube, then connect a "dual duty" inductor/radiator coil
> of suitable design between them and couple in the feed power (one way or
> another). Generating an RF beam like this sounds too good to be true/easy.
> In the past I've found this means it isn't/isn't. Have you ever seen
> something like this in action?
>

> Great pointer, thanks,
>
> Mike
>
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> *** --oOOOo---(_)---oOOOo-- ***
>
>
>
>

1616. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 16:02:28 UTC
From: Ben <BennotCasey@ben.ben.net>
Message-ID: <3C5181B5.B4196F72@ben.ben.net>
Source record: 150251
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

Hi OM,

Why use a third party shipper like those stores ?
Pay the fee and call them for a UPS Pickup and you are using UPS
(or fedex or usps whoever picks the box up)

by using these 'authorized centers' you are under their thumb if an error

is made. Lost or damaged, that third party shipper has to file the claims

with ups/fedex/etc. not you because you are not shipping the box, the
third
party is shipper and selected the carrier ups etc.

Another tip, if you are buying an item from someone either on auction or
swap, do not let the seller ship the item, call UPS or FEDEX and have the
go and pick it up by using the call service. small fee BUT big
difference..

you are now the sender and you can file the claim if lost/stolen/damaged.

otherwise, you are under the thumb of the seller and only seller can file
the
claim with carrier.

Very complicated but once learned you can have your packages arrive !

73 ben

Brian wrote:

> Get this: I send a package to Colorado via UPS. I label the package
> with the printed Label ups.com gives you when you have an account with
> them. I drop off the package at an "Authorized UPS Shipping Center"
> because it is insured for $3,400 and that is what UPS requires. I get
> a receipt from the shipping center stating that the item has been
> properly packed and labeled. OK so far... Four days later a guy in New
> Jersey at a communications business calls me. "We have your package
> and we don't know why it came here, but we opened it and read your
> letter inside. Looks like it is supposed to go to Colorado, what
> should we do with it?" I tell the guy thanks for calling me and I will
> call UPS and get back to him. I call 1-800-pickups. The first
> "support" person hangs up on me. The second says I "should take it up
> with the shipping center" (all they did was hold it for the truck
> pickup, the UPS driver in reality should have scanned it upon pickup).
> I ask to speak to a supervisor. The supervisor is cooperative and I
> tell her I want the thing overnighted from New Jersey to Colorado

> since it is "Guaranteed" to be there tomorrow by UPS. She says, "OK, I
> will call NJ UPS and set that up, they will call you in one hour or
> less." I thank her VERY much and ask for her name, title, and
> location. She complies. I am a happy camper. One hour passes, no call,
> two hours pass, no call. I call UPS back and ask to speak to this
> individual and... No such individual exists!! By this time it is late
> so I call and get another person in the morning who tells me to "take
> it up with the shipper..." I ask to speak to HER Supervisor. Her
> Supervisor says she will investigate and get back to me.... 7 hours go
> by. I call her and ask for a status report. Luckily, "she exists." Her
> answer? "Sir, since the package arrived in NJ and it was signed for;
> it is considered a completed delivery." I ask, incredulous... "What
> about my package?" "Sir," she says, "You need to contact the
> individual in NJ who has your package and ask him to forward it to
> Colorado for you. Since it was never scanned into our system there
> will be no charge." UPS at no time took responsibility for this
> transaction, despite my signed receipt. At no time did they offer a
> viable solution to a problem they created. At one time I received
> FALSE information from a UPS employee just to get me off the phone.
> Hence; I WILL NEVER DEAL WITH UPS AGAIN, and I would urge all persons
> to carefully consider all other alternatives before trusting anything
> of value to UPS. Only through the kindness and honesty of an
> individual in NJ was I able to locate and send my package to its
> proper destination. Rest assured, when it gets to Colorado, it will
> not have passed through UPS hands.

1617. Re: FED EX - UPS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 16:04:02 UTC
From: Lou <tech@dp.net>
Message-ID: <a2rvn7$1v58$1@news.dp.net>
Source record: 150254
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

While I suppose there is a first time for everything, I've yet to have a problem "with UPS" - myself being a shipper. As for the others, I've had items delivered to me from shippers via Fed Ex, but not RPS. Not even sure if RPS is doing business in our immediate area. I've sent light and heavy items via UPS and never yet a problem or complaints from the receiving parties of any.

Two problems I "did" encounter.....

1. A package that was allegedly shipped and I never received it. NOR did my UPS delivery man recall it. According to the shipper of the item, the item was taken to shipping site. The package and ALL paperwork then disappeared. The tracking number supplied to me at drop off, kept showing "not a valid number". Assuming the shipper did ship it, which I had no reason to doubt as I dealt with them before, sounds more like a clerk problem to me. Though it did take a few weeks to get my money/items replaced, I can't say for certain whose fault that was..... as to the delay to conclude it. Could have been a delay in shipper to start the investigation, the shipping site to do their own investigation. I don't know. All in all, it wasn't too unreasonable an amount of time once I knew "something" was being done about it.

2. Around here, there used to be a few UPS shipping sites. Most stopped taking UPS.. (Mgmt changes they said) Down to about 3 sites within reasonable travel distance, two of them were reasonable in cost both small and large, even with
the site's service fee included. The third was ridiculous.

At the 3rd, I paid as much to send a small box out - as a box 25 times bigger than that - previously from one of the other sites. The other sites are now shut down. I think the 3rd shipping site was over charging on the service fee. I'm not aware of what they are allowed to charge for their fee, so I had no way to challenge it. I suppose I could have said forget it, but the clerk wrote it up before giving me an exact total INCLUDING their fee. Not wanting to look or feel like an idiot (cheap or confrontational) especially without facts to support my claim, I decided to swallow my pride and to let it go this time. But, I've yet to go back. I've been shipping primarily Postal only for that reason - unless I happen to be going near a different site which is a distance away from me.

Now I have to use the charts online for UPS and Postal to get the best rate for the individual package. Personally, I still would prefer UPS. And, if I AM going out and about, I will make the trip to the distant UPS site....

Unless some one can prove to me beyond a shadow of a doubt - otherwise, I don't believe the UPS service itself in any way, was responsible for the two

episodes I experienced.

--
Lou
E-Mail: Tech@DP.NET

"rickm" <rickm_msn@email.msn.com> wrote in message
news:ubglMNXpBHA.388@cpimsnntpa03...
> Actually, you don't need a business address for Fed Ex.
>
> Fed Ex now has a ground service that I've been using for a couple of
years.
> Haven't had any problems with it at all, and it's a heck of a lot cheaper
> than UPS.
>
> Several years ago, when I owned my own business, I had UPS deliver some
> C.O.D. packages. I made a mistake and paid for them with cash. A few
weeks
> later, UPS comes back to me and tells me they lost my check and asks me to
> rewrite the check. When I explained that I paid in cash, they told me I
was
> mistaken, and demanded another check. This went on for a couple of months
> and then I started getting harrasing phone calls from attorneys
representing
> UPS. It was a total mess, and ended up costing me several thousand
dollars.
> I agree, I'll never use UPS again.
>
> Rick, K6SIX
>
>
> "Bill Aycock" <baycock@hiwaay.net> wrote in message
> news:3C50DD2F.DB4322B7@hiwaay.net...
> > Fed-ex is fine if you are a business, have a city address, are in the
> > yellow pages, and have a sign out front. If you do not qualify, it's
> > just TS.
> > I live in a rural area- UPS found out how to find us country folk, a
> > long time ago. The first delivery FedEx tried, they got lost three
> > times, and I finally had to get them to sit still so I could find them,
> > instead of the other way.
> > The worst is RPS- they sent a semi to deliver a two pound package, and
> > got where they couldnt turn around.
> > Bill-W4BSG
> >
> > Murray Neece wrote:
> > >
> > > I have only been using them two months, but so far, even though they
> lost
> > > a set of tubes...Im much more impressed....UPS damaged about 1 out of
8
> > > packages over 35 lbs. that I sent....THEY SUCK and now YOU

> KNOW....BOYCOTT
> > > em..use fedex they are pretty good so far..73 Murray
> > >
>
>

1618. Re: need suggestions for base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 16:06:19 UTC
From: George Sambataro <wxperson@pcwp.com>
Message-ID: <qff48.83346$Ee7.5578556@e3500-atl1.usenetserver.com>
Source record: 150253

Thanks.. I try to find my ARRL handbook.. Probably time for a new one anyhow
:-)

George
"Larry Deitcher" <kb9ksr@adelphia.net> wrote in message
news:opb48.10318$Xw4.2258378@news1.news.adelphia.net...
> I have used a 1/4 wave ground plane ant. Its a so239 with 5 12 guage wire
> attached to it. If you look in the arrl handbook or the now your talking
> book it will tell you how to build it. It should only take about 30 mins
to
> build and cost less then $10.00 the biggest expense will be the coax cable
I
> use rg 8m or rg8 u and lmr 400. Remember height is yor friend if you want
to
> go some distance.
>
> Larry
> KB9KSR/PIO/OES/ORS
> George Sambataro <wxperson@pcwp.com> wrote in message
> news:pS%38.57423$Y17.4232141@e3500-atl2.usenetserver.com...
> > HI.
> >
> > Although I have done HF for quite a while this 2m stuff is new to me.
> >
> > I recently purchased a ICOM T2H handheld and I would like to hook up a
2m
> > antenna at home.
> >
> > My questions are these.
> >
> > 1. Can I use an antenna up in the attic for VHF?
> >
> > 2. What kind of lead should I use to connect the antenna to the radio.
> > With outputing only 6 watts, I can't afford to lose much.
> >
> > I figure if I "get into this" 2m stuff more I can look at a more
suitable
> > base station but for now does this make sense?
> >
> > Thanks for any help.
> >
> > George
> >
> >

> >
>
>

1619. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 16:45:01 UTC
From: richardharrison@webtv.net
Message-ID: <8278-3C518B8D-23@storefull-115.iap.bryant.webtv.net>
Source record: 150259

Ed Cregger wrote:
"If you can afford to pay rent, you can afford to buy."

Importantly, interest rates are historically low now and the interest paid on a home loan is tax deductible in the US.

Best regards, Richard Harrison, KB5WZI

1620. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 16:45:19 UTC
From: TFW <frankjg@citlink.net>
Message-ID: <u532tcnmmgak58@corp.supernews.com>
Source record: 150255
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

My company (TFW Inc) has stopped using UPS for similar reasons.

We were receiving a %20 lost shipping and damage rate.

All packages now go thru USPO Priority. Not a single failure in the last 300 ships.

Frank W9LVC

1621. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 16:52:53 UTC
From: Jon Van Allen <kf7yn@qwest.net>
Message-ID: <3C518D65.7A84DB36@qwest.net>
Source record: 150257
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

You should have checked old messages within these groups, we have been
talking about avoiding UPS for YEARS!

For packages such as the one you describe, there are other very good
alternatives such as Osborne Air Freight who want to do a good job.

Welcome to the "piss on UPS" crowd.

Jon

Brian wrote:
>
> Get this: I send a package to Colorado via UPS. <snip>

1622. New pages / features at www.ab7sl.com

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 16:56:09 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c518e35$1@news.bnb-lp.com>
Source record: 150256

Some new stuff has been added at www.ab7sl.com in the past few weeks....

1. Site search - the entire site is now indexed and searchable from the
homepage

2. Arizona Repeaters Page - covering all repeaters statewide
on ALL bands. This added some 20 pages to the site.....

3. Weather Page - shows temps for selected US cities , full weather
conditions
for Prescott,AZ and USA - World weather maps and forecasts...

4. Added a Grand Kids Photos page....they are so cute and adorable!

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

1623. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 17:11:51 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C5191D6.82AC1343@umich.edu>
Source record: 150258

Crazy George wrote:
>
> 1. Check each possible location with a portable SW receiver, preferably day
> on 20 M and at night on 40 or 75 M for noise and signals. Pay attention to
> computer and power line noises, as these won't go away.

Amen. Driving around town, there are two places I can always count on picking up QRM. One is near a small ISP, the other is near the University of Michigan's Computer Science Department. Both places can completely obliterate a major local station on by car *FM* radio! There are apartment complexes near each of these locations. I've always wondered how bad it would be to live in them.

On a related note, is there any way to force a computer installation to reduce their spurious RF output? I won't hassle the University ("...the hand that feeds you" and all), but that local ISP kinda ticks me off. They're not even all that big a place. I envision some out-of-date computers overclcked and with the cases removed to help cool them.

Bob, KI8AB

1624. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 17:18:28 UTC
From: cpa7@qwest.net
Message-ID: <3c519299.5753799@news.qwest.net>
Source record: 150260
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

I ask EVERYONE that I do bussiness with to NOT use UPS. They lie
about many things, and if you do not keep copies of EVERYthing that
shows up on their tracking pages, they will deny any problems with
their service. .....Sam in Phoenix

On 24 Jan 2002 19:24:37 -0800, k3vr@hotmail.com (Brian) wrote:

>Get this: I send a package to Colorado via UPS. I label the package
>with the printed Label ups.com gives you when you have an account with
>them. I drop off the package at an "Authorized UPS Shipping Center"
>because it is insured for $3,400 and that is what UPS requires. I get
>a receipt from the shipping center stating that the item has been
>properly packed and labeled. OK so far... Four days later a guy in New
>Jersey at a communications business calls me. "We have your package
>and we don't know why it came here, but we opened it and read your
>letter inside. Looks like it is supposed to go to Colorado, what
>should we do with it?" I tell the guy thanks for calling me and I will
>call UPS and get back to him. I call 1-800-pickups. The first
>"support" person hangs up on me. The second says I "should take it up
>with the shipping center" (all they did was hold it for the truck
>pickup, the UPS driver in reality should have scanned it upon pickup).
>I ask to speak to a supervisor. The supervisor is cooperative and I
>tell her I want the thing overnighted from New Jersey to Colorado
>since it is "Guaranteed" to be there tomorrow by UPS. She says, "OK, I
>will call NJ UPS and set that up, they will call you in one hour or
>less." I thank her VERY much and ask for her name, title, and
>location. She complies. I am a happy camper. One hour passes, no call,
>two hours pass, no call. I call UPS back and ask to speak to this
>individual and... No such individual exists!! By this time it is late
>so I call and get another person in the morning who tells me to "take
>it up with the shipper..." I ask to speak to HER Supervisor. Her
>Supervisor says she will investigate and get back to me.... 7 hours go
>by. I call her and ask for a status report. Luckily, "she exists." Her
>answer? "Sir, since the package arrived in NJ and it was signed for;
>it is considered a completed delivery." I ask, incredulous... "What
>about my package?" "Sir," she says, "You need to contact the
>individual in NJ who has your package and ask him to forward it to
>Colorado for you. Since it was never scanned into our system there
>will be no charge." UPS at no time took responsibility for this
>transaction, despite my signed receipt. At no time did they offer a
>viable solution to a problem they created. At one time I received
>FALSE information from a UPS employee just to get me off the phone.
>Hence; I WILL NEVER DEAL WITH UPS AGAIN, and I would urge all persons
>to carefully consider all other alternatives before trusting anything

>of value to UPS. Only through the kindness and honesty of an
>individual in NJ was I able to locate and send my package to its
>proper destination. Rest assured, when it gets to Colorado, it will
>not have passed through UPS hands.

1625. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 17:45:02 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <d5635ukma402bd5buganpg18ur1aq9agh2@4ax.com>
Source record: 150261

On Fri, 25 Jan 2002 09:17:53 -0600, "Joe Bramblett, KD5NRH"
<kd5nrh-r.r.a.a@kd5nrh.net> wrote:

>On Thu, 24 Jan 2002 19:39:56 GMT, Richard Clark <kb7qhc@attbi.com>
>wrote:
>
>>This is simply a prejudice, but I would suspect that those models
>>under $200 are suitable in Europe only where there is a high density
>>of SW traffic (large signal, low sensitivity receiver).
>
>Well, while they're hardly the match for some of the pricier models,
>I've got a RS DX-398 (rebranded ATS-909, $150) and a DX-398 (rebranded
>ATS-818CS, bought used for ~$100) here in my apartment, and I'm using
>metal raingutters for an antenna with fair-to-good results for both
>shortwave and AM broadcast band DX. Due to the electrically noisy
>conditions, (apartment, and KRLD's 50kW signal nearby) and the strange
>nature of the antenna connections, I had to build a good preselector
>for them, but that's a one-evening, under $10 project.
>
>
>
>Joe Bramblett, KD5NRH
>kd5nrh@kd5nrh.net

Hi Joe,

For what is worth, the additional expense really goes into features
more than sensitivity per si¿½. One such feature is the BFO. My
DX-440's BFO is rock stable, although that may not be true for all of
them. Then there is multiple conversion and filters that jack up the
price. However, this says nothing of sensitivity when TRF radios can
do just as well, or those designed around phase quadrature detectors.

73's
Richard Clark, KB7QHC

1626. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 17:51:41 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <rg635u88lqnhs5aghsi2rf30iv38agp6mc@4ax.com>
Source record: 150262

On Fri, 25 Jan 2002 09:06:05 -0600, "Joe Bramblett, KD5NRH"
<kd5nrh-r.r.a.a@kd5nrh.net> wrote:

>
>Built-in dimmers - even if you don't use yours, it's going to be hard
>to stop the neighbors, and you won't hear their RFI during the day, so
>it's hard to check for. Don't count on any apartment complex going to
>the extra expense of using good ones, either...I've been thinking
>about keying and tuning our dining room dimmer to see if I can get
>some CW contacts from other galaxies.
>
>
>
>Joe Bramblett, KD5NRH

Hi Joe,

I have dimmers installed at every light switch, and yes they do
generate quite a hash.

However this more a problem of conduction than radiation. I soon
discovered I could run my dimmers indiscriminately for casual
listening if I separated their power paths (the dimmer being on a
separate circuit from the receiver). For DX it did come in through
the antenna port, but then I simply moved the antenna feed point
further away from the house, snubbed it with ferrites, and went on
listening.

The radiative path is one of luck (bad) when house wiring is of a size
to become resonant. Electric fences that complete a loop are
especially bad in the "quiet" country side (and sometime a source of
greater grief than living next to a neon sign in the city).

73's
Richard Clark, KB7QHC

1627. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 18:08:50 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <Sah48.191$S4.262535@paloalto-snr2.gtei.net>
Source record: 150263

THANKS Reg - THAT is exactly the sort of input and pointer I am LOOKING for! :-)

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a2qp4n$13eke2$1@ID-124126.news.dfncis.de...
> Gary, if you havn't already done so, download program LOADCOIL from website
> below. Choose coil dimensions and slide the coil up and down the antenna to
> find maximum efficiency. The program automatically adjusts the number of
> coil turns to resonate the antenna to your chosen frequency at whatever
> height the coil may be.
>
> To reduce coil loss increase length of coil to enable thicker wire to be
> used.. Or increase coil diameter to enable thicker wire to be used with
> fewer turns. Or both.
>
> You may find for an antenna overall height of 11 feet, at 7 MHz, and a big
> coil, the best place to locate the coil is, mechanically very conveniently,
> at the bottom.
>
> Or it may occur that although maximum efficiency occurs half way up, the
> loss in efficiency by placing the coil at the base is so small that the
> disadvantage is more than outweighed by the mechanical conveneience.
>
> In any coil loaded antenna design the last thing to decide is height of the
> coil for maximum efficiency. The program will allow you to experiment with
> a very long, small diameter coil - a helix ! But at 7MHz you will
> probably end up with a shortish, fat coil wound with quite thick wire or
> even copper pipe. The program will allow you to suck it and see before
> obtaining the materials.
>
> There is seldom any advantage in placing the coil in a short vertical at a
> height greater than 50 or 60 percent of overall height, especially if a good
> ground connection is available. With a very good ground the best place is
> always at or near the bottom. If it's at the bottom consider locating it
> inside the tuner box inside the vehicle.
>
> Don't be surprised if your pre-conceived ideas have to changed. If you set
> yourself a very high efficiency target you may end up with a coil former the

> same size as a 50-gallon oil drum wound with 2" diameter copper pipe. ;o)
>
> In addition to program LOADCOIL you may find programs HELICAL3 and VERTLOAD
> interesting.
> --
> **************************
> Regards, Reg G4FGQ
> Free Radio Modelling Programs
> Http://www.g4fgq.com
> **************************
>
> Gary - KJ6Q <davison7@gte.net> wrote in message
> news:2o248.869$0Q5.308653@paloalto-snr2.gtei.net...
> > OK, here's the deal...
> >
> > I'm wanting to construct a mobile antenna for 7.2 mhz with an efficiency
> > of 70% or better (relative to a reference dipole). I need a PHYSICAL
> overall
> > length of about 11 feet - to be composed of a 5 foot lower section 3/8"
> fiber-
> > glass shaft, a loading coil, and an upper section of 6 feet or so of the
> same
> > material as the lower section, or part shaft, part whip... Measurements
> are
> > SOMEWHAT flexible, but overall length is not, if I am to keep it outta the
> > trees and overhead wires.
> >
> > NOW, available 'puter programs tell me I need an ELECTRICAL lower length
> > of 6 feet, a 3 inch diameter coil of 12 ga. wire, and a top section with
> an
> > ELECTRICAL length of 8 feet to reach my goal - and by the way, I am
> running
> > a 6-700 watt PEP amp in my mobile as well...
> >
> > SOooo, I am in serious need of a pointer, or info on helical winding as
> > commonly used in antennas of this type, not necessarily as the loading
> > coil itself, but as a tool to electrically alter the electrical length of
> other
> > system components - is it practical, can I expect to wind enough wire or
> > similar material on the upper and lower sections of my antenna to "fool"
> the
> > system into thinking and functioning as tho' it is a physically longer
> system?
> >
> > Is it practical or possible to merely employ a CB or ham band monoband
> > whip, such as 17 meters in a system like mine to electrically simulate a
> > longer length? It would be great if a standard existing monoband antenna
> > could serve as both the top element of a 40 meter setup, and also be used
> > on it's basic band as well! (Not in the same physical configuration, of
> > course...)

> >
> > Does helical winding, such as used on Hamstick and similar antennas
> provide
> > actual INDUCTIVE loading, longer ELECTRICAL length, or BOTH? And
> > at what point do I reach tradeoffs that start defeating my goals? Is there
> ANY
> > reliable, accepted source of helical RF facts and guidelines I can access
> via
> > the internet?
> >
> > I'm really looking for actual, proven feedback or info here, not off-hand
> > guesses or wild speculation - surely there is SOME source of program or
> > test data to provide a basis for intelligent choice...
> >
> > Any help?
> >
> > --
> > Gary - KJ6Q
> > **********
> > Two things we'll never see:
> > 1. Perpetual motion...
> > 2. A liberal Democrat complaining
> > about "Too much government"
> >
>
>

1628. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 18:17:30 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <_ih48.197$S4.270041@paloalto-snr2.gtei.net>
Source record: 150264

WELL Doc, I'm not too certain as to the accuracy of indicated efficiency as obtained from readily
available mobile antenna programs - I suspect they primarily are just good places to START playing... But I *DO* know that the operational efficiency of my 20 meter mobile setup is VERY
equivelent to my 20 meter inverted V antenna at 70 feet - and only about the expected S unit less
than my Mosley Classic 33 beam at about the same height - proved that MANY times, with MANY stations
all over the US... SOOOo, with THAT in mind, I don't feel TOO uncomfortable in accepting the 90%
efficiency figure the modeling program I was using stated my antenna was capable of...

AHHhh, but 40 meters, my OTHER primary mobile band will be a MUCH tougher challenge I'm afraid...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"'Doc" <w5lz@icok.net> wrote in message news:3C512C02.A84A5D24@icok.net...
>
>
> Gary,
> Yes, I have run the commonly used mobile antennas you
> named, both through one of the modeling programs, and from
> the back of my car. The antenna modeling programs usually
> show what I've seen in actual use (within reason). Speaking
> of 40 meters only, you will be very lucky to see something
> approaching 3-9% efficiency from any of them. (Encluded in
> that list of antennas is an 11 foot 'BugCatcher' using both
> the old 'standard' coil and the larger 8" coil, not that
> much differnce.)
> Even using the 'BugCatcher', the efficiency on the higher
> HF bands is ~well~ below 25% efficiency. If you have a mobile
> antenna that is anywhere close to 90% efficient on 20 meters,
> you better patent that thing!
> 'Doc

1629. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 18:20:02 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <mlh48.58216$eT5.2560738470@newssvr15.news.prodigy.com>
Source record: 150265

I don't know if it will work for a copper pipe, but I drove down the
grounding rods by first punching it into the ground and then wetting the
area. Then punch again and then go up and down with the rod like a plunger.
When you aren t making more progress fill the hole with water and keep
plunging away. It works. But a warning: Don't stop. I was halfway down with
a rod and was overtaken by a thunderstorm. The next day, I went out and the
rod wouldn t budge. Had to pound it the rest of the way down into the
earth.
"avatar" <avatar@frii.com> wrote in message
news:3c516676$0$2196$7586b60c@news.frii.com...
> I have installed two ground rods over the years and they both have been
> eaten away to a small spike in just a few years. These were copper cladded
> steel rods. I was recently told that a pure copper rod won't be affected
by
> the chemical reaction. I'd like to use a 3/4 inch copper pipe, but driving
a
> 10 foot length into the ground is a problem, especially with some clay in
> the soil. While a copper pipe is fairly rigid, it won't withstand a sledge
> hammer. I'm looking for solutions to accomplish this task.
>
> Dave
> W�MAY
>
>
>

1630. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 18:23:27 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <zoh48.223$S4.274678@paloalto-snr2.gtei.net>
Source record: 150266

This, and your other post, good info Mark - thanks!

I agree tha SO FAR, the Texas bugcatcher arrangements are definitely the right place to start...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0201250316.25354259@posting.google.com...
> "Gary - KJ6Q" <davison7@gte.net> wrote in message news:<2o248.869
>
> I might add that for my preferred antenna being the bugcatcher with a
> tall mast, adding a capacity hat would be the best for ultimate
> performance over using a another narrow loaded whip. So the "ultimate"
> super duper 11 ft antenna would be the tall 6 ft or so mast, hi-Q
> bugcatcher coil, and a capacity hat and stinger. I can see no other
> practical antenna beating it. It's alway better to use more
> capacitance above the coil than more inductance. If you add narrow
> wound inductance, you are taking off hi-Q lower loss windings and
> replacing them with higher loss windings higher up on the antenna. No
> bueno...:(MK

1631. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 18:28:45 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <xth48.246$S4.278547@paloalto-snr2.gtei.net>
Source record: 150267

OH, for you and Reg - I wonder if there is any program or table showing or computing the effective
additional electrical length of a capacity hat added to the top of a mobile whip?

For instance, if I fabricate a simple "X" capacity hat from a pair of 3 ft long 1/8th inch brazing
rods, and attach them to the top of a 6 foot stinger on a 20 meter monoband antenna, how much
effective length have I added to the overall whip section?

How do I find out, other than tedious cut-and-try?

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0201250316.25354259@posting.google.com...
> "Gary - KJ6Q" <davison7@gte.net> wrote in message news:<2o248.869
>
> I might add that for my preferred antenna being the bugcatcher with a
> tall mast, adding a capacity hat would be the best for ultimate
> performance over using a another narrow loaded whip. So the "ultimate"
> super duper 11 ft antenna would be the tall 6 ft or so mast, hi-Q
> bugcatcher coil, and a capacity hat and stinger. I can see no other
> practical antenna beating it. It's alway better to use more
> capacitance above the coil than more inductance. If you add narrow
> wound inductance, you are taking off hi-Q lower loss windings and
> replacing them with higher loss windings higher up on the antenna. No
> bueno...:(MK

1632. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 18:40:38 UTC
From: aa1ll@email.com
Message-ID: <e85be400.0201251040.6cdade86@posting.google.com>
Source record: 150268

'Doc <w5lz@icok.net> wrote in message news:<3C512C02.A84A5D24@icok.net>...
> Gary,
> Yes, I have run the commonly used mobile antennas you
> named, both through one of the modeling programs, and from
> the back of my car. The antenna modeling programs usually
> show what I've seen in actual use (within reason). ....
>.... 'Doc

Hi Doc,

Did you model a helical antenna with hundreds of turns
in NEC? How many elements did the model have? Just curious,
not questioning your veracity, but I have tried it and I
needed like 10 or so elements per turn and even at that I never
got anything that was consistent--the results changed de-
pending on how many elements I used. I was modeling a 40 meter
radial mode helical over infinite perfect ground.
Is there a lower limit on element size for NEC2?

73, Paul, AA1LL
Mason, NH
http://www.qsl.net/aa1ll

1633. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 18:41:14 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <ks635ugp8tcft719up75p1qgu1fpso4b7l@4ax.com>
Source record: 150119

On Fri, 25 Jan 2002 11:46:27 +0000 (UTC), Francesco Messineo
<frank@ares.ccii.unipi.it> wrote:

>stefano <sgalast@tin.it> wrote:
>> Hi Francesco,
>> I officially invite you to test/verify the antenna.
>> Just send me an email, we will arrange a meeting.
>> stefano
>
>Ok Stefano,
>give me some time to organize people and find all necessary equipment.
>More info via email shortly.
>
>In the meanwhile, if anybody as good suggestions on test methods (that might
>not all come on my mind) please contact me.
>
>73
>Francesco IZ5DWF

Hi Francesco, Stefano,

This indeed marks progress. A good source of such methods is found in
the antennex's critic and noted authority, Jack Belrose. You would do
well to examine the photographs which clearly show the care of
removing the measuring equipment well away from the antenna, and
performing the tests in the most non-reflective environment short of
lab.

Please keep us informed of all development.

73's
Richard Clark, KB7QHC

1634. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 18:43:44 UTC
From: SAM <xxscottm@xxnetcommander.comxx>
Message-ID: <AHh48.78713$fg.4865749@bin7.nnrp.aus1.giganews.com>
Source record: 150120

I'd like to use a 3/4 inch copper pipe, but driving
a 10 foot length into the ground is a problem, especially with some clay in the soil. While a copper pipe is fairly rigid, it won't withstand a sledge hammer. I'm looking for solutions to accomplish this task.

Attach a fitting that will adapt to a standard garden hose. Attach the pipe with the fitting to the garden hose and the garden hose to the water supply. Turn on the water supply so that the water is coming out the end of the pipe. Stand the pipe up on its end and start pushing. The water should dig the hole for you and allow you to slide the rod into the earth.

Scott M.

1635. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 19:16:48 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <j4i48.84716$Ee7.5699711@e3500-atl1.usenetserver.com>
Source record: 150121
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

Brian <k3vr@hotmail.com> wrote in message
news:4bfc7bb.0201241924.4fdd5373@posting.google.com...

<<snip>>

Rest assured, when it gets to Colorado, it will
> not have passed through UPS hands.

Having said that I, too, would not use UPS, I have broken my word quite a lot! Most of the
Carolina Cyclone antennas I build and ship go out UPS. I use PVC pipe for shipping containers, and that has proven to prevent the breakage they are so notorious for. I used to
get lots of broken coil covers, either by simple mashing, or slinging them on and off trucks. By
using plenty of packing material (bubble wrap, newspaper, etc), I've had pretty good results so
far (knock, knock).

When I worked in the rail industry, I used to ship as many as 20 packages per day. What got me torqued at them was the time I carefully packaged a boiler water sample, cushioned the plastic jar with several layers of bubble wrap, and put some foam sheet on the top. The package came back marked "improperly packaged". The kicker was, it wasn't even the same
box I shipped it in and all that packing was missing! I called them and received the "Yeah, right!" treatment from the rep, and I went ballistic. With quite a bit of invective, I explained to
the smart-assed lady that the box wasn't even in the same SOBing box I shipped it in. I got
pretty sassy (putting it mildly) with her! Finally, I told her, "Tell ya what, lady. You pull your
records and see how much we ship with you. I happen to be the one that decides who I am
gonna use, and YOU don't tell me what box I shipped a package in. And from now on I will
use Fed Ex. YOU can turn it crossways and shove it-- I don't give a ****!" I started shipping
via alternate shippers, and I guess UPS sort of "missed" our volume because it wasn't long before one of their suit and tie types was in my warehouse wanting to know what happened.
I had the chance to tell him, of course, and a chance to get a jab in at their customer service,
telling him about how their smart-mouthed lady was "able" to tell me what carton I shipped in.

He, too, was a little upset when he found out that they had switched boxes on me. It took a
lot of promises and begging and several visits from the customer rep before we shipped with them again.

If they pull a caper like that again on me, now that I am running my own business, it'll be a cold
day in you-know-where before I ship with them again.

73

Jerry
K4KWH
www.qsl.net/k4kwh

1636. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 19:18:07 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c51b352_1@news1.prserv.net>
Source record: 150122

SAM <xxscottm@xxnetcommander.comxx> wrote in message
news:AHh48.78713$fg.4865749@bin7.nnrp.aus1.giganews.com...
> I'd like to use a 3/4 inch copper pipe, but driving
> a 10 foot length into the ground is a problem, especially with some clay
in
> the soil. While a copper pipe is fairly rigid, it won't withstand a sledge
> hammer. I'm looking for solutions to accomplish this task.
>
> Attach a fitting that will adapt to a standard garden hose. Attach the
pipe
> with the fitting to the garden hose and the garden hose to the water
supply.
> Turn on the water supply so that the water is coming out the end of the
> pipe. Stand the pipe up on its end and start pushing. The water should
dig
> the hole for you and allow you to slide the rod into the earth.
>
> Scott M.

But after you do this, the pipe is typically in very poor contact with the remaining soil. For this to be an effective ground, the hole around the copper must be backfilled with one of the conductive materials used for this purpose. I know the name "Bentonite" to be one of this class of materials, but have no idea what it is or where to get it. Driving a rod into earth compresses the surrounding soil and leaves the rod in intimate contact, a condition not usually achieved with the water method.

--
Crazy George
Remove NO and SPAM from return address

1637. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 19:30:39 UTC
From: SAM <xxscottm@xxnetcommander.comxx>
Message-ID: <zni48.11575$vH6.639099@bin6.nnrp.aus1.giganews.com>
Source record: 150123

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message > But after you do this, the pipe is typically in very poor contact with the
> remaining soil. For this to be an effective ground, the hole around the
> copper must be backfilled with one of the conductive materials used for this
> purpose. I know the name "Bentonite" to be one of this class of materials,
> but have no idea what it is or where to get it. Driving a rod into earth
> compresses the surrounding soil and leaves the rod in intimate contact, a
> condition not usually achieved with the water method.

You may be right. I assumed that the water would actually break up the soil around the rod and actually help compact it against the rod. Maybe not.

1638. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 19:33:45 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <tqi48.13325$9z4.1858813091@newssvr16.news.prodigy.com>
Source record: 150124

Hmmm. That must be why my ground rod wiggled when I plunged it down over 7
1/2 feet. But with time wouldn t the soil conform around the rod?
"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:3c51b352_1@news1.prserv.net...
>
>
> SAM <xxscottm@xxnetcommander.comxx> wrote in message
> news:AHh48.78713$fg.4865749@bin7.nnrp.aus1.giganews.com...
> > I'd like to use a 3/4 inch copper pipe, but driving
> > a 10 foot length into the ground is a problem, especially with some clay
> in
> > the soil. While a copper pipe is fairly rigid, it won't withstand a
sledge
> > hammer. I'm looking for solutions to accomplish this task.
> >
> > Attach a fitting that will adapt to a standard garden hose. Attach the
> pipe
> > with the fitting to the garden hose and the garden hose to the water
> supply.
> > Turn on the water supply so that the water is coming out the end of the
> > pipe. Stand the pipe up on its end and start pushing. The water should
> dig
> > the hole for you and allow you to slide the rod into the earth.
> >
> > Scott M.
>
> But after you do this, the pipe is typically in very poor contact with the
> remaining soil. For this to be an effective ground, the hole around the
> copper must be backfilled with one of the conductive materials used for
this
> purpose. I know the name "Bentonite" to be one of this class of
materials,
> but have no idea what it is or where to get it. Driving a rod into earth
> compresses the surrounding soil and leaves the rod in intimate contact, a
> condition not usually achieved with the water method.
>
> --
> Crazy George
> Remove NO and SPAM from return address
>
>
>

1639. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 19:53:03 UTC
From: alex@localhost.localdomain
Message-ID: <slrna53e6q.al0.alex@homer.linux1.lan>
Source record: 150125

> copper must be backfilled with one of the conductive materials used for this
> purpose. I know the name "Bentonite" to be one of this class of materials,
> but have no idea what it is or where to get it. Driving a rod into earth

Go to the local pet supply shop and get a bag of the cheapest clay based
kitty litter there is. It is usually very close to being 100% bentonite.

1640. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 19:56:20 UTC
From: Brian <lib_mrducks@yahoo.com>
Message-ID: <ELi48.23316$ZK4.734531@typhoon.austin.rr.com>
Source record: 150126
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

To add more lunacy to the ranting:

I used to own a small computer business and had to have some parts shipped UPS red (overnight) from Seattle, Wa to Waco, Tx. The next day the package did not arrive, so I called my supplier who said the shipment went out with the other overnight pickups at 4pm. We checked the tracking # supplied, and it shows that the package never made it to the first checkpoint, but WAS picked up. I had a good supplier, so they overnighted me the part again and I received it the following day. Here's the gripper though....about 1 week later, a VERY confused FedEx employee walked into my store with my package. It did not have any FedEx shipping credentials on the box, just the UPS shipping labels and my address! The driver did not know how the package made it anywhere with UPS suff on it in the FedEx system, much less how it ended up in his truck for delivery.....all we can figure is that UPS and FedEx were at my supplier's dock at the same time and my package went with the wrong carrier....

Go figure...

Brian

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:j4i48.84716$Ee7.5699711@e3500-atl1.usenetserver.com...
>
>
>
>
> Brian <k3vr@hotmail.com> wrote in message
> news:4bfc7bb.0201241924.4fdd5373@posting.google.com...
>
> <<snip>>
>
> Rest assured, when it gets to Colorado, it will
> > not have passed through UPS hands.
>
>
> Having said that I, too, would not use UPS, I have broken my word quite a
> lot! Most of the
> Carolina Cyclone antennas I build and ship go out UPS. I use PVC pipe for
> shipping containers, and that has proven to prevent the breakage they are
so
> notorious for. I used to
> get lots of broken coil covers, either by simple mashing, or slinging them
> on and off trucks. By

> using plenty of packing material (bubble wrap, newspaper, etc), I've had
> pretty good results so
> far (knock, knock).
>
> When I worked in the rail industry, I used to ship as many as 20 packages
> per day. What got me torqued at them was the time I carefully packaged a
> boiler water sample, cushioned the plastic jar with several layers of
bubble
> wrap, and put some foam sheet on the top. The package came back marked
> "improperly packaged". The kicker was, it wasn't even the same
> box I shipped it in and all that packing was missing! I called them and
> received the "Yeah, right!" treatment from the rep, and I went ballistic.
> With quite a bit of invective, I explained to
> the smart-assed lady that the box wasn't even in the same SOBing box I
> shipped it in. I got
> pretty sassy (putting it mildly) with her! Finally, I told her, "Tell ya
> what, lady. You pull your
> records and see how much we ship with you. I happen to be the one that
> decides who I am
> gonna use, and YOU don't tell me what box I shipped a package in. And from
> now on I will
> use Fed Ex. YOU can turn it crossways and shove it-- I don't give a ****!"
> I started shipping
> via alternate shippers, and I guess UPS sort of "missed" our volume
because
> it wasn't long before one of their suit and tie types was in my warehouse
> wanting to know what happened.
> I had the chance to tell him, of course, and a chance to get a jab in at
> their customer service,
> telling him about how their smart-mouthed lady was "able" to tell me what
> carton I shipped in.
> He, too, was a little upset when he found out that they had switched boxes
> on me. It took a
> lot of promises and begging and several visits from the customer rep
before
> we shipped with them again.
>
> If they pull a caper like that again on me, now that I am running my own
> business, it'll be a cold
> day in you-know-where before I ship with them again.
>
> 73
>
> Jerry
> K4KWH
> www.qsl.net/k4kwh
>
>
>

1641. Re: Autotransformer ATU

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 20:19:29 UTC
From: "owen.home" <owen.home@ntlworld.com>
Message-ID: <X8j48.23822$Ph2.4043254@news2-win.server.ntlworld.com>
Source record: 150128

Thanks for the only reply so far George, did I phrase my question badly or
is it too obvious or something?
Thanks anyway
John

"owen.home" <owen.home@ntlworld.com> wrote in message
news:lpE38.11282$Ph2.1727980@news2-win.server.ntlworld.com...
> Help
> I have a Racal ATU from an HF navigation system, it's unbalanced in and
out
> in the form of an autotransformer with 11 input and output tappings with
> one or two vacuum variables (8-650pF) across the whole coil which consists
> of 35 turns on a 2.5" former. I believe it's designed for the lower HF
> frequencies and perhaps to match to a short vertical. The configuration
and
> use of an autotransformer isn't something I've seen in the amateur
> literature - I'd appreciate any comments as to it's capabilities and
> drawbacks as I'd like to use it or modify it for general HF use. The unit
is
> very well built with EHT cable and incorporates a 5A RF current meter
driven
> from a transformer in the output line.
> Any comments/suggestions appreciated.
> Thanks
>
> John
>
>

1642. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 20:47:20 UTC
From: "Richard A. Miles" <k7rnz@worldnet.att.net>
Message-ID: <3C51C45C.C6D83E40@worldnet.att.net>
Source record: 150129

Bentonite is used by well drillers to form an ecology seal around the casing to prevent surface water intrusion into the acquifer.
Most well drillers should be willing to sell or give it to you at a low cost. It is a fine pulverized clay.

Copper sulfate is mostly used to provide a good ground contact.

another suggestion is to use a hammer-drill for driving ground rod. Here in the Pacific Northwest we have a lot of hardpan and rocks in the soil and I have successfully driven 8ft rods using this method where the sledge hammer or slide hammer fails.

73's...Dick K7RNZ

Alex Flinsch wrote:

> > copper must be backfilled with one of the conductive materials used for this
> > purpose. I know the name "Bentonite" to be one of this class of materials,
> > but have no idea what it is or where to get it. Driving a rod into earth
>
> Go to the local pet supply shop and get a bag of the cheapest clay based
> kitty litter there is. It is usually very close to being 100% bentonite.

1643. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 20:53:10 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2sgvm$13j42j$3@ID-124126.news.dfncis.de>
Source record: 150131

Gary - KJ6Q wrote
> I wonder if there is any program or table showing or computing the
effective
> additional electrical length of a capacity hat added to the top of a
mobile whip?
>
> For instance, if I fabricate a simple "X" capacity hat from a pair of 3 ft
long 1/8th inch brazing
> rods, and attach them to the top of a 6 foot stinger on a 20 meter
monoband antenna, how much
> effective length have I added to the overall whip section?
>
> How do I find out, other than tedious cut-and-try?
==========

Gary, download program TOPHAT1 which helps design short verticals of height H surmounted by a set of N radial rods of length L.

The antenna has no loading coil in it. But in effect it is 'bottom loaded' with a coil which may be inside the vehicle - a part of an L-match tuner. The program calculates tuner inductance and capacitance values.

With top capacitance loading it doesn't make much difference where a loading coil is placed in the antenna. So for mechanical convenience place it at the bottom - inside the vehicle. The advantage of having the coil in the antenna is that it can be physically larger and therefore of higher Q.

If the coil is actually in the antenna I would prefer to place a coil about halfway up the vertical. There is then a better distribution of top-hat capacitance between ground and that part of the antenna+vehicle below the coil. At half height, coil inductance will be a bit bigger than when the coil is in a bottom-end tuner. The program doesn't calculate inductance for heights other than at the base.

Top capacitance loading is superior to coil loading because -

(1) it increases radiation resistance more than coil loading simply because it can be placed right at the top, whereas a coil turns into a dummy load when it is placed near the top. (Extremely high inductance and very low Q due to self-capacitance).

(2) There is negligible conductor loss associated with a capacitance hat.

(3) With a capacitance hat, a smaller loading or L-match inductance is needed and so, for the same coil Q, the coil loss resistance decreases. As a by-product the program estimates the difference in dB between capacitance and no-capacitance loading for a given set of antenna dimensions.

There's a BIG disadvantage - to achieve the above benefits it is necessary to have a top hat diameter equal to antenna height. This is more appropriate for a back yard than a vehicle on city streets. And in a back yard performance can be improved much more economically and conveniently just by doubling height.

Program TOPHAT1 does not calculate the equivalent extra height of N radials of length L. But you should be able to estimate it from the behaviour when L is varied with N fixed, and when N is varied with L fixed. Capacitance is approximately proportional to radial length and to the logarithm of their number.

Incidentally, you'll notice there's not much point in increasing N beyond 16 or 32, there is hardly any further increase in capacitance. Which is similar to what I've been saying for years about buried ground radials - ground loss resistance does not decrease significantly beyond 16 or 32 radials. Any more is overkill. Yes, I've heard about BL&E ;o)

Download TOPHAT1 from website below -
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

1644. Re: Autotransformer ATU

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 21:24:49 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2sson$13orvd$1@ID-124126.news.dfncis.de>
Source record: 150146

Hello John,

George said practically all there was to say about it with the limited info
you provided.

But if you like I'll repeat it.

There's a tapped coil with tuning capacitors across it. This is a classical
arrangement for matching end-fed short wire antennas to 50 ohms or what have
you. It will also match other high impedance antennas such as long wires,
an integral number of half-waves long.

But with the double-tapping for input and output it will match almost
anything to anything provided its not too extreme.

You seem uncertain about the number of vacuum-variable capacitors associated
with the coil. Draw out the full circuit on a piece of paper and you should
see what it is intended to do. Is it switchable into a Pi-network ? Is it
switchable for balanced output ?

With that size of coil it should handle 160 and 80m band antennas quite
well. A nice job. It would be shame to modify it. If you don't want it
ship it to me.

Reg G4FGQ

==========

owen.home <owen.home@ntlworld.com> wrote in message
news:X8j48.23822$Ph2.4043254@news2-win.server.ntlworld.com...
> Thanks for the only reply so far George, did I phrase my question badly or
> is it too obvious or something?
> Thanks anyway
> John
>
> "owen.home" <owen.home@ntlworld.com> wrote in message
> news:lpE38.11282$Ph2.1727980@news2-win.server.ntlworld.com...
> > Help
> > I have a Racal ATU from an HF navigation system, it's unbalanced in and
> out
> > in the form of an autotransformer with 11 input and output tappings
with
> > one or two vacuum variables (8-650pF) across the whole coil which
consists
> > of 35 turns on a 2.5" former. I believe it's designed for the lower HF
> > frequencies and perhaps to match to a short vertical. The configuration
> and

> > use of an autotransformer isn't something I've seen in the amateur
> > literature - I'd appreciate any comments as to it's capabilities and
> > drawbacks as I'd like to use it or modify it for general HF use. The
unit
> is
> > very well built with EHT cable and incorporates a 5A RF current meter
> driven
> > from a transformer in the output line.
> > Any comments/suggestions appreciated.
> > Thanks
> >
> > John
> >
> >
>
>

1645. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 21:51:57 UTC
From: matt weber <matthеww50@home.com>
Message-ID: <7qk35ug0pdkgt7jsibhcrlqqvlborfa6o0@4ax.com>
Source record: 150132
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

On Thu, 24 Jan 2002 22:21:03 -0600, Bill Aycock <baycock@hiwaay.net>
wrote:

>Fed-ex is fine if you are a business, have a city address, are in the
>yellow pages, and have a sign out front. If you do not qualify, it's
>just TS.
>I live in a rural area- UPS found out how to find us country folk, a
>long time ago. The first delivery FedEx tried, they got lost three
>times, and I finally had to get them to sit still so I could find them,
>instead of the other way.
>The worst is RPS- they sent a semi to deliver a two pound package, and
>got where they couldnt turn around.
YOu are little behind the times, RPS is FEDEX these days...

1646. Re: SWR, needles in eyes, same thing to me

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 22:15:39 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C51D977.7ED3C7EF@bellatlantic.net>
Source record: 150133

Kamatu wrote:

> "Richard Clark" <kb7qhc@attbi.com> wrote in message
> news:8af92u04cteng9ip9aheo0dn5sn0udn7pl@4ax.com...
> > On Sat, 22 Dec 2001 07:36:01 -0500, "Kamatu" <admin@ahww.net> wrote:
> >
> > >
> > >"Richard Clark" <kb7qhc@attbi.com> wrote in message
> > >news:l6f82u0gj3lvi1nfoi1r7u1srlbsag2pj5@4ax.com...
> > >> On Fri, 21 Dec 2001 23:43:07 -0500, "Kamatu" <admin@ahww.net> wrote:
> > >>
> > >> >
> > >> >"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> > >> >news:a00tv5hhj8@paris.btinternet.com...
> > >> >
> > >> >> Obsession with SWR is a defect of an operator's mental processes.
> And
> > >of
> > >> >> authors of magazine articles and technical editors. It seldom
> bothers
> > >the
> > >> >> transmitter.
> > >> >
> > >> >
> > >> >I've noticed a SWR of 5 or higher makes all the panel lights blink and
> > >pops
> > >> >the breaker on the power supply at extended transmits.
> > >>
> > >> Hi Jim,
> > >>
> > >> Classic evidence of Common Mode currents returning down the outer
> > >> shield of your feedline. Choke the drivepoint as I described. You
> > >> can confirm (or reject) this with the extremely simple test I already
> > >> offered.
> > >>
> > >
> > >The choke would be 4 turns at 5", or 5 turns at 4"?
> >
> >
> > Bye Jim,
> >
> > Good luck....
> >
>

> Eat me I guess.
> I was asking a serious question.
>
> All you people this easily annoyed?

Not annoyed - frustrated. He gave you the dimensions
in his first reply, the same day you asked. It is fair to
expect the person asking the original question (that
would be you) to read the reply - and to re-read it
if it was forgotten. His attempts to help you were
frustrated by your lack of reading the reply.

1647. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 22:22:07 UTC
From: Ken Finney <kenneth.c.finney@boeing.com>
Message-ID: <3C51DA8F.1BDC@boeing.com>
Source record: 150134
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

Something that most people don't know about is that the radiation of
mail to eliminate anthrax WILL destroy electronic equipment and part.
There is a somewhat benign warning on www.jedec.org.

Bottom line, don't use the Post Office to mail electronics to zip codes
that begin 202 through 205.

1648. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 22:56:44 UTC
From: AB7RS <ab7rs@arrl.net>
Message-ID: <u53om0ic9dr0d8@corp.supernews.com>
Source record: 150135
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

Many of the parcels I deliver for the US postal service are ones that the sender and probably the recipient wanted to go fedX...but fedX remailed it to save themselves a trip.Might as well use the postal service to begin with.
TG
"Murray Neece" <radioranch@cableone.net> wrote in message news:3C50F029.5FBB21D2@cableone.net...
> I have only been using them two months, but so far, even though they lost
> a set of tubes...Im much more impressed....UPS damaged about 1 out of 8
> packages over 35 lbs. that I sent....THEY SUCK and now YOU KNOW....BOYCOTT
> em..use fedex they are pretty good so far..73 Murray
>
> Brian wrote:
>
> > Get this: I send a package to Colorado via UPS. I label the package
> > with the printed Label ups.com gives you when you have an account with
> > them. I drop off the package at an "Authorized UPS Shipping Center"
> > because it is insured for $3,400 and that is what UPS requires. I get
> > a receipt from the shipping center stating that the item has been
> > properly packed and labeled. OK so far... Four days later a guy in New
> > Jersey at a communications business calls me. "We have your package
> > and we don't know why it came here, but we opened it and read your
> > letter inside. Looks like it is supposed to go to Colorado, what
> > should we do with it?" I tell the guy thanks for calling me and I will
> > call UPS and get back to him. I call 1-800-pickups. The first
> > "support" person hangs up on me. The second says I "should take it up
> > with the shipping center" (all they did was hold it for the truck
> > pickup, the UPS driver in reality should have scanned it upon pickup).
> > I ask to speak to a supervisor. The supervisor is cooperative and I
> > tell her I want the thing overnighted from New Jersey to Colorado
> > since it is "Guaranteed" to be there tomorrow by UPS. She says, "OK, I
> > will call NJ UPS and set that up, they will call you in one hour or
> > less." I thank her VERY much and ask for her name, title, and
> > location. She complies. I am a happy camper. One hour passes, no call,
> > two hours pass, no call. I call UPS back and ask to speak to this
> > individual and... No such individual exists!! By this time it is late
> > so I call and get another person in the morning who tells me to "take
> > it up with the shipper..." I ask to speak to HER Supervisor. Her
> > Supervisor says she will investigate and get back to me.... 7 hours go
> > by. I call her and ask for a status report. Luckily, "she exists." Her
> > answer? "Sir, since the package arrived in NJ and it was signed for;
> > it is considered a completed delivery." I ask, incredulous... "What
> > about my package?" "Sir," she says, "You need to contact the

> > individual in NJ who has your package and ask him to forward it to
> > Colorado for you. Since it was never scanned into our system there
> > will be no charge." UPS at no time took responsibility for this
> > transaction, despite my signed receipt. At no time did they offer a
> > viable solution to a problem they created. At one time I received
> > FALSE information from a UPS employee just to get me off the phone.
> > Hence; I WILL NEVER DEAL WITH UPS AGAIN, and I would urge all persons
> > to carefully consider all other alternatives before trusting anything
> > of value to UPS. Only through the kindness and honesty of an
> > individual in NJ was I able to locate and send my package to its
> > proper destination. Rest assured, when it gets to Colorado, it will
> > not have passed through UPS hands.
>

1649. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 23:12:22 UTC
From: Bill Grimwood <bill@grimwood.net>
Message-ID: <gvl48.48165$h31.3036028@e420r-atl1.usenetserver.com>
Source record: 150136

Use a fence post driver available at most hardware stores and the ground rod drives in easy.

Bill

KG4NAC

"avatar" <avatar@frii.com> wrote in message
news:3c516676$0$2196$7586b60c@news.frii.com...
> I have installed two ground rods over the years and they both have been
> eaten away to a small spike in just a few years. These were copper cladded
> steel rods. I was recently told that a pure copper rod won't be affected
by
> the chemical reaction. I'd like to use a 3/4 inch copper pipe, but driving
a
> 10 foot length into the ground is a problem, especially with some clay in
> the soil. While a copper pipe is fairly rigid, it won't withstand a sledge
> hammer. I'm looking for solutions to accomplish this task.
>
> Dave
> W&#65533;MAY
>
>
>

1650. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 23:21:56 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C51E894.21590E63@coqui.net>
Source record: 150137
Cross-posted to: rec.radio.swap,rec.radio.shortwave,rec.radio.amateur.antenna

AB7RS wrote:
>
> Many of the parcels I deliver for the US postal service are ones that the
> sender and probably the recipient wanted to go fedX...but fedX remailed it
> to save themselves a trip.Might as well use the postal service to begin
> with.
> TG

I understood that back in early September the USPS had started using Fedex facilities for moving some Priority and Express mail. My own delivery times took a nose-dive then and have just gotten back to normal since 9/11. Had a (another) Priority package arrive in less than 48 hours just the other day from my remote QTH (offshore island of Puerto Rico) to a town in the Midwest. Amazing.

-Bill WX4A

1651. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 23:29:25 UTC
From: Louis Bybee <louisb@datacomm.com>
Message-ID: <3C51EA55.2ABF9961@datacomm.com>
Source record: 150138

"Bentonite" is a form of clay.

Louis

Crazy George wrote:
>
> SAM <xxscottm@xxnetcommander.comxx> wrote in message
> news:AHh48.78713$fg.4865749@bin7.nnrp.aus1.giganews.com...
> > I'd like to use a 3/4 inch copper pipe, but driving
> > a 10 foot length into the ground is a problem, especially with some clay
> in
> > the soil. While a copper pipe is fairly rigid, it won't withstand a sledge
> > hammer. I'm looking for solutions to accomplish this task.
> >
> > Attach a fitting that will adapt to a standard garden hose. Attach the
> pipe
> > with the fitting to the garden hose and the garden hose to the water
> supply.
> > Turn on the water supply so that the water is coming out the end of the
> > pipe. Stand the pipe up on its end and start pushing. The water should
> dig
> > the hole for you and allow you to slide the rod into the earth.
> >
> > Scott M.
>
> But after you do this, the pipe is typically in very poor contact with the
> remaining soil. For this to be an effective ground, the hole around the
> copper must be backfilled with one of the conductive materials used for this
> purpose. I know the name "Bentonite" to be one of this class of materials,
> but have no idea what it is or where to get it. Driving a rod into earth
> compresses the surrounding soil and leaves the rod in intimate contact, a
> condition not usually achieved with the water method.
>
> --
> Crazy George
> Remove NO and SPAM from return address

1652. Tilted Beverage

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 23:32:51 UTC
From: jpat <jpat@sonic.net>
Message-ID: <DWl48.13142$TI3.129067@typhoon.sonic.net>
Source record: 150140

Recently I came across a 1000' spool of wire I had always intended to use to build a T2FD with but never got around to erecting the supports. Wanting to get my shortwave (AOR 7030+) fired up, I decided to throw up a beverage. I figured it would be a waste of time but thought I should at least be able to hear something. The reason I was pesimistic is that my house sits halfway up a 1000' hill. Here on the west coast (USA), shortpath to just about anyway is north and the peak of the hill is due north from my house. Not to be confused by the facts, I strung the beverage up anyway, running it up the side of the hill which averages about a 25 deg. slope. I wound a 9:1 balun, drove a couple of 10' copper stakes in the ground, layed out a few counterpoise radials, terminated the far end (at the top of the hill) with a 470 ohm resister and called it done. In the two weeks since I've had it up I have been absolutely amazed at the results. I can consistantly listen to Middle Eastern stations (KOL, Kuait, Egypt, UAE) 5/9 and Southern Africa 4/7. I am working these over the Artic Circle as verified by the 25 dB null I am getting to South America when I attach the end termination. This morning I pulled in Makassar Indonesia which runs only 25 kW.

Does this surprise anyone but me? I would think the hill would shade all the low angle radiation coming from the north. Isn't my effective angle of radiation something like 50 deg? (25 from the hill anfd 25 from the antenna). Whats up with this?

Not complaining, just curious.
Jeff Patterson

--
Jeff Patterson
R&D Engineer
Agilent Technologies

1653. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 23:33:02 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3C51EB2E.C51DEFF1@hiwaay.net>
Source record: 150139
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

I was not talking about "these days". The truck was marked "RPS", and
the operation was pretty stupid.
Bill-W4BSG

matt weber wrote:

> YOu are little behind the times, RPS is FEDEX these days...

1654. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 23:37:11 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <H_l48.863$S4.546868@paloalto-snr2.gtei.net>
Source record: 150141

GEEZE, I hate to be asking so many questions (but how ELSE to learn - or display my ignorance...)...

I have found that there is a pronounced observable change in loading of a mobile whip/capacity hat
when the capacity element is moved up or down on the whip portion of a center loaded whip (probably
true of ALL whips...). Sometimes it SEEMS that substantially LOWERING the mounting point of the
capacity hat has relatively small effect on the overall tuning and performance of the antenna as a
whole - sometimes I have even mounted the capacity hat immediately above the coil, with results
nearly as good as up near the top of the whip.

Any comment?

--
Gary - KJ6Q
****

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a2sgvm$13j42j$3@ID-124126.news.dfncis.de...
>
>
> Gary - KJ6Q wrote
> > I wonder if there is any program or table showing or computing the
> effective
> > additional electrical length of a capacity hat added to the top of a
> mobile whip?
> >
> > For instance, if I fabricate a simple "X" capacity hat from a pair of 3 ft
> long 1/8th inch brazing
> > rods, and attach them to the top of a 6 foot stinger on a 20 meter
> monoband antenna, how much

1655. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 23:41:13 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <s2m48.866$S4.549725@paloalto-snr2.gtei.net>
Source record: 150142

UMMmmm - dancing fingers messed up - I left out the word "not" in the lead paragraph below...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:H_l48.863$S4.546868@paloalto-snr2.gtei.net...
> GEEZE, I hate to be asking so many questions (but how ELSE to learn - or display my ignorance...)...
>
> I have found that (frequently) there is NOT a pronounced observable change in loading of a mobile
whip/capacity hat
> when the capacity element is moved up or down on the whip portion of a center loaded whip (probably
> true of ALL whips...). Sometimes it SEEMS that substantially LOWERING the mounting point of the
> capacity hat has relatively small effect on the overall tuning and performance of the antenna as a
> whole - sometimes I have even mounted the capacity hat immediately above the coil, with results
> nearly as good as up near the top of the whip.
>
> Any comment?
>
> --
> Gary - KJ6Q
> **********
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:a2sgvm$13j42j$3@ID-124126.news.dfncis.de...
> >
> >
> > Gary - KJ6Q wrote
> > > I wonder if there is any program or table showing or computing the
> > effective
> > > additional electrical length of a capacity hat added to the top of a
> > mobile whip?
> > >

> > > For instance, if I fabricate a simple "X" capacity hat from a pair of 3 ft
> > long 1/8th inch brazing
> > > rods, and attach them to the top of a 6 foot stinger on a 20 meter
> > monoband antenna, how much
>

1656. Estimating ground plane efficiency -- a confession

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-25 23:51:40 UTC
From: zygo@azstarnet.com
Message-ID: <zygo-2501021651420001@10.0.0.2>
Source record: 150143

In article <zygo-2401020859040001@10.0.0.2>, zygo@azstarnet.com (Jim Mandaville) wrote:

> I'm trying to estimate as closely as possible the efficiency (pwr radiated
> over pwr delivered by feedline)
> of my 14 MHz ground plane.

I thank all for their comments. I'll now make a confession to explain why I was asking about something seemingly of little practical importance (as at least one responder gently hinted :). I can, after some trimming, use this antenna on 14 MHz. It is now resonant, however, on 13.5 MHz, where I'm using it for a Part 15 beacon, the output of which is regulated by FCC rules. The rules allow me a field strength of 10,000 microvolts/meter at a distance of 30 meters from the antenna. A rule of thumb among the small group of people involved in such "hifer" beacons, is that this will be produced by a dipole fed with 1.8 mW (many settle for 2 mW). At first I was not sure where this number came from, whether from someone's empirical measurements or from calculations. Although I'm a non-engineer with sub-calculus math I decided to take a stab at such a calculation with the help of a couple of references and amazed myself by actually coming up with the same power level (after allowing for the 2 dB difference between a real dipole and the isotropic of the calculations). It struck me, however, that this assumes an antenna with 100 percent efficiency. To produce the given field strength, one has to increase the power to make up for any inefficiency. Thus my concern for that factor.

In short I'm trying to produce the maximum allowed field strength by setting my transmitter output power to make allowances for my 0.2 dB transission line loss, the 0.5 dB gain difference between a dipole and a ground plane with drooped radials, and the efficiency figure of the antenna itself. (Using 90 percent as the efficiency, along with those other losses, I come up with a need for 2.3 mW into my feed line to do the job). Measuring power at such low levels is not a simple thing, but I've

got two independent means to measure it to 1 percent accuracy.

Probably the majority of such hifer operators are not all this concerned with power accuracy
at this low level, but I just considered it a technical challenge that would be amusing to deal with.

By the way, I'd love to have any reception reports of my beacon, which runs 24 hours a day on
13.5545 MHz, repeating its CW ID "AZ" at 12 wpm. So far it's been heard in Texas and at three
places in California.

Cheers, Jim Mandaville, Tucson, AZ, KF7A

1657. Re: Estimating ground plane efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 00:30:05 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2t7dr$13i68i$1@ID-124126.news.dfncis.de>
Source record: 150160

It seems this is the end of the thread. No doubt readers will draw their
own conclusions.

Reg, G4FGQ

1658. Re: Tilted Beverage

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 00:32:34 UTC
From: zygo@azstarnet.com
Message-ID: <zygo-2501021732340001@10.0.0.2>
Source record: 150147

> I can consistantly listen to Middle Eastern
> stations (KOL, Kuait, Egypt, UAE) 5/9 and Southern Africa 4/7....
> Does this surprise anyone but me?

Well, I regularly hear Kuwait and Bangalore, India on my 1940 Hallicrafters with an indoor antenna 15 feet long. I'm not sure how to report the signal strength, as the SX-28 has a rather squirrely S-meter. But it's quite good copy at grey-path time. So I guess I'm not surprised. But did you string out the whole one thousand feet?? Don't reel it in. I've never used one but hear it can do good things for you at lower frequencies.

Jim Mandaville, KF7A

1659. Re: Directional remote control antenna - Pls help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 00:41:15 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3C51FB2B.E6A90A01@ipeg.com>
Source record: 150148

> > Martin Hibbs <mhibbs@ipeg.com> <snip>
> >
> > > Have you thought about something as simple as a tuned L-C circuit
> > > (something akin to a Bilal Isotron) stuck in the bottom of some sort of
> > > tube?<snip>
> > > marty...
> > > N7MX
> >
> > I checked out http://www.rayfield.net/isotron/ (i.e. the Bilal Isotron
> home
> > page I think)
> >
> > This thing looks interesting. Kind of reduces the whole antenna+tank
> problem
> > to it's essentials. Do the magazine reviews and promo text on the site
> tend
> > to understate it's directional characteristics? Have you fooled around
> with
> > one yourself?
> >
> > My first impression is that there's a lot of theory at work here and Mr.
> > Bilal probably spent many hours with a calculator before he built the
> first
> > one. It can't possibly be as easy as finding the right size, shape, etc
> for
> > two (capacitive) plates, mount them the right distance, orientation, etc
> > inside an aluminum tube, then connect a "dual duty" inductor/radiator coil
> > of suitable design between them and couple in the feed power (one way or
> > another). Generating an RF beam like this sounds too good to be true/easy.
> > In the past I've found this means it isn't/isn't. Have you ever seen
> > something like this in action?

I've not used an L-C circuit like this (in a tube) but I have used a
simple stubby rubber duck in a tube at VHF and UHF at reduced power to
achieve results much like you say you want. Try it, it just might work
for you. My L-C suggestion was merely an attempt to get you thinking in
terms of a reduced size radiator instead of a normal 1/4 wave or
variation thereof.

marty...
N7MX

1660. Re: Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 00:43:41 UTC
From: John Reed <jreed@NOSPAM.thor.atl.ga.us>
Message-ID: <u53utvo12avl3b@corp.supernews.com>
Source record: 150149

I've read all the other threads to date - thanks!

On the Ford Explorer, on the rear left side, about 2-3 inches below the left rear quarter-panel window, there's the ball.

There's very little metal between the antenna and the rest of the vehicle - there's only about 2 feet of "car" and the rest of the antenna is well above the vehicle.

Ground is good. If you use a VOM and just look for a dead-short - you have continuity between the base of the antenna / coax braid connection and another good strong ground point on the other side of the vehicle. It appears that we have good ground. I could be mistaken.

I probably need to get some digital pictures together so you guys can eyeball the installation to see if you see anything funky.

John
N4TII

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:11777-3C50E7D8-225@storefull-111.iap.bryant.webtv.net...
> John, N4TII wrote:
> "Anything we should be looking for?"
>
> With a ballmount, it is important to ensure a good bite into the metal
> car body so that both ends of your coax are well grounded.
>
> It is important that the coax is perfect.
>
> You got a 1.6:1 SWR on 10m with an 8 ft whip. Remember that the 1/4-wave
> whip may be resonant and have a drivepoint impedance of 25 to 30 ohms.
> You are connecting it with a 50-ohm cable. Don`t expect a 1:1 match. The
> SWR can`t be helped without a network at the whip for a better match.
> but the radio match may be improved by changing the cable length.
>
> Best regards, Richard Harrison, KB5WZI
>

1661. Re: Tilted Beverage

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 01:07:19 UTC
From: jpat <jpat@sonic.net>
Message-ID: <bjn48.13165$TI3.129902@typhoon.sonic.net>
Source record: 150150

Jim Mandaville <zygo@azstarnet.com> wrote:
:> I can consistantly listen to Middle Eastern
:> stations (KOL, Kuait, Egypt, UAE) 5/9 and Southern Africa 4/7....
:> Does this surprise anyone but me?

: Well, I regularly hear Kuwait and Bangalore, India on my 1940
: Hallicrafters with an indoor antenna 15 feet long. I'm not sure how to

Hi Jim,
Thanks for the response.

Bangalore is a 500kw powehouse and Kuwait (200 kW) beams to NA. On 45 meters, I'm picking up African, Chinese and Russian regionals, Myanmar (50 kW Indonesian pointed sideways from me) etc. Other west coast SWLs are green. Take my word, this antenna rocks.

I used 950' wire to get to the top of the hill. Didn't start down the other side. One thing that I've noticed is this antenna is much quieter than the 100 foot longwire (60' high) I used to have.

I guess angle of radiation isn't that important for reception?

--
Jeff Patterson
Site Administrator
The Melanoma Patients' Information Page
http://www.mpip.org/

1662. Re: Minibean Antenna I looking for

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 01:09:17 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <3C5201BD.2C03BDAD@lucent.com>
Source record: 150144

A friend and I just put up and evaluated the new Cushcraft minibeam with capacitively loaded elements. Nice front to side and very surprising front to back. Much better then that Butterworth (or whatever) thing. Looks nice on a mast, very low profile. Quality construction and solid engineering. SS hardware as well. Good swr bandwidth but not great (To me this means high efficiency and high q) The tuner in your rig will get you to the band edges but for other than 20 it covers most of the band anyway. Of course my fiend would love to sell you the Mrs. Butterworth. hihi That thing has so many poor connections it's practically 50 ohms resistive!

Tony WA6LZH

Jose Manuel wrote:

> Waht is the best minibeam antenna??
> --
> www.ea8ee.es.fm

1663. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 01:10:56 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <3C520220.D10AAE00@lucent.com>
Source record: 150145

How about cutting the ground end into a wedge and sharpen it then drive a piece of wood into the hit end then slam away. Cut off the wood end when it's driven all the way.

avatar wrote:

> I have installed two ground rods over the years and they both have been
> eaten away to a small spike in just a few years. These were copper cladded
> steel rods. I was recently told that a pure copper rod won't be affected by
> the chemical reaction. I'd like to use a 3/4 inch copper pipe, but driving a
> 10 foot length into the ground is a problem, especially with some clay in
> the soil. While a copper pipe is fairly rigid, it won't withstand a sledge
> hammer. I'm looking for solutions to accomplish this task.
>
> Dave
> Wï¿½MAY

1664. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 01:20:12 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c520466_2@news.iglou.com>
Source record: 150151

Home Depot sells drill bits 6' long. Drill the hole a tad smaller than the pipe.

--
Steve Ellington
N4LQ
"Tony Angerame" <tangeram@lucent.com> wrote in message
news:3C520220.D10AAE00@lucent.com...
> How about cutting the ground end into a wedge and sharpen it then drive a piece
> of wood into the hit end then slam away. Cut off the wood end when it's driven
> all the way.
>
> avatar wrote:
>
> > I have installed two ground rods over the years and they both have been
> > eaten away to a small spike in just a few years. These were copper cladded
> > steel rods. I was recently told that a pure copper rod won't be affected by
> > the chemical reaction. I'd like to use a 3/4 inch copper pipe, but driving a
> > 10 foot length into the ground is a problem, especially with some clay in
> > the soil. While a copper pipe is fairly rigid, it won't withstand a sledge
> > hammer. I'm looking for solutions to accomplish this task.
> >
> > Dave
> > W�MAY
>

1665. Re: Autotransformer ATU

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 01:29:03 UTC
From: "owen.home" <owen.home@ntlworld.com>
Message-ID: <kHn48.25338$Ph2.4314691@news2-win.server.ntlworld.com>
Source record: 150152

Reg
Thanks for the reply, I guessed it would be OK for 1.6 to about 4Mc/s as it's designed for HF navigation apparatus and I think it's part of a mobile system so a short vertical is probably a good guess. The circuit is exactly as I've described - with one or two vacuum variables across the whole coil where the second one is switched in parallel with the first via a chunky reed relay providing a total range of 8 to 1300pF, it's unbalanced in and out and is not switchable to a pi network. The only aspect I left out is that there are direct bypass positions on both input and output tapping switches.
Part of my question was because I've never seen this configuration shown as such in any of the amateur literature so I guess that maybe it's because it doesn't provide any harmonic suppression?, my other concern was that there is no series capacitor on the input to tune out the reactance of the input part of the coil as I've seen in link coupled circuits but my understanding of ATUs is a bit hazy as I've never applied myself to the problem and there's so much written about so many configurations for such a relatively simple task so I'm going to start back at first principles.
I'll just put some RF through the ATU and try it once I've changed the Lemo connectors on it.
John

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:a2sson$13orvd$1@ID-124126.news.dfncis.de...
> Hello John,
>
> George said practically all there was to say about it with the limited info
> you provided.
>
> But if you like I'll repeat it.
>
> There's a tapped coil with tuning capacitors across it. This is a classical
> arrangement for matching end-fed short wire antennas to 50 ohms or what have
> you. It will also match other high impedance antennas such as long wires,
> an integral number of half-waves long.
>
> But with the double-tapping for input and output it will match almost
> anything to anything provided its not too extreme.
>
> You seem uncertain about the number of vacuum-variable capacitors associated

> with the coil. Draw out the full circuit on a piece of paper and you
should
> see what it is intended to do. Is it switchable into a Pi-network ? Is
it
> switchable for balanced output ?
>
> With that size of coil it should handle 160 and 80m band antennas quite
> well. A nice job. It would be shame to modify it. If you don't want it
> ship it to me.
> ---
> Reg G4FGQ
>
> ==
>
> owen.home <owen.home@ntlworld.com> wrote in message
> news:X8j48.23822$Ph2.4043254@news2-win.server.ntlworld.com...
> > Thanks for the only reply so far George, did I phrase my question badly
or
> > is it too obvious or something?
> > Thanks anyway
> > John
> >
> > "owen.home" <owen.home@ntlworld.com> wrote in message
> > news:lpE38.11282$Ph2.1727980@news2-win.server.ntlworld.com...
> > > Help
> > > I have a Racal ATU from an HF navigation system, it's unbalanced in
and
> > out
> > > in the form of an autotransformer with 11 input and output tappings
> with
> > > one or two vacuum variables (8-650pF) across the whole coil which
> consists
> > > of 35 turns on a 2.5" former. I believe it's designed for the lower HF
> > > frequencies and perhaps to match to a short vertical. The
configuration
> > and
> > > use of an autotransformer isn't something I've seen in the amateur
> > > literature - I'd appreciate any comments as to it's capabilities and
> > > drawbacks as I'd like to use it or modify it for general HF use. The
> unit
> > is
> > > very well built with EHT cable and incorporates a 5A RF current meter
> > driven
> > > from a transformer in the output line.
> > > Any comments/suggestions appreciated.
> > > Thanks
> > >
> > > John
> > >
> > >

> >
> >
>
>

1666. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 01:45:49 UTC
From: K7SAM <2smoore@nemontel.net>
Message-ID: <IOn48.48677$h31.3083955@e420r-atl1.usenetserver.com>
Source record: 150153

Have used the garden hose and pipe trick many times. If you think the ground rod is not in good contact with the ground let is set for a week and try to pull that 8' rod out. If you have the same luck I do you will need a "handyman" jack to get it back out of the ground. Have never had any trouble making good grounds using this system and have a total of 8 ground rounds around the house.

Sam
K7SAM

1667. Re: PAR OMNI HORZOTAL UHF ANTENNAS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 01:49:34 UTC
From: ZX11D <w9jcm@arrl.net>
Message-ID: <OWn48.997$mv.7249@newsfeed.intelenet.net>
Source record: 150154
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.scanner

it it worked so great whats the reason your selling them?
"WILLIAM C FORVIK" <n0mnb@email.msn.com> wrote in message
news:ejrS6fdpBHA.1504@cpimsnntpa03...
> 4 SALE USED 1 MONTH TWO PAR 432 ANTENNAS WITH CO-PHASING HARNESS
> WORK GREAT BOTH MOBLIE AND FIXED
> 3DB GAIN SEE IT AT E-BAY
> 1326292265
>
> SEE PICTURE
>
>

1668. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 02:26:40 UTC
From: "Security Unlimited Inc." <securit1951@earthlink.net>
Message-ID: <Ato48.15843$ag5.1386642@newsread2.prod.itd.earthlink.net>
Source record: 150155
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

LIKE I SAID UPS IS FULL OF SHIT 24/7!
"Brian" <lib_mrducks@yahoo.com> wrote in message
news:ELi48.23316$ZK4.734531@typhoon.austin.rr.com...
> To add more lunacy to the ranting:
>
> I used to own a small computer business and had to have some parts shipped
> UPS red (overnight) from Seattle, Wa to Waco, Tx. The next day the
package
> did not arrive, so I called my supplier who said the shipment went out
with
> the other overnight pickups at 4pm. We checked the tracking # supplied,
and
> it shows that the package never made it to the first checkpoint, but WAS
> picked up. I had a good supplier, so they overnighted me the part again
and
> I received it the following day. Here's the gripper though....about 1
week
> later, a VERY confused FedEx employee walked into my store with my
package.
> It did not have any FedEx shipping credentials on the box, just the UPS
> shipping labels and my address! The driver did not know how the package
> made it anywhere with UPS suff on it in the FedEx system, much less how it
> ended up in his truck for delivery.....all we can figure is that UPS and
> FedEx were at my supplier's dock at the same time and my package went with
> the wrong carrier....
>
> Go figure...
>
> Brian
>
> "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
> news:j4i48.84716$Ee7.5699711@e3500-atl1.usenetserver.com...
> >
> >
> >
> >
> > Brian <k3vr@hotmail.com> wrote in message
> > news:4bfc7bb.0201241924.4fdd5373@posting.google.com...
> >
> > <<snip>>
> >
> > Rest assured, when it gets to Colorado, it will
> > > not have passed through UPS hands.

> >
> >
> > Having said that I, too, would not use UPS, I have broken my word quite
a
> > lot! Most of the
> > Carolina Cyclone antennas I build and ship go out UPS. I use PVC pipe
for
> > shipping containers, and that has proven to prevent the breakage they
are
> so
> > notorious for. I used to
> > get lots of broken coil covers, either by simple mashing, or slinging
them
> > on and off trucks. By
> > using plenty of packing material (bubble wrap, newspaper, etc), I've had
> > pretty good results so
> > far (knock, knock).
> >
> > When I worked in the rail industry, I used to ship as many as 20
packages
> > per day. What got me torqued at them was the time I carefully packaged a
> > boiler water sample, cushioned the plastic jar with several layers of
> bubble
> > wrap, and put some foam sheet on the top. The package came back marked
> > "improperly packaged". The kicker was, it wasn't even the same
> > box I shipped it in and all that packing was missing! I called them and
> > received the "Yeah, right!" treatment from the rep, and I went
ballistic.
> > With quite a bit of invective, I explained to
> > the smart-assed lady that the box wasn't even in the same SOBing box I
> > shipped it in. I got
> > pretty sassy (putting it mildly) with her! Finally, I told her, "Tell
ya
> > what, lady. You pull your
> > records and see how much we ship with you. I happen to be the one that
> > decides who I am
> > gonna use, and YOU don't tell me what box I shipped a package in. And
from
> > now on I will
> > use Fed Ex. YOU can turn it crossways and shove it-- I don't give a
****!"
> > I started shipping
> > via alternate shippers, and I guess UPS sort of "missed" our volume
> because
> > it wasn't long before one of their suit and tie types was in my
warehouse
> > wanting to know what happened.
> > I had the chance to tell him, of course, and a chance to get a jab in at
> > their customer service,
> > telling him about how their smart-mouthed lady was "able" to tell me

what
> > carton I shipped in.
> > He, too, was a little upset when he found out that they had switched
boxes
> > on me. It took a
> > lot of promises and begging and several visits from the customer rep
> before
> > we shipped with them again.
> >
> > If they pull a caper like that again on me, now that I am running my own
> > business, it'll be a cold
> > day in you-know-where before I ship with them again.
> >
> > 73
> >
> > Jerry
> > K4KWH
> > www.qsl.net/k4kwh
> >
> >
> >
>
>
>

1669. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 02:53:59 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <ChhSPBQ6U0+FsEnC8jiV=ZRH3uRD@4ax.com>
Source record: 150156

"avatar" <avatar@frii.com> wrote:

>I have installed two ground rods over the years and they both have been
>eaten away to a small spike in just a few years. These were copper cladded
>steel rods. I was recently told that a pure copper rod won't be affected by
>the chemical reaction. I'd like to use a 3/4 inch copper pipe, but driving a
>10 foot length into the ground is a problem, especially with some clay in
>the soil. While a copper pipe is fairly rigid, it won't withstand a sledge
>hammer. I'm looking for solutions to accomplish this task.
>
>Dave
>Wï¿½MAY
>
>

The best device I've found is a ground rod driver that Glen Martin sells (the people who build towers). It's a piece of sturdy pipe that slips over the ground rod. It has a metal plug in it. It has big handles on each side of the pipe. You grab the handles and slam the thing down on your ground rod. Wham, wham, wham, and the rod goes in, sliker'n a whistle. Lot easier to use than a hammer.

Bob
k5qwg

1670. Re: Goofy Antenna Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 02:55:16 UTC
From: graywolf15222@yahoo.com
Message-ID: <a53b928c.0201251855.1b89ed98@posting.google.com>
Source record: 150157

John,

Your low return loss (VSWR) readings on the magnet mount and on your vehicle are cause by losses. You're getting a false reading. The high readings on ball mount are more accurate because you have a much better RF ground. A low return loss (VSWR) doesn't necessary mean the antenna is at optimal performance. In fact it could mean something is wrong. Many hams and CB radio operators assume a 1:1 VSWR means everything is fine. That's not necessary the case. You need ask yourself the following questions.

Does this low VSWR reading make sense?

Does this high VSWR reading make sense?

What tells me that the high reading is probably the accurate one is the 8-foot whip. I'm assuming that the antenna was designed for the CB band, a 1.6:1 VSWR is about what you should see on 10 meters. A 1/4 wave antenna on 10 meters is shorter.

GW

"John Reed" <jreed@NOSPAM.thor.atl.ga.us> wrote in message news:<u51kfht28dm935@corp.supernews.com>...
> Here's a fun one:
>
> My friend has a Ford Explorer. On the left rear, just near the "gas cap"
> he's got a ball mount. The ball mount is mounted thru the hull of the
> vehicle. He has 50 ohm coax coming off the ball mount to his radio. The
> cable is good. The connections are good - no shorts. There is good ground
> available.
>
> Now here's the catch:
>
> He's tried several antennas - a "whippet" 10/11m base loaded thing, a 10m
> "hamstick", a 10m quarterwave whip, and a 6m "hamstick'.
>
> I used an MFJ meter and a different mount - a mag mount temporarily stuck to
> the middle of the hood and tuned all the antennas to minimum SWR.
>
> When the whippet and the hamsticks are put on the ball mount, we can get no
> better than 3:1 SWR on the bands they are rated for. The 8 foot whip gets
> us down to around 1.6:1 on
> 10m.
>
> Any reason why we're getting these goofy SWR readings? Again, if I take

> these antennas and put them on my vehicle, or on the magmount on his truck,
> they tune fine - but on the ball mount, the SWR goes to pot.
>
> There was an on-glass antenna (2m/440) on the window right by the ball
> mount - but we've disconnected the antenna and the feedline, leaving just
> the on-glass thing.
>
> So - why would an antenna that's tuned as good as it can get and performs
> well on other mounts display poor SWR when placed on the ballmount?
>
> Anything we should be looking for? Could the on-glass thing be screwing up
> the antenna? We even took off all roof-mount antennas, too, just to make
> sure they weren't doing something odd to the equation.
>
> Thanks in advance. Replies here to the newsgroup, or direct to me in email
> (remove the NOSPAM from my email address) are fine.
>
> 73 de John, n4tii

1671. Re: Tilted Beverage

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 03:04:42 UTC
From: zygo@azstarnet.com
Message-ID: <zygo-2501022004420001@10.0.0.2>
Source record: 150158

> I'm picking up African, Chinese and Russian regionals, Myanmar (50 kW
> Indonesian pointed sideways from me) etc.

Okay, that sounds more like something interesting. I've always wanted to try a really long wire. What's the average height of your wire (for Beverages, it's not supposed to make much difference, I understand).

Jim

1672. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 03:15:10 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.16bbbf1e1bab016e98969f@news.onlynews.com>
Source record: 150159

In article <ChhSPBQ6U0+FsEnC8jiV=ZRH3uRD@4ax.com>, bamiller@texas.net
says...
> "avatar" <avatar@frii.com> wrote:
>
> >I have installed two ground rods over the years and they both have been
> >eaten away to a small spike in just a few years. These were copper cladded
> >steel rods. I was recently told that a pure copper rod won't be affected by
> >the chemical reaction. I'd like to use a 3/4 inch copper pipe, but driving a
> >10 foot length into the ground is a problem, especially with some clay in
> >the soil. While a copper pipe is fairly rigid, it won't withstand a sledge
> >hammer. I'm looking for solutions to accomplish this task.
> >
> >Dave
> >WMAY
> >
> >
>
> The best device I've found is a ground rod driver that Glen Martin sells (the
> people who build towers). It's a piece of sturdy pipe that slips over the ground
> rod. It has a metal plug in it. It has big handles on each side of the pipe. You
> grab the handles and slam the thing down on your ground rod. Wham, wham, wham,
> and the rod goes in, sliker'n a whistle. Lot easier to use than a hammer.
>
> Bob
> k5qwg
>
>
Great advice, they are about $10 at Home Depot

1673. Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 03:37:50 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201251937.16da6ee5@posting.google.com>
Source record: 150161
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Have any study been done on this? I'm surprised that the ARRL hasn't researched this. (Or have they?)

I am willing to bet that electrical engineering majors who operate ham radio (or who participate in other EE-related hobbies) tend to do better than their nonham counterparts. I know I would have been a MUCH better student if I had been a ham radio operator when I entered college as an electrical engineering major. Without ham radio (or any other practical experience), SWR, Smith Charts, matching networks, and other concepts were just mumbo jumbo I had to plow through in order to get through classes. It took ham radio to enable me to truly grasp what I studied.

I would expect to see that EE hams, as a group, earn better GPAs, are less likely to drop out or change majors, are more likely to be actively involved in EE-related extracurricular activities (like IEEE and various contests), get better jobs, and are more likely to earn graduate degrees in EE.

I'm also willing to bet that even after one adjusts for differences in SAT scores, high school class rank, and other admission criteria, EE hams still earn better GPAs than their nonham counterparts.

If I were the head of a college or university EE department, I would pull out all stops to recruit ham radio operators into the student body and faculty. I would also work with the school ham radio club to recruit new hams on campus and in the surrounding community.

Jason Hsu, AG4DG
jason_hsu_802701@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

1674. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 04:30:04 UTC
From: Milesnz <milesnz@hotmail.com>
Message-ID: <pkq48.2993$Lv.384724@news.xtra.co.nz>
Source record: 150162
Cross-posted to: rec.radio.amateur.antenna,sci.electronics

As an EE who was involved in electrical and electronic stuff prior to going to engineering school, I have to say the previous experience probably makes you a *worse* student, not a better one. The plain and simple reason is that with "a little knowledge" you tend to assume you know more than you really do and that is definitely a bad thing when entering a field such as electrical engineering. Yes it's easier to learn stuff because you already know *some* of it, but it's also even easier to *assume* you know stuff that you don't.

In addition, not all of the training associated with something like ham radio (or any other hobby fields) is kosher, so some of what was learned before studying engineering may well be wrong, or incomplete.

If I was the head of the EE department I'd take people on their merits and not favour them on such inappropriate grounds as whether they've got a radio ham license. If anything it would work against them on the basis that "a little knowledge is dangerous".

My thoughts fwiw.

Jason Hsu <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0201251937.16da6ee5@posting.google.com...
> Have any study been done on this? I'm surprised that the ARRL hasn't
> researched this. (Or have they?)
>
> I am willing to bet that electrical engineering majors who operate ham
> radio (or who participate in other EE-related hobbies) tend to do
> better than their nonham counterparts. I know I would have been a
> MUCH better student if I had been a ham radio operator when I entered
> college as an electrical engineering major. Without ham radio (or any
> other practical experience), SWR, Smith Charts, matching networks, and
> other concepts were just mumbo jumbo I had to plow through in order to
> get through classes. It took ham radio to enable me to truly grasp
> what I studied.
>
> I would expect to see that EE hams, as a group, earn better GPAs, are
> less likely to drop out or change majors, are more likely to be
> actively involved in EE-related extracurricular activities (like IEEE
> and various contests), get better jobs, and are more likely to earn
> graduate degrees in EE.
>
> I'm also willing to bet that even after one adjusts for differences in
> SAT scores, high school class rank, and other admission criteria, EE
> hams still earn better GPAs than their nonham counterparts.

>
> If I were the head of a college or university EE department, I would
> pull out all stops to recruit ham radio operators into the student
> body and faculty. I would also work with the school ham radio club to
> recruit new hams on campus and in the surrounding community.
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

1675. Re: Tilted Beverage

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 05:15:22 UTC
From: jpat <jpat@sonic.net>
Message-ID: <KXq48.13228$TI3.130904@typhoon.sonic.net>
Source record: 150163

Jim Mandaville <zygo@azstarnet.com> wrote:

: What's the average height of your wire (for
: Beverages, it's not supposed to make much difference, I understand).

Around 10'. The two things that seem to really matter are the termination (I used a spectrum analyzer last week to measure the null on a SA station (around 6 MHz as I recall) and measured a 25dB difference with and without the 470 ohm resister) and the ground counterpoise at the termination end. A ground rod (about 6' of a 10' copper clad stake driven into the ground) didn't seem like enough. After I laid out some radials I noticed a marked increase in sensitivity(although the background noise seemed to go up as well). Removing the feedpoint counterpoise didn't seem to make any difference.

If you got the space I think a beverage is well worth a try.

73s,
Jeff
: Jim

--
Jeff Patterson
R&D Engineer
Agilent Technologies
jeff_patterson@agilent.com

1676. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 05:22:13 UTC
From: Dave D <Dave_d@default.com>
Message-ID: <a2tee5gam1@knossos.btinternet.com>
Source record: 150164
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0201251937.16da6ee5@posting.google.com...
> Have any study been done on this? I'm surprised that the ARRL hasn't
> researched this. (Or have they?)
>
> I am willing to bet that electrical engineering majors who operate ham
> radio (or who participate in other EE-related hobbies) tend to do
> better than their nonham counterparts. I know I would have been a
> MUCH better student if I had been a ham radio operator when I entered
> college as an electrical engineering major. Without ham radio (or any
> other practical experience), SWR, Smith Charts, matching networks, and
> other concepts were just mumbo jumbo I had to plow through in order to
> get through classes. It took ham radio to enable me to truly grasp
> what I studied.
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> I would expect to see that EE hams, as a group, earn better GPAs, are
> less likely to drop out or change majors, are more likely to be
> actively involved in EE-related extracurricular activities (like IEEE
> and various contests), get better jobs, and are more likely to earn
> graduate degrees in EE.
>
> I'm also willing to bet that even after one adjusts for differences in
> SAT scores, high school class rank, and other admission criteria, EE
> hams still earn better GPAs than their nonham counterparts.
>
> If I were the head of a college or university EE department, I would
> pull out all stops to recruit ham radio operators into the student
> body and faculty. I would also work with the school ham radio club to
> recruit new hams on campus and in the surrounding community.
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

I don't think amateur radio qualifications are worth anything much in
electrical engineering. I decided to enter the exam just for the hell of it.
The night before the exam I read the licensing conditions and got a credit
for that part and a destinction for theory. Quite frankly, it was piss-easy.
I have no other qualifications in electronics, apart from attending an HND
bridge course for nearly a year and having worked and played in electronics
most of my life. I kept my AR license up for one solitary year before I
realized what it was really like ;-)

Dave

1677. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 05:29:57 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u54fn8mll84696@corp.supernews.com>
Source record: 150165
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Depends. If they are like that idiot DaveD that responded that he only did it for the fun of passing the exam, the license has all the worth of breasts on a bull.

If they are like most of us who earned the damned thing in high school and experimented (and got zapped a few times) all the way through graduate school...I'd hire one of those persons in a second over a PhD that never smelled hot solder in their life.

Jim

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message news:f7d9a152.0201251937.16da6ee5@posting.google.com...
> Have any study been done on this? I'm surprised that the ARRL hasn't
> researched this. (Or have they?)

1678. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 05:48:08 UTC
From: Robert Baer <robertbaer@earthlink.net>
Message-ID: <3C5242F6.30118F15@earthlink.net>
Source record: 150166
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Jim Weir wrote:
>
> Depends. If they are like that idiot DaveD that responded that he only did
> it for the fun of passing the exam, the license has all the worth of breasts
> on a bull.
>
> If they are like most of us who earned the damned thing in high school and
> experimented (and got zapped a few times) all the way through graduate
> school...I'd hire one of those persons in a second over a PhD that never
> smelled hot solder in their life.
>
> Jim
>
> "Jason Hsu" <jason_hsu@my-deja.com> wrote in message
> news:f7d9a152.0201251937.16da6ee5@posting.google.com...
> > Have any study been done on this? I'm surprised that the ARRL hasn't
> > researched this. (Or have they?)

Reminds me of the joke "BS" means "Bull Slop", "MS" means "More of the
Same" and PHD" means "Piled Higher and Deeper".

1679. Mobile antenna installations - question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 05:56:11 UTC
From: JG in NY <n1aep@yahoo.com>
Message-ID: <%xr48.6189$Ki1.638330@typhoon.nyroc.rr.com>
Source record: 150167

I notice that a lot of mobile antenna situations involve the whip extending up along the side or back of the vehicle for some distance (esp. with a bumper or ball mount).

Wouldn't this pose problems? I'm imagining that it might similar to taking a dipole and placing both legs in proximity, parallel, even, separated by only a couple inches. It certainly wouldn't be a very operable arrangement, and the impedance at the center would certainly not be the in the usual 75 ohm neighboorhood.

What would be the effects of this type of mobile installation -- on, say, impedance at the feedpoint, or SWR, or distortion of the radiation pattern?

How would it be different from a dipole folded sharply back on itself?

Roof mounted antennas would appear to be the ideal, if practical for the bands in use. The ground plane is perpendicular to the radiator, and below it. Not alongside.

Thanks for any comments...
jg

1680. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 05:59:21 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2tgu8$13negg$1@ID-124126.news.dfncis.de>
Source record: 150069
Cross-posted to: rec.radio.amateur.antenna,sci.electronics

For an 'amateur' wishing to be and being educated to become a
'professional', the hardest thing to do is to clear the mind of the
preconceived, wooly, technical notions previously acquired, and return to
square one. Otherwise you will be handicapped.

The next hardest thing is to learn to think quantitatively, precisely, in
terms of numbers. If you cannot quantify or measure what you are speaking
about then you know next to nothing about it.

On the other hand, supervised practical experience gained as a radio amateur
during the course of an engineering education is just as valuable as that
gained in the laboratory. But it should not supplant it.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

Milesnz <milesnz@hotmail.com> wrote in message
news:pkq48.2993$Lv.384724@news.xtra.co.nz...
> As an EE who was involved in electrical and electronic stuff prior to
going
> to engineering school, I have to say the previous experience probably
makes
> you a *worse* student, not a better one. The plain and simple reason is
> that with "a little knowledge" you tend to assume you know more than you
> really do and that is definitely a bad thing when entering a field such as
> electrical engineering. Yes it's easier to learn stuff because you
already
> know *some* of it, but it's also even easier to *assume* you know stuff
that
> you don't.
>
> In addition, not all of the training associated with something like ham
> radio (or any other hobby fields) is kosher, so some of what was learned
> before studying engineering may well be wrong, or incomplete.
>
> If I was the head of the EE department I'd take people on their merits and
> not favour them on such inappropriate grounds as whether they've got a
radio
> ham license. If anything it would work against them on the basis that "a
> little knowledge is dangerous".
>

> My thoughts fwiw.
> ---
> Jason Hsu <jason_hsu@my-deja.com> wrote in message
> news:f7d9a152.0201251937.16da6ee5@posting.google.com...
> > Have any study been done on this? I'm surprised that the ARRL hasn't
> > researched this. (Or have they?)
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> > I am willing to bet that electrical engineering majors who operate ham
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> > If I were the head of a college or university EE department, I would
> > pull out all stops to recruit ham radio operators into the student
> > body and faculty. I would also work with the school ham radio club to
> > recruit new hams on campus and in the surrounding community.
> >
> > Jason Hsu, AG4DG
> > jason_hsu_802701@@@@@yahoo.com
> > http://www.jasonhsu.com/ham_radio-technical.html
>
>

1681. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 05:59:33 UTC
From: Garrett Mace <garrett.r.mace@rose-hulman.edu>
Message-ID: <3C5245C5.5060406@rose-hulman.edu>
Source record: 150168
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

You'd probably find that ham radio has nothing to do with it. Rather, the type of student who really is interested in the field, and probably does well in studies, is more inclined to operate ham radio. I personally have never seen the need to run a ham set, although I used to listen in on a multi-band radio when I was ten years old. I suppose if you narrowed it down a *lot* more, for example look at those engineers specializing in wireless technology, you'd find a better correlation. But I really don't think it was the ham set that did the trick; rather, those most likely to get involved in their studies may have had more desire to operate one.

I always had more of an interest in computer interfacing and stuff. I suppose the parallel would be heavy use of the internet for communicating with others over large distances! :-)

1682. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 07:19:26 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a2tl9u$l4u$2@quark.scn.rain.com>
Source record: 150070

stefano <sgalast@tin.it> wrote:

> I have completely descript a 40 meters CFA antenna having the efficiency
> minimum of 70%.

Once again, how about providing a description of how you determined this efficiency?

I can make an antenna more efficient than a dipole quite easily, if I place the dipole on the ground.

> Still today I don't understand WHY very few hams tried to have one built.
> I gave all measures, all hints , all....but, I am sure, only three or four
> hams did it....I know it can be a quite important mechanic job,using some
> expensive parts...but these behaviors still surprising me.

We want some valid scientific data - not just a bunch of claims. If the data looks promising, then we would try building the antenna.

There are those that will try anything - even the base loaded tree that was in one April issue a few years ago. But such people are rather rare, as well as probably incapable of making valid measurement of the results.

--
Bill Nelson (billn@peak.org)

1683. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 07:23:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C52598F.64FA815F@eznec.com>
Source record: 150071
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

I'm probably an exception. I was a lousy EE student. I worked my way through engineering school doing circuit design (and with a little financial help from my former employer, the U.S. government), and was constantly frustrated by the huge gap between what I was learning and what I needed to know to solve the real-world problems I encountered daily in my job. The professors had almost no idea of what the real world was like. (Example: In frustration, I asked the head-in-the-clouds 20-something year old PhD math instructor trying to teach us differential equations to help us get connected by solving a simple mass-spring problem. "Masses? Springs?" he replied. "What do differential equations have to do with masses and springs?") A 2.0 GPA was required to graduate, and I felt (and still feel) that graduating with 2.01 was a waste of one half of one percent of my time. I did end up overshooting, but not by much. I had no trouble finding a job after graduating, since while I was going to school I had designed all or a major part of ten production instruments for the small company I worked for. And after the first job, no one cared less about a GPA, as it should be.

About the happiest day of my life was when I finally got finished with the stupidity of that "education".

Later on, from time to time I was called on to do screening interviews of college students for the large company I worked for. Ironically, I wouldn't have qualified for most of the interviews myself, not having the minimum GPA required of the students I interviewed. I've found that GPA has very little correlation to a person's ability as a design engineer. The GPA measures the ability to analyze prepared problems and repeat back what's expected, while design work requires synthesizing solutions, a very different process (which does, however, require analytical skills). What I find to be a much better indicator of engineering skill is curiosity, something not generally encouraged in engineering school. A good design engineer is simply bugged if something shows up that he can't understand or that doesn't work like he thought it did, and will stick at the problem until it's understood. In the interviews, I was much more interested in any kind of hobby activities they did on their own, the problems they had solved, and how they had approached and solved them, than I was in a GPA. And ones I selected who were hired turned out to be pretty good engineers. (They did, admittedly, also have fairly high GPAs, that being required to get the interview in the first place.) I saw plenty of students with a 4.0 who would have been disasters at doing design.

I'd say that the hams I've known who are design engineers have, on the average, been among the better ones. But I don't think they've necessarily been the best students. I think it would be great if universities would hire more people who had some experience with reality. But then they'd have to pay 'em. . .

Roy Lewallen, W7EL

Jason Hsu wrote:
>
> Have any study been done on this? I'm surprised that the ARRL hasn't
> researched this. (Or have they?)
>
> I am willing to bet that electrical engineering majors who operate ham
> radio (or who participate in other EE-related hobbies) tend to do
> better than their nonham counterparts. I know I would have been a
> MUCH better student if I had been a ham radio operator when I entered
> college as an electrical engineering major. Without ham radio (or any
> other practical experience), SWR, Smith Charts, matching networks, and
> other concepts were just mumbo jumbo I had to plow through in order to
> get through classes. It took ham radio to enable me to truly grasp
> what I studied.
>
> I would expect to see that EE hams, as a group, earn better GPAs, are
> less likely to drop out or change majors, are more likely to be
> actively involved in EE-related extracurricular activities (like IEEE
> and various contests), get better jobs, and are more likely to earn
> graduate degrees in EE.
>
> I'm also willing to bet that even after one adjusts for differences in
> SAT scores, high school class rank, and other admission criteria, EE
> hams still earn better GPAs than their nonham counterparts.
>
> If I were the head of a college or university EE department, I would
> pull out all stops to recruit ham radio operators into the student
> body and faculty. I would also work with the school ham radio club to
> recruit new hams on campus and in the surrounding community.
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

1684. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 07:37:39 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C525CAA.4199C6EB@icok.net>
Source record: 150072

Paul,
No, I didn't model a helical antenna like the 'HamStick',
I didn't think I would have to. It behaves so poorly on 40
and 80 meters that I didn't think it could be improved on, no
matter what you did with it.
'Doc

1685. Re: Mobile antenna installations - question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 07:51:02 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C525FCD.8B19C346@icok.net>
Source record: 150073

JG,
The feed point impedance is lowered to something on
the order of 15-35 ohms.
Instead of saying a dipole's legs are folded back so
they are parallel, it's more 'correct' to say that the
dipole's legs are at right angles to each other. The
resulting radiation pattern tends to be in the direction
of the body of the vehicle. The pattern isn't what I
would call 'directional', as in a beam antenna, but more
of a 'lop-sided' omnidirectional pattern. This 'trend'
in direction doesn't seem all that desirable in a mobile
antenna system, but that's what you end up with when you
have to adapt to 'practical' places to mount an antenna.
'Doc

1686. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 07:56:56 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a2tng8$l4u$3@quark.scn.rain.com>
Source record: 150074
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

In rec.radio.amateur.antenna rickm <rickm_msn@email.msn.com> wrote:

> Several years ago, when I owned my own business, I had UPS deliver some
> C.O.D. packages. I made a mistake and paid for them with cash. A few weeks
> later, UPS comes back to me and tells me they lost my check and asks me to
> rewrite the check. When I explained that I paid in cash, they told me I was
> mistaken, and demanded another check. This went on for a couple of months
> and then I started getting harrasing phone calls from attorneys representing
> UPS. It was a total mess, and ended up costing me several thousand dollars.
> I agree, I'll never use UPS again.

Why did it cost you any money? You had to pay the driver to get the
package. That is sufficient proof that you paid. If UPS lost the payment,
that is not your fault.

I have been that route. A quick letter from my attorney set them straight.

But I avoid UPS whenever possible. They often leave packages sitting on
my front doorstep in the rain. The sometimes leave packages that require
a signature - good thing that I am honest and don't claim that it was
never delivered.

--
Bill Nelson (billn@peak.org)

1687. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 08:05:08 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C526318.F70CD2DA@icok.net>
Source record: 150075

Crazy George,
I think it may depend on the type of soil in your
area. I've put down several ground rods like that and
don't seem to have any problem with the "rod not being
in intimate contact with the dirt". I can say that
when finished puting a rod down this way, there's no
chance of you ever pulling it up by hand! I'd call that
"intimate" enough...
'Doc

1688. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 08:13:57 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a2tog5$l4u$4@quark.scn.rain.com>
Source record: 150076

Jerry <jerryaa@prodigy.net> wrote:
> The HF6 directions say to use a 11'2" length of 75 ohm transmission line
> connected to any 50 ohm coax. Friends of mine say that shouldn t make much
> difference in efficiency.

> What are my likely problems here? I don t want to use a tuner if I don t
> have to use one. Is that 75 ohm line going to make that much diference?
> Instructions say that line is for matching in the 10 meter band.

That length of 75 ohm line is a matching section. Take a look in any
copy of the Radio Amateur's Handbook for a discussion.

It doesn't affect the efficiency of the antenna, but it certainly can
affect the percentage of your power that gets into the antenna.

--
Bill Nelson (billn@peak.org)

1689. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 08:41:34 UTC
From: Nick Sheldon <nick.sheldon@sheldonassociate.demon.co.uk>
Message-ID: <1012034540.20948.0.nnrp-14.c1eda3cf@news.demon.co.uk>
Source record: 150077
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Roy Lewallen wrote in message <3C52598F.64FA815F@eznec.com>...
>I've found that
>GPA has very little correlation to a person's ability as a design
>engineer. The GPA measures the ability to analyze prepared problems and
>repeat back what's expected, while design work requires synthesizing
>solutions, a very different process (which does, however, require
>analytical skills). What I find to be a much better indicator of
>engineering skill is curiosity, something not generally encouraged in
>engineering school. A good design engineer is simply bugged if something
>shows up that he can't understand or that doesn't work like he thought
>it did, and will stick at the problem until it's understood. In the
>interviews, I was much more interested in any kind of hobby activities
>they did on their own, the problems they had solved, and how they had
>approached and solved them, than I was in a GPA. And ones I selected who
>were hired turned out to be pretty good engineers. (They did,
>admittedly, also have fairly high GPAs, that being required to get the
>interview in the first place.) I saw plenty of students with a 4.0 who
>would have been disasters at doing design.
>
>I'd say that the hams I've known who are design engineers have, on the
>average, been among the better ones. But I don't think they've
>necessarily been the best students. I think it would be great if
>universities would hire more people who had some experience with
>reality. But then they'd have to pay 'em. . .
>
>Roy Lewallen, W7EL

Exactly, Roy!

This is represented in the classical Greek approach to what would have become science had they adopted the simple expedient of testing their theories in practice. eg. the rate at which heavy objects accelerate relative to light ones, and the number of teeth possessed by women.

I'm an academic EE BSc at heart, but have had to requalify in psychology (BA) and now sociology (BSc ... ha-ha! - "Science?")because of the UK's reluctance to employ engineers any more (or even know what engineering means). You'd be amazed at the hypotheses regarding electrical technology held by psychology and sociology PhDs!

One commonly held belief (by fellow academics) is that EE involves nothing more complex than simple arithmetic, and is a manual activity for working class students of "other" institutions. Another oddity is the assumption that there is no creative process in designing, say, a new transformer.

Returning to the topic, I knew a ham who was chucked out of uni after his 2nd year who I would employ above *any* maths PhD I have met, and many maths PhDs hold similar views to the social scientists metioned above.

Nick Sheldon
(working on a mathematical sociology PhD but owns a valve hi-fi company)

1690. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 09:35:17 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <a2tt71$46h$1@slb7.atl.mindspring.net>
Source record: 150078
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna

"Garrett Mace" <garrett.r.mace@rose-hulman.edu> wrote in part:

> I suppose if
> you narrowed it down a *lot* more, for example look at those engineers
> specializing in wireless technology, you'd find a better correlation.

Do they teach much about RF in undergrad EE programs these days? Or power
engineering? Or is power now in the domain of ME?

Corry

--
It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net

I have sold more books about physics than Madonna has about sex.
- Stephen Hawking

1691. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 09:39:37 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C527941.13EC619@icok.net>
Source record: 150079

Jason,
Ham radio is a hobby that I really enjoy. But it isn't
my only hobby, and some 'hobbies' are more enjoyable than
others...
'Doc

1692. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 09:46:14 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <ZXJw89EmrnU8EAKH@ifwtech.com>
Source record: 150080
Cross-posted to: rec.radio.amateur.antenna,sci.electronics

Milesnz wrote:
>As an EE who was involved in electrical and electronic stuff prior to
>going to engineering school, I have to say the previous experience
>probably makes you a *worse* student, not a better one. The plain and
>simple reason is that with "a little knowledge" you tend to assume you
>know more than you really do and that is definitely a bad thing when
>entering a field such as electrical engineering. Yes it's easier to
>learn stuff because you already know *some* of it, but it's also even
>easier to *assume* you know stuff that you don't.
>
>In addition, not all of the training associated with something like
>ham radio (or any other hobby fields) is kosher, so some of what was
>learned before studying engineering may well be wrong, or incomplete.
>
>If I was the head of the EE department I'd take people on their merits
>and not favour them on such inappropriate grounds as whether they've
>got a radio ham license. If anything it would work against them on the
>basis that "a little knowledge is dangerous".
>
>My thoughts fwiw.

As with any other qualification, the value of a ham radio licence depends on your "grades". I don't only mean the class of your licence, but what you have chosen to do with it.

For all the pessimism about things only half-learned through amateur radio, there are some young radio hams who apply for university EE courses with an extraordinary amount of existing knowledge that they could only have gained through amateur electronics. Amateur electronics has many branches today, but amateur radio is still one of the best - if you really use it.

I am completely confident about young people's ability to discard incomplete and incorrect information. The whole of science education, from elementary school to PhD and beyond, is a progression of peeling away the simple knowledge we learned earlier, and discovering the details, the numbers, and the subtleties underneath. Young people are doing this naturally and easily all the time - it's only older people who forget this is possible!

At the other end of the EE course, employers will be trying to find people who are not only qualified in engineering but also have enthusiasm for applying it. This is where a ham radio licence - used to do some serious graduate-level engineering, just for the love of it -

can really make a graduate EE stand out from the herd.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1693. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 11:02:33 UTC
From: Fotis Visilias <sv3eao@yahoo.com>
Message-ID: <a2u2tg$cr3$1@usenet.otenet.gr>
Source record: 150081
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

> This is represented in the classical Greek approach to what would have
> become science had they adopted the simple expedient of testing their
> theories in practice. eg. the rate at which heavy objects accelerate
> relative to light ones, and the number of teeth possessed by women.

If this is your philosophy, maybe it's a good idea to learn more about the civilization and history of Greece.
When we was enjoying the civilization and learning, you was sleeping in the caves...
The word "philosophy" is taken from the Greek language like more of the words that you use, for example "psychology" , " technology" "academic", "sociology", "arithmetic", "mathematical". Does it means something for you, maybe?

Fotis Visilias radio amateur from Greece (sv3eao).
http://www.qsl.net/sv3eao

>
> I'm an academic EE BSc at heart, but have had to requalify in psychology
> (BA) and now sociology (BSc ... ha-ha! - "Science?")because of the UK's
> reluctance to employ engineers any more (or even know what engineering
> means). You'd be amazed at the hypotheses regarding electrical technology
> held by psychology and sociology PhDs!
>
> One commonly held belief (by fellow academics) is that EE involves nothing
> more complex than simple arithmetic, and is a manual activity for working
> class students of "other" institutions. Another oddity is the assumption
> that there is no creative process in designing, say, a new transformer.
>
> Returning to the topic, I knew a ham who was chucked out of uni after his
> 2nd year who I would employ above *any* maths PhD I have met, and many
maths
> PhDs hold similar views to the social scientists metioned above.
>
> Nick Sheldon
> (working on a mathematical sociology PhD but owns a valve hi-fi company)
>
>

1694. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 11:23:00 UTC
From: fractenna@aol.com
Message-ID: <20020126062300.25945.00000600@mb-fx.aol.com>
Source record: 150082

>
>Have any study been done on this? I'm surprised that the ARRL hasn't
>researched this. (Or have they?)
>
>I am willing to bet that electrical engineering majors who operate ham
>radio (or who participate in other EE-related hobbies) tend to do
>better than their nonham counterparts. I know I would have been a
>MUCH better student if I had been a ham radio operator when I entered
>college as an electrical engineering major. Without ham radio (or any
>other practical experience), SWR, Smith Charts, matching networks, and
>other concepts were just mumbo jumbo I had to plow through in order to
>get through classes. It took ham radio to enable me to truly grasp
>what I studied.
>
>I would expect to see that EE hams, as a group, earn better GPAs, are
>less likely to drop out or change majors, are more likely to be
>actively involved in EE-related extracurricular activities (like IEEE
>and various contests), get better jobs, and are more likely to earn
>graduate degrees in EE.
>
>I'm also willing to bet that even after one adjusts for differences in
>SAT scores, high school class rank, and other admission criteria, EE
>hams still earn better GPAs than their nonham counterparts.
>
>If I were the head of a college or university EE department, I would
>pull out all stops to recruit ham radio operators into the student
>body and faculty. I would also work with the school ham radio club to
>recruit new hams on campus and in the surrounding community.
>
>Jason Hsu, AG4DG
>jason_hsu_802701@@@@@yahoo.com
>http://www.jasonhsu.com/ham_radio-technical.html
>

Its an interesting speculation, but I fear that the number of ham students is so small these days that it would be difficult to make a valid comparison.

A shame, really.

73,
Chip N1IR

1695. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 11:26:35 UTC
From: fractenna@aol.com
Message-ID: <20020126062635.25945.00000601@mb-fx.aol.com>
Source record: 150083

>Do they teach much about RF in undergrad EE programs these days? Or power
>engineering? Or is power now in the domain of ME?
>
>
>
>Corry
>
>

Corry has a valid point. Many ECE dep'ts do not emphasize RF these days. That is not a criticism, but an observation.

Analog RF at universities is truly moribund.That DOES rate a disappointment, from me anyway.

73
Chip N1IR

1696. Re: so is the USPS !

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 11:51:06 UTC
From: Midnight Rider <mrbig@tough.com>
Message-ID: <uLw48.24868$KC1.4373394@news20.bellglobal.com>
Source record: 150084
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

I'm still waitting for my package shipped in june 2001 and still haven't arrived
!!!!
Global Priority means slow boat to China and never coming back !!!

"Security Unlimited Inc." <securit1951@earthlink.net> wrote in message
news:Ato48.15843$ag5.1386642@newsread2.prod.itd.earthlink.net...
> LIKE I SAID UPS IS FULL OF SHIT 24/7!
> "Brian" <lib_mrducks@yahoo.com> wrote in message
> news:ELi48.23316$ZK4.734531@typhoon.austin.rr.com...
> > To add more lunacy to the ranting:
> >
> > I used to own a small computer business and had to have some parts shipped
> > UPS red (overnight) from Seattle, Wa to Waco, Tx. The next day the
> package
> > did not arrive, so I called my supplier who said the shipment went out
> with
> > the other overnight pickups at 4pm. We checked the tracking # supplied,
> and
> > it shows that the package never made it to the first checkpoint, but WAS
> > picked up. I had a good supplier, so they overnighted me the part again
> and
> > I received it the following day. Here's the gripper though....about 1
> week
> > later, a VERY confused FedEx employee walked into my store with my
> package.
> > It did not have any FedEx shipping credentials on the box, just the UPS
> > shipping labels and my address! The driver did not know how the package
> > made it anywhere with UPS suff on it in the FedEx system, much less how it
> > ended up in his truck for delivery.....all we can figure is that UPS and
> > FedEx were at my supplier's dock at the same time and my package went with
> > the wrong carrier....
> >
> > Go figure...
> >
> > Brian
> >
> > "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
> > news:j4i48.84716$Ee7.5699711@e3500-atl1.usenetserver.com...
> > >
> > >
> > >
> > >
> > > Brian <k3vr@hotmail.com> wrote in message

> > > news:4bfc7bb.0201241924.4fdd5373@posting.google.com...
> > >
> > > <<snip>>
> > >
> > > Rest assured, when it gets to Colorado, it will
> > > > not have passed through UPS hands.
> > >
> > >
> > > Having said that I, too, would not use UPS, I have broken my word quite
> a
> > > lot! Most of the
> > > Carolina Cyclone antennas I build and ship go out UPS. I use PVC pipe
> for
> > > shipping containers, and that has proven to prevent the breakage they
> are
> > so
> > > notorious for. I used to
> > > get lots of broken coil covers, either by simple mashing, or slinging
> them
> > > on and off trucks. By
> > > using plenty of packing material (bubble wrap, newspaper, etc), I've had
> > > pretty good results so
> > > far (knock, knock).
> > >
> > > When I worked in the rail industry, I used to ship as many as 20
> packages
> > > per day. What got me torqued at them was the time I carefully packaged a
> > > boiler water sample, cushioned the plastic jar with several layers of
> > bubble
> > > wrap, and put some foam sheet on the top. The package came back marked
> > > "improperly packaged". The kicker was, it wasn't even the same
> > > box I shipped it in and all that packing was missing! I called them and
> > > received the "Yeah, right!" treatment from the rep, and I went
> ballistic.
> > > With quite a bit of invective, I explained to
> > > the smart-assed lady that the box wasn't even in the same SOBing box I
> > > shipped it in. I got
> > > pretty sassy (putting it mildly) with her! Finally, I told her, "Tell
> ya
> > > what, lady. You pull your
> > > records and see how much we ship with you. I happen to be the one that
> > > decides who I am
> > > gonna use, and YOU don't tell me what box I shipped a package in. And
> from
> > > now on I will
> > > use Fed Ex. YOU can turn it crossways and shove it-- I don't give a
> ****!"
> > > I started shipping
> > > via alternate shippers, and I guess UPS sort of "missed" our volume
> > because

> > > it wasn't long before one of their suit and tie types was in my
> warehouse
> > > wanting to know what happened.
> > > I had the chance to tell him, of course, and a chance to get a jab in at
> > > their customer service,
> > > telling him about how their smart-mouthed lady was "able" to tell me
> what
> > > carton I shipped in.
> > > He, too, was a little upset when he found out that they had switched
> boxes
> > > on me. It took a
> > > lot of promises and begging and several visits from the customer rep
> > before
> > > we shipped with them again.
> > >
> > > If they pull a caper like that again on me, now that I am running my own
> > > business, it'll be a cold
> > > day in you-know-where before I ship with them again.
> > >
> > > 73
> > >
> > > Jerry
> > > K4KWH
> > > www.qsl.net/k4kwh
> > >
> > >
> > >
> >
> >
> >
>
>

1697. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 12:20:40 UTC
From: richardharrison@webtv.net
Message-ID: <2335-3C529F18-49@storefull-114.iap.bryant.webtv.net>
Source record: 150085

Roy Lewallen wrote:
"I`d say that the hams I`ve known who are design engineers have, on the average, been among the better ones."

My experience is different. There were no hams who made it to graduation in my EE class. I wasn`t a ham then and I graduated.

Most of my classmates got jobs in design at major corporations, Collins, Motorols, GE, etc. They did not immediately take charge of a design group, but before long they got there, and many continued their education, getting advanced degrees.

They changed companies and jobs often. Defense was big during the "cold war" and a company winning a contract was hiring. Several of my classmates seemed to migrate like birds. Summer in Chicago with Motorola, and winter in Dallas with Collins.

I did something different. I took a high paying job overseas with no starting grunt work and stayed for a few years.

In my experience, the EE education agenda was too demanding for diversions such as ham radio.

Best regards, Richard Harrison, KB5WZI

1698. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 12:28:19 UTC
From: Radio Ham <no.spam@no.spam>
Message-ID: <3c52aa5e$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 150086
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna

And now you take your turn at sleeping.

Fotis Visilias <sv3eao@yahoo.com> wrote in message
news:a2u2tg$cr3$1@usenet.otenet.gr...
> When we was enjoying the civilization and learning, you was sleeping in
the
> caves...

1699. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 12:44:23 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <gC3AgKAnSqU8EwNt@invest.fsbusiness.co.uk>
Source record: 150088

Stefano,

> If you want
>prove your self the CFA CAN have the same efficiency of a full size vertical
>(with no traps) you can look for "stefano's cfa experiments" in the antennex
>archive.

Last years CFA tests conducted at NTL's Weston Park here in the UK had
poor results.

Comments from a friend;

The CFA passed away rather quietly during the early part of last year.
Khabbary himself seems to have slunk away with his ill gotten gains, and
apparently no longer works for the Egyptian Radio and Television
services.
Son of CFA is however alive and well, and yet another hopeful individual
is following the path....
At least this time the antenna is being submitted for FCC testing and
approval, but no-one is holding their breath....
On the subject of antennas, the biggest advantage that the Folded
Unipole has over the series fed antenna, is the fact that the bandwidth
is always greater for a given geometry.
This will always be disputed by various pundits, but is a feature of the
shorted transmission line in parallel with the radiating element.
The slope of reactance for both elements of the antenna is opposite, and
has a tendency to cancel.
This is most effective around quarter wave resonance, but is useful at
much shorter effective heights.
When the antenna is shorter than a quarter wave, there is a further
advantage to using a Folded Unipole.
Because the feed becomes inductive rather than capacitive, the losses in
the matching networks can be reduced considerably, due to the
performance of practical components.
I.e. the losses associated with practical inductors, compared to the
losses for easily obtainable vacuum capacitors.
I think you probably know that I am back with

XXXX

again, and have been
for the last eighteen months or so.
At the moment I am designing a diplexing system to enable dual use of
one of our London sites, in order to accommodate one of the new "Access"
radio stations.
It is fun to get the opportunity to combine the predictive power of the

PC with real world measurements, and see how they match up.
In the case of a Band One STL antenna, the computer model failed
miserably.....
Just shows how important accurate measurement equipment is, to confirm
predicted performance.
That's about all from here for now.

End.

Phil G4ZOW

1700. Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 13:37:11 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3C52B107.CEC1AA8A@hiwaay.net>
Source record: 150087

Lets turn the subject around. Of the more well known Hams, which do you think (or know) have EE bakgrounds?
I know that, of the people I observe here on the net (NG and reflector), One of the ones whose opinion I respect most is an English major- One that I respect least has a Phd in Physics. Another I ALWAYS read is (apparently) an EE, with an RF base (Hard to get, these days).
Of the better operators (as indicated by being high on DXCC and contest lists), I wonder which are EE, and which are Communication majors (non RF EE).[and- yes- I know those criteria (DXCC,etc) are not necessarily good indicators].

Just curious - Bill, W4BSG (Aerospace background, not EE)

1701. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 14:14:19 UTC
From: k1bqt@aol.com
Message-ID: <20020126091419.12490.00000659@mb-mn.aol.com>
Source record: 150089

>Of the more well known Hams, which do you think (or know) have EE...<

Of all the well known "RF engineers", how many actually have EE degrees?

Rick K1BQT

1702. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 14:24:27 UTC
From: Garrett Mace <garrett.r.mace@rose-hulman.edu>
Message-ID: <3C52BC1B.5090907@rose-hulman.edu>
Source record: 150091
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna

>
> Do they teach much about RF in undergrad EE programs these days? Or power
> engineering? Or is power now in the domain of ME?
>

Well, considering that I currently have a class in each, yes. :-) At least my college (voted the #1 in undergraduate engineering for three years running, according to US News and World Report) has a wide variety of both required and elective classes one can take in these fields. For example, right now I'm taking a required power systems course, which builds on the power concepts taught throughout the other classes, and goes into some detail on three-phase power, transformers, DC and AC machines, and the requisite analysis methods. Should I want more, there are several additional power electives, some involving power control systems, high-power transmission, etc. Now, regarding wireless; I'm in an elective right now which covers topics ranging from antenna gain and noise calculations to cellular sectoring methods and multiple-path propagation models to the various flavors of digital keying. These concepts also have been discussed throughout my education; I recall last year one class required us to design an FM transmitter in lab. Ours worked pretty well; essentially broadcasting a few hundred feet every whisper in a room. Should I want another wireless class, there is a wireless electronics class offered next quarter, in which various radio constructon methods are covered and 10% bonuses go to those with ham radio licenses. But I'll be taking electronic music synthesis instead...sounds like more fun and I like thinking about things in digital terms anyway (even if it really is all analog).

So I have only one quarter left...but yeah, I think there are some undergraduate programs with a decent amount of specialization opportunities. I didn't really specialize, though; I picked up most of my electives from an experimental entrepreneurial team study. Right now the team is working on the same project for senior design; a USB robotic webcam mount with integrated hub. I got stuck with programming all of the PC client software (usb interfacing, tcp/ip, video capture) and all of the firmware code (microcontroller usb implementation, motor control). Now I've only had one computer programming class; a freshman C++ course. But somehow, through hundreds of pages of documentation, all-nighters, and some luck, I'm making really good progress and already have a two-way data pipe set up over USB. Assembly code really isn't that bad :-).

That said, I'm going to graduate in May and still don't have a job. Anybody out there know of a good position? I don't take up much space! I

eat very little! I can start a fire by rubbing two sticks! I would be more than happy to send you a resume or give you a call!

Later,
---Garrett

1703. WTB:Its an addiction--need military antennas and acess.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 14:28:43 UTC
From: fumper@aol.com
Message-ID: <20020126092843.27788.00000532@mb-cj.aol.com>
Source record: 150090

I use and collect military antennas. Got any to sell or trade? The green bag stuff.

email only please

Thanx Steve

1704. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 14:36:10 UTC
From: richardharrison@webtv.net
Message-ID: <19514-3C52BEDA-50@storefull-117.iap.bryant.webtv.net>
Source record: 150093

I wrote:
"In my experience, the EE agenda was too demanding for diversions such as ham radio."

On Saturday mornings, my ham radio club meets for breakfasts in several locations. My group usually includes 4 engineers. This morning there were only two. I told Charlie about this thread and asked his experience. It was almost the same as mine. No practicing radio amateurs in his graduating class in a different university. Charlie had a ham license when he entered the university, but completely forsook the hobby while in school because he didn`t have the time and energy for both ham radio and his engineering education.

Best regards, Richard Harrison, KB5WZI

1705. Re: PAR OMNI HORZOTAL UHF ANTENNAS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 14:42:00 UTC
From: Kent K9EZ <kwinrich@wi.rr.com>
Message-ID: <Xez48.35034$bv.3363069@twister.kc.rr.com>
Source record: 150092
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.scanner

Out of the mouths of feeble minds.....

"ZX11D" <w9jcm@arrl.net> wrote in message
news:OWn48.997$mv.7249@newsfeed.intelenet.net...
> it it worked so great whats the reason your selling them?
> "WILLIAM C FORVIK" <n0mnb@email.msn.com> wrote in message
> news:ejrS6fdpBHA.1504@cpimsnntpa03...
> > 4 SALE USED 1 MONTH TWO PAR 432 ANTENNAS WITH CO-PHASING HARNESS
> > WORK GREAT BOTH MOBLIE AND FIXED
> > 3DB GAIN SEE IT AT E-BAY
> > 1326292265
> >
> > SEE PICTURE
> >
> >
>
>

1706. Re: Tilted Beverage

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 14:47:17 UTC
From: Kent K9EZ <kwinrich@wi.rr.com>
Message-ID: <Ujz48.35035$bv.3368035@twister.kc.rr.com>
Source record: 150094

I have a 1500' beverage that winds around in a virgin forest. I just used electric fence wire and went from tree to tree. I did not terminate it, and I don't use a transformer.

Yet....

The performance is AWESOME! Perhaps some day I will actually build a transformer, and then add another at 90 degrees to this one.

Bottom line is that the height is not too critical. Neither is keeping it in a straight line. Just get it up and see how it works!

Kent, K9EZ

"Jim Mandaville" <zygo@azstarnet.com> wrote in message news:zygo-250102200442000l@10.0.0.2...
>
> > I'm picking up African, Chinese and Russian regionals, Myanmar (50 kW
> > Indonesian pointed sideways from me) etc.
>
> Okay, that sounds more like something interesting. I've always wanted to
> try a really long wire. What's the average height of your wire (for
> Beverages, it's not supposed to make much difference, I understand).
>
> Jim

1707. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:00:40 UTC
From: Vicki and Jim Bolinger <vjbolinger@on-ramp.net>
Message-ID: <fqz48.60976$h31.3269343@e420r-atl1.usenetserver.com>
Source record: 150095

One of the worse things you can do, I think, is make your hobby your career (unless you work for yourself and have no employees---then its fun)! What do you do when you come home after 'playing' with RF all day? I haven't turned my TS930 on for almost a month now. I am leaning now towards more low-tech hobbies.

A more direct answer, I personally know several. The most notable being W8JK. He has kept his license up, but is not active---another example of the above complaint, I guess.

And yes, I am both an EE and ham. (Notice my callsign...)

Jim
N8EE

Bill Aycock <baycock@hiwaay.net> wrote in message news:3C52B107.CEC1AA8A@hiwaay.net...
> Lets turn the subject around. Of the more well known Hams, which do you
> think (or know) have EE bakgrounds?
> I know that, of the people I observe here on the net (NG and reflector),
> One of the ones whose opinion I respect most is an English major- One
> that I respect least has a Phd in Physics. Another I ALWAYS read is
> (apparently) an EE, with an RF base (Hard to get, these days).
> Of the better operators (as indicated by being high on DXCC and contest
> lists), I wonder which are EE, and which are Communication majors (non
> RF EE).[and- yes- I know those criteria (DXCC,etc) are not necessarily
> good indicators].
>
> Just curious - Bill, W4BSG (Aerospace background, not EE)

1708. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:07:23 UTC
From: tdonaly@cs.com
Message-ID: <20020126100723.12450.00000588@mb-mn.news.cs.com>
Source record: 150096

>
>
>Of all the well known "RF engineers", how many actually have EE degrees?
>
>Rick K1BQT
>

I didn't know there were any well known RF
engineers, except dead ones such as Marconi, or Armstrong. Did those fellows
have degrees?

Tom Donaly KA6RUH

1709. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:08:52 UTC
From: richardharrison@webtv.net
Message-ID: <19513-3C52C684-139@storefull-117.iap.bryant.webtv.net>
Source record: 150098

Roy Lewallen wrote:
"The professors had almost no idea of what the real world was like."

That definitely is the opposite of my experience, and of my frind Charlie`s experience at a different university. All of our EE professors not only had left academia and returned because they wanted to teach, but all were running profitable consulting businesses on the side because the prof`s salary was too big a sacrifice.

Best regards, Richard Harrison, KB5WZI

1710. G5RV - Extending one side - Will it help - HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:09:58 UTC
From: 1ARTB <rbouder@dejazzd.com>
Message-ID: <meg55ucnd6aqrhn2s6i09sc61usjhq1kv2@4ax.com>
Source record: 150099

I have a G5RV between two of my towers.... the end insulator tied
off with 10-15 feet of rope to one tower and the other with 180 -190
feet to the other tower at the back of the yard. I have a "football"
field + length for my back yard. Would it help / hurt to extend
the one side of the 51' design of the G5RV with more wire ----???
Say 51' on one side and double or tripled the length of wire on the
other side to 150 feet - replacing the rope? My thought was to use
more capture area with more wire ..... Can't ask the guy that
designed the antenna - he is a "silent key".

I am about 40 ' off the ground at the center - ladder line feed -
regular G5RV... I do not want to change the center feed point as
it is coax in black plastic pipe - underground - comes out of the
ground and up between two trees.

Any Ideas?????

Thanks

Ron

rbouder@dejazzd.com

1711. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:12:44 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c52cb49_3@news1.prserv.net>
Source record: 150097

Doc:
Yes, it does depend on the type of soil. To use a ridiculous extreme example, one well placed subsurface rock will make extraction difficult, and yet provide almost no soil contact. And, disturbing the soil by water jet, even though a lot of it settles back in the hole, always leaves it a lot less dense than it started, even when it is sand.

My reason for pointing out the problem is that anyone who has to ask probably also has a poor understanding of any of the principles of either RF grounding, or lightning protection, and should be aware that a ground rod installed loosely in a hole is not going to work as well as a driven one for low frequencies, nor a properly designed radial field for RF which someone else commented on. There have been measurements made of contact resistance of driven rods vs. other methods, and the driven rod always has the lowest resistance, sometimes by a lot, sometimes by a little. Unfortunately, I don't remember where that reference is, but I'll bet either NFPA or UL can come up with it, as it forms a portion of the basis for present NEC codes.

I would love to put a current probe around the ground wire of the original poster's installation, to see if it is AC or DC which is eating up his ground rods. And, more importantly, has his service entrance ground also been eroded away, so that he has no electrical system protection either? It's not likely the utility company used a solid copper ground rod.

--
Crazy George
Remove NO and SPAM from return address
'Doc <w5lz@icok.net> wrote in message news:3C526318.F70CD2DA@icok.net...
>
>
> Crazy George,
> I think it may depend on the type of soil in your
> area. I've put down several ground rods like that and
> don't seem to have any problem with the "rod not being
> in intimate contact with the dirt". I can say that
> when finished puting a rod down this way, there's no
> chance of you ever pulling it up by hand! I'd call that
> "intimate" enough...
> 'Doc

1712. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:31:43 UTC
From: Roger N <rneal63@onemain.com>
Message-ID: <zZz48.17069$ag5.1591023@newsread2.prod.itd.earthlink.net>
Source record: 150100
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Dave D" <Dave_d@default.com> wrote in message
news:a2tee5gam1@knossos.btinternet.com...
>
> I don't think amateur radio qualifications are worth anything much in
> electrical engineering. I decided to enter the exam just for the hell of
it.
> The night before the exam I read the licensing conditions and got a credit
> for that part and a destinction for theory. Quite frankly, it was
piss-easy.
> I have no other qualifications in electronics, apart from attending an HND
> bridge course for nearly a year and having worked and played in
electronics
> most of my life. I kept my AR license up for one solitary year before I
> realized what it was really like ;-)

I got my Technician and General class license last year so things may be different now then they were when you got your license. The electrical part was easiest for Technician class, had a little more for General class, but Extra class appears to have quite a bit, compared to the others anyway. I can see that an EE could easily pass the electrical parts with little trouble, but how did you memorize all the rules on which frequencies are for what and how much power you were allowed to use on the different bands? The parts that took some study time for me was memorizing the rules and procedures, and learning Morse code. If I decide to go for the Extra class license, I will have to memorize a good bit more FCC rules and operating procedures, etc, plus re-memorize electrical formulas that I learned in school and haven't used in 20 years. :-(My interests in Amateur radio came about by my wanting to put a video camera on my R/C helicopter, license is required for the higher powered transmitters.

1713. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:32:49 UTC
From: tdonaly@cs.com
Message-ID: <20020126103249.12450.00000593@mb-mn.news.cs.com>
Source record: 150101

Roy wrote;
>
>I'm probably an exception. I was a lousy EE student. I worked my way
>through engineering school doing circuit design (and with a little
>financial help from my former employer, the U.S. government), and was
>constantly frustrated by the huge gap between what I was learning and
>what I needed to know to solve the real-world problems I encountered
>daily in my job. The professors had almost no idea of what the real
>world was like. (Example: In frustration, I asked the head-in-the-clouds
>20-something year old PhD math instructor trying to teach us
>differential equations to help us get connected by solving a simple
>mass-spring problem. "Masses? Springs?" he replied. "What do
>differential equations have to do with masses and springs?") ...

(The rest snipped.)

Mathematicians aren't supposed to know anything. In his essay "Mathematicians
and Metaphysicians" Bertrand Russell wrote,
"Thus mathematics may be defined as the subject in which we
never know
what we're talking about, nor whether what we are saying is true. People who
have been
puzzled by the beginnings of mathematics will, I hope, find comfort in this
definition,
and will probably agree that it is accurate."
I hope they weren't using a real mathematician to teach engineering math. If
they were,
you should go back to the institution you attended, Roy, and ask for your money
back.

Tom Donaly KA6RUH

1714. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:34:41 UTC
From: joseph.buch@dol.net
Message-ID: <3c52cb73.7246235@news.dol.net>
Source record: 150102

fractenna@aol.com (Fractenna) wrote:

>
>Corry has a valid point. Many ECE dep'ts do not emphasize RF these days. That
>is not a criticism, but an observation.
>
>Analog RF at universities is truly moribund.That DOES rate a disappointment,
>from me anyway.
>
>73
>Chip N1IR

I agree. About 20 years ago i had to staff a new satellite communications ground terminal with a few engineers. The folks I tried to hire right out of university were sadly ignorant of RF stuff. Much of what I learned in the 1950's was not even being taught any more.

In my own case, I had my extra class license as a senior in high school. During the summers I worked for Eldico Corp. at their factory on Long Island assembling production prototypes of their SSB-100 transmitters and 1 KW linear amplifiers. I built all my own transmitters for use at home.

I found the EE curiculum to be boring until I got to my senior year communications course in which I got an "A". I knew several hams in the radio club who dropped out of school because they knew they could make good money as a broadcast engineer without a degree. The hard part for me was seeing any relevance to the real world in what we were studying. Concepts of electromagnetic field theory like "curl" and design of nine-phase AC power transmission systems left me cold. I managed to graduate and had a successful 35 year career in the aerospace industry in spite of my difficulty with the content of the EE program.

Joe Buch
joseph.buch at dol.net

1715. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:41:19 UTC
From: richardharrison@webtv.net
Message-ID: <19513-3C52CE1F-143@storefull-117.iap.bryant.webtv.net>
Source record: 150104

Jim Bolinger wrote:
"I am both an EE and ham. (Notice my callsign...) Jim N8EE."

A frind of mine is both an engineer and a ham. His callsign: N5CPA

Best regards, Richard Harrison, KB5WZI

1716. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:42:39 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C52CE6F.5CD7D23A@coqui.net>
Source record: 150103

Tdonaly wrote:
>
> >
> >
> >Of all the well known "RF engineers", how many actually have EE degrees?
> >
> >Rick K1BQT
> >
>
> I didn't know there were any well known RF
> engineers, except dead ones such as Marconi, or Armstrong. Did those fellows
> have degrees?
>
> Tom Donaly KA6RUH

Were EE degrees offered back then?
-Bill

1717. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 15:58:44 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2umb2$141du9$1@ID-124126.news.dfncis.de>
Source record: 150107

Phil, from where can be obtained an analysis of the behaviour of a folded monopole, feedpoint impedance vs dimensions, etc. I am not interested in radiation pattern - that's obviously the same as a simple vertical of the same height.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Philip de Cadanet <phil@invest.fsbusiness.co.uk> wrote in message news:gC3AgKAnSqU8EwNt@invest.fsbusiness.co.uk...
> Stefano,
>
> > If you want
> >prove your self the CFA CAN have the same efficiency of a full size vertical
> >(with no traps) you can look for "stefano's cfa experiments" in the antennex
> >archive.
>
> Last years CFA tests conducted at NTL's Weston Park here in the UK had
> poor results.
>
> Comments from a friend;
>
> The CFA passed away rather quietly during the early part of last year.
> Khabbary himself seems to have slunk away with his ill gotten gains, and
> apparently no longer works for the Egyptian Radio and Television
> services.
> Son of CFA is however alive and well, and yet another hopeful individual
> is following the path....
> At least this time the antenna is being submitted for FCC testing and
> approval, but no-one is holding their breath....
> On the subject of antennas, the biggest advantage that the Folded
> Unipole has over the series fed antenna, is the fact that the bandwidth
> is always greater for a given geometry.
> This will always be disputed by various pundits, but is a feature of the
> shorted transmission line in parallel with the radiating element.
> The slope of reactance for both elements of the antenna is opposite, and
> has a tendency to cancel.
> This is most effective around quarter wave resonance, but is useful at
> much shorter effective heights.
> When the antenna is shorter than a quarter wave, there is a further

> advantage to using a Folded Unipole.
> Because the feed becomes inductive rather than capacitive, the losses in
> the matching networks can be reduced considerably, due to the
> performance of practical components.
> I.e. the losses associated with practical inductors, compared to the
> losses for easily obtainable vacuum capacitors.
> I think you probably know that I am back with
>
> XXXX
>
> again, and have been
> for the last eighteen months or so.
> At the moment I am designing a diplexing system to enable dual use of
> one of our London sites, in order to accommodate one of the new "Access"
> radio stations.
> It is fun to get the opportunity to combine the predictive power of the
> PC with real world measurements, and see how they match up.
> In the case of a Band One STL antenna, the computer model failed
> miserably.....
> Just shows how important accurate measurement equipment is, to confirm
> predicted performance.
> That's about all from here for now.
>
> End.
>
> Phil G4ZOW

1718. Re: Tilted Beverage

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 16:04:42 UTC
From: richardharrison@webtv.net
Message-ID: <19515-3C52D39A-17@storefull-117.iap.bryant.webtv.net>
Source record: 150105

Kent, K9EZ wrote:
"Bottom line is that the height is not too critical."

When I lived in Portugal almost 50 years ago I used a very long open-wire transmission line aimed west as a Beverage antenna to often listen to the CBS Evening News from WCBS in New York and from WWL in New Orleans, after midnight local time in Portugal. These provided very good frequency-diversity reception.

Best regards, Richard Harrison, KB5WZI

1719. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 16:38:14 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2umb4$141du9$2@ID-124126.news.dfncis.de>
Source record: 150108

> Last years CFA tests conducted at NTL's Weston Park
> here in the UK had poor results.
==========

That (presumably) professional engineers/scientists wasted time and somebody else's money on making tests and measurements, to demonstrate what should have been perfectly obvious to such people, is a sad reflection on present-day standards of basic engineering education in the UK.

But then, there's not much to be done with students who are unable to add and subtract, let alone multiply, by the age of 18.

1720. How Good Is the "Lattin" Dipole Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 16:41:39 UTC
From: Pete Ritter <SeeSig@Below.com>
Message-ID: <7%A48.862$Ox4.1395@rwcrnsc51.ops.asp.att.net>
Source record: 150106
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Has anyone tried the "Lattin" dipole antenna described at this URL? How does it perform? Are the measurements correct? How much pruning did you have to do? How does its efficiancy compare to that of commercial trap dipoles?

Thanks for your comments.

http://www.g3ycc.karoo.net/lattin.htm

--
**
** You know what to do to fix this email address: CPRitter-attbi-com
**

1721. Re: 160M on R-5 Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 16:44:21 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <F1B48.1946$Qg2.129358@news1.east.cox.net>
Source record: 150109

The SWR at the antenna matchbox will remain the same, regardless of what
the SWR at the rig is tuned to. Why not just run a length of random wire
for
160 meters against a ground, such as your home plumbing and then use
the tuner to achieve a good match?

If you must use the R-5, I'd be tempted to bypass the matchbox with the
coax directly feeding the R-5. The biggest problems with those antennas
seems to be toasting the matching transformer which CC will not replace
or provide engineering specifics for. Another point, the matchbox may
be extremely lossy when the antenna is used for 160 meters, or it may
provide
some matching. Who knows what the antenna impedance is at 1.8 MHz?

Pete

"Richard Valentine" <rwvNOSPAM@attbi.com> wrote in message
news:Fh738.9128$Qs4.25401@rwcrnsc53...
>
> I was wondering if anyone out there knows if I can damage the matching box
> on an R-5 Vertical by forcing 160Meters on the antenna? I've tried it,
after
> getting a 1:1 SWR through an antenna tuner and I kept the power low
(10Watts
> AM). Who knows where or how the signal radiates, but it actually worked.
> Made some AM contacts, albeit weak. This is strictly a temporary
situation,
> with a long story behind it. My only concern is, In the meantime will I
> toast the Matching box on the antenna, or no worries? Till now I've heard
> varying opinions. Thanks, Rick.
> N1SQJ
>
> ------------
>
>
>
>

1722. Re: 160M on R-5 Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 16:51:03 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c52de77$1@news.bnb-lp.com>
Source record: 150110

I have a drawing with component values for the Cushcraft R-7 "black box"
on the Ham Radio Links page of my site listed below.....

Uncle Peter said....
>The biggest problems with those antennas
>seems to be toasting the matching transformer
>which CC will not replace
>or provide engineering specifics for.

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

1723. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 17:02:51 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <u55o77252meb6c@corp.supernews.com>
Source record: 150111
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna

Dear Group:
1. Notice how many excellent people have responded to this thread - a number of observations came from people who only occasionally comment. There are issues here of interest to many.

2. Thinking back to University four+ decades ago, the most effective engineers were almost all radio amateurs. Let us not forget that being a radio amateur in those days was a lot more intellectual and practical than is now the case. Some of our best teachers were radio amateurs. Separated by years, N8EE and I both had W8JK as a mentor and exemplar.

3. In over 37 years of teaching EEs, many of the most productive engineers were radio amateurs. Mind, the best did not always have the best grades. [I remember one student (a radio amateur) who was a vigorous participant in Noon hour seminars over lunch. He flunked out of our school. Years latter, he approached me at Dayton. He had done well at another school and was then head of the part of the public service agency of a major State overseeing the electric power industry in that State.]
The Wise Roy has put his finger on the correlative factor. It is curiosity. What I have found to be linked in a ridged fashion to success (as engineers would recognize it) is a student's curiosity. That such persons should also tend to be radio amateurs (of the classical type) is of no surprise. [Mind you, some of those successful EE students now are involved with major medical research, head patent law firms, and also perform more traditional, creative engineering.] Over the years, I have seen the effects of the debasing of the amateur license in that fewer of the curious students have a license.

4. Most of the effective faculty in my department have a radio amateur license and the other effective faculty exhibit the same type of curiosity as that of the best students. Their teaching reflects broad understanding of the issues involved with analysis and synthesis. Yes, springs and mass has a lot to do with circuit analysis (and understanding).

Let us all nurture curiosity whenever an opportunity to do so arises. This group plays a positive role most of the time. 73 Mac
N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net
Office: JCM@McLMcL.Com

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C52598F.64FA815F@eznec.com...
<snip>
> Later on, from time to time I was called on to do screening interviews
> of college students for the large company I worked for. Ironically, I
> wouldn't have qualified for most of the interviews myself, not having
> the minimum GPA required of the students I interviewed. I've found
that
> GPA has very little correlation to a person's ability as a design
> engineer. The GPA measures the ability to analyze prepared problems
and
> repeat back what's expected, while design work requires synthesizing
> solutions, a very different process (which does, however, require
> analytical skills). What I find to be a much better indicator of
> engineering skill is curiosity, something not generally encouraged in
> engineering school. A good design engineer is simply bugged if
something
> shows up that he can't understand or that doesn't work like he thought
> it did, and will stick at the problem until it's understood. In the
> interviews, I was much more interested in any kind of hobby activities
> they did on their own, the problems they had solved, and how they had
> approached and solved them, than I was in a GPA. And ones I selected
who
> were hired turned out to be pretty good engineers. (They did,
> admittedly, also have fairly high GPAs, that being required to get the
> interview in the first place.) I saw plenty of students with a 4.0 who
> would have been disasters at doing design.
>
> I'd say that the hams I've known who are design engineers have, on the
> average, been among the better ones. But I don't think they've
> necessarily been the best students. I think it would be great if
> universities would hire more people who had some experience with
> reality. But then they'd have to pay 'em. . .
>
> Roy Lewallen, W7EL
>

1724. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 17:20:12 UTC
From: edvanc@mediaone.net
Message-ID: <gzB48.28077$yC.3559991@typhoon.mn.mediaone.net>
Source record: 150112

Hi Jerry,

Been a Butternut user here since 1991 running both the HF-6V and HF-2V. Both antennas are still in service, but have had to replace the 75 Ohm matching section on the HF-6V several times. The matching section is cut for 20 Meters as you have noted. It helps most on 20M. My Butternuts are ground mounted over 73 buried radials of from 15 to 55ft in length. You didn't mention the frequencies at which the SWR readings you reported were encountered. I don't have full band coverage on 40M either with the HF-6V, but do with the HF-2V, but have set my 2:1 bandwidth toward the CW portion of the band on the HF-6V. You should be seeing something better for 15M and may need to adjust the length of the 15M stub.

Hope that helps.

Ed, W0VC

In article <VYc48.22725$im4.1986553961@newssvr17.news.prodigy.com>, jerryaa@prodigy.net says...
>
>I have had ongoing problems with swr on my HF6 and now seem to have fixed
>those by proper grounding. I get anywhere from 1.6:1 on 40 and 10 meters and
>1.9:1 on 15 meters. 80 meters I get a 1.9:1 on a very narrow frequency when
>measured at the antenna.
>
>I am using 35 feet of RG8x as transmission line. measured from the feedline
>point my swr is 1 point higher. I have tried an RG8 AU with the same
>readings.
>The HF6 directions say to use a 11'2" length of 75 ohm transmission line
>connected to any 50 ohm coax. Friends of mine say that shouldn t make much
>difference in efficiency.
>
>What are my likely problems here? I don t want to use a tuner if I don t
>have to use one. Is that 75 ohm line going to make that much diference?
>Instructions say that line is for matching in the 10 meter band.
>
>
>
>

1725. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 17:25:20 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C52E680.2D757766@IEEE.org>
Source record: 150113

Gary - KJ6Q wrote:
> Sometimes it SEEMS that substantially LOWERING the mounting point of the
> capacity hat has relatively small effect on the overall tuning and performance of the antenna as a
> whole - sometimes I have even mounted the capacity hat immediately above the coil, with results
> nearly as good as up near the top of the whip.

I've run field strength tests that tend to indicate that not much radiation comes from the top of the stinger. A top hat should be kept out of the immediate fields of the loading coil. I run a 6' diameter top hat two feet above the screwdriver coil with no "stinger". This is a good way to improve clearance.
--
cheers, CAM http://www.qsl.net/w5dxp

1726. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 17:59:08 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <egr55u0h6h4vgfh3qrm8180b30u6pt6br5@4ax.com>
Source record: 150114

On Sat, 26 Jan 2002 16:38:14 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>But then, there's not much to be done with students who are unable to add
>and subtract, let alone multiply, by the age of 18.
>

The classic statement of the Old Wife.

One riposte I've seen lately "Experiance... wasted with the old." ;-)

73's
Richard Clark, KB7QHC

1727. Re: G5RV - Extending one side - Will it help - HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 17:59:29 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2utda$143d0n$1@ID-124126.news.dfncis.de>
Source record: 150021

Ron, just put up the longest dipole you can manage up to a maximum of about 240 feet end to end. Length very non-critical. As high above ground as possible. If you can, feed it roughly at its centre with heavy-gauge 300, 450 or 600-ohm line. Prefer the higher line impedance. If you can't manage centre feed just do your best. Absolute centre it is not a vital necessity. Whatever you do, practically all the power you put into the feedline will be radiated in some direction or another.

It doesn't matter if, in order to feed nearer to the dipole centre, the feedline comes away from the antenna at an angle considerably different from the ideal 90 degrees.

If you have any coax in the feeder consign it to the junk box. Bring the feedline right into the shack if you can manage it. Fit a choke balun between feedline and tuner. There may be any length of coax between tuner and transmitter but the shorter the better of course. It's convenient for tuning-up purposes if the SWR meter is at the tuner end of this coax to the transmitter.

You will then have the most efficient, all-band 160 to 10m antenna possible at your QTH.

Taking one band with another the antenna can be considered omni-directional

If you are numerically inclined you may find program DIPOLE2 of interest. Models any centre-fed dipole with any type of feedline plus L-match network component values. Download in a few seconds from website below and run immediately.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
1ARTB <rbouder@dejazzd.com> wrote in message
news:meg55ucnd6aqrhn2s6i09sc61usjhq1kv2@4ax.com...
>
> I have a G5RV between two of my towers.... the end insulator tied
> off with 10-15 feet of rope to one tower and the other with 180 -190
> feet to the other tower at the back of the yard. I have a "football"
> field + length for my back yard. Would it help / hurt to extend
> the one side of the 51' design of the G5RV with more wire ----???
> Say 51' on one side and double or tripled the length of wire on the
> other side to 150 feet - replacing the rope? My thought was to use
> more capture area with more wire ..... Can't ask the guy that
> designed the antenna - he is a "silent key".

>
> I am about 40 ' off the ground at the center - ladder line feed -
> regular G5RV... I do not want to change the center feed point as
> it is coax in black plastic pipe - underground - comes out of the
> ground and up between two trees.
>
> Any Ideas?????
>
> Thanks
>
> Ron
>
>
> rbouder@dejazzd.com
>

1728. Balun question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 18:07:48 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <a2ur52$t1s$1@news7.svr.pol.co.uk>
Source record: 150115

I just purchased a used 16 ele NBS 2m yagi from a nearby ham.

The driven element is a folded dipole.
I noticed that the length of the coax cable used to form the coaxial
balun has a total length of 26".

The usual 4:1 coaxial balun is 1/2 wave long or about 41" for 144.300 MHz.

Can anyone suggest a reason as to why the coaxial balun is 26" on the used
2m yagi I just bought ?

Different impedance transformation ratio maybe or just downright wrong ??

Thanks,

1729. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 18:11:09 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <1jC48.942$3Y3.267595@paloalto-snr1.gtei.net>
Source record: 150116

That pretty well duplicates my experiments as well - which at least helps keep larger capacity hats
outta the trees and overhead wires - and here's still ANOTHER variation... After a small "incident"
with a tree, I found that when the same circular array capacity hat had all the "spikes" rearranged
to the REAR area of the vertical whip, it still loaded the same as it did when they were arranged
radially around the whip - it seems the physical area/number of hat radials is more critical than
actual layout (only to a degree, I'm sure!), at least in terms of system loading. Sure would be
interesting to see accurate, in-depth test data on the subject!

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message news:3C52E680.2D757766@IEEE.org...
> Gary - KJ6Q wrote:
> > Sometimes it SEEMS that substantially LOWERING the mounting point of the
> > capacity hat has relatively small effect on the overall tuning and performance of the antenna as
a
> > whole - sometimes I have even mounted the capacity hat immediately above the coil, with results
> > nearly as good as up near the top of the whip.
>
> I've run field strength tests that tend to indicate that not much radiation
> comes from the top of the stinger. A top hat should be kept out of the immediate
> fields of the loading coil. I run a 6' diameter top hat two feet above the
> screwdriver coil with no "stinger". This is a good way to improve clearance.
> --
> cheers, CAM http://www.qsl.net/w5dxp

1730. Non-Inductive Resistors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 18:25:49 UTC
From: zzz <zzz@fast.net>
Message-ID: <3C52F4AD.5DE9E416@fast.net>
Source record: 150117
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

Fellow Hams:
Does anyone know of good sources/prices for non-inductive
ceramic/carborendum power resistors (25-300 ohms) suitable for making rf
loads or swamping attenuators (@hf) ???

I'm aware of the manufacturer Kanthal/Globar (Cesiwid) in NY and Surplus
Sales of Nebraska.

Thanks,
Ed. B.(W3DLZ)

1731. Re: Non-Inductive Resistors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 18:30:59 UTC
From: Bill & Suzie Whatley <spud286@attbi.com>
Message-ID: <DBC48.1289$Ox4.3376@rwcrnsc51.ops.asp.att.net>
Source record: 150118
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

These are also available from Bird Electronics (same ones who make the model 43 wattmeter).

WA5VRL
Willis

1732. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 18:32:37 UTC
From: aidehua@aol.com
Message-ID: <20020126133237.24590.00000456@mb-mg.aol.com>
Source record: 150019

For 80m, you should be able to obtain a lower SWR by widening or compressing
that lil' red coil at the feedpoint. It's there specifically for that purpose.
Great antenna!

73,
Ed NI6S

1733. Re: Non-Inductive Resistors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 18:33:44 UTC
From: Bill & Suzie Whatley <spud286@attbi.com>
Message-ID: <cEC48.6480$Om2.20802@rwcrnsc53>
Source record: 150020
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

Forgot the site info...

www.birdfla.com

73
WA5VRL
Willis

1734. Re: G5RV - Extending one side - Will it help - HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 18:41:40 UTC
From: "A. Duffy" <va3atd@sympatico.ca>
Message-ID: <3C52F864.50903@sympatico.ca>
Source record: 150022

Look into a Windom antenna... If memory serves me there are too
different lengths to the radiators that would probabily fit the bill for
you.

73, Tony
VA3ATD
London Ontario

1ARTB wrote:

> I have a G5RV between two of my towers.... the end insulator tied
> off with 10-15 feet of rope to one tower and the other with 180 -190
> feet to the other tower at the back of the yard. I have a "football"
> field + length for my back yard. Would it help / hurt to extend
> the one side of the 51' design of the G5RV with more wire ----???
> Say 51' on one side and double or tripled the length of wire on the
> other side to 150 feet - replacing the rope? My thought was to use
> more capture area with more wire ..... Can't ask the guy that
> designed the antenna - he is a "silent key".
>
> I am about 40 ' off the ground at the center - ladder line feed -
> regular G5RV... I do not want to change the center feed point as
> it is coax in black plastic pipe - underground - comes out of the
> ground and up between two trees.
>
> Any Ideas?????
>
> Thanks
>
> Ron
>
>
> rbouder@dejazzd.com
>
>

1735. Unipole Was CFA

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 18:48:16 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <U3yd9PAwnvU8Ew4t@invest.fsbusiness.co.uk>
Source record: 150023

Reg,

>Phil, from where can be obtained an analysis of the behaviour of a folded
>monopole, feedpoint impedance vs dimensions, etc. I am not interested in
>radiation pattern - that's obviously the same as a simple vertical of the
>same height.
Did I not post this earlier in the thread, maybe not.

http://www.dlr.com/dlrweb/papers/nabpaper/Nabpaper.htm

Regards

Phil G4ZOW

1736. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 19:05:37 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <tgs55ucc3h1i8md79ek0n9j0pr3nf5t86s@4ax.com>
Source record: 150024
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

On Fri, 25 Jan 2002 23:23:59 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I'm probably an exception. I was a lousy EE student. I worked my way
>through engineering school doing circuit design (and with a little
>financial help from my former employer, the U.S. government), and was
>constantly frustrated by the huge gap between what I was learning and
>what I needed to know to solve the real-world problems I encountered
>daily in my job. The professors had almost no idea of what the real
>world was like. (Example: In frustration, I asked the head-in-the-clouds
>20-something year old PhD math instructor trying to teach us
>differential equations to help us get connected by solving a simple
>mass-spring problem. "Masses? Springs?" he replied. "What do
>differential equations have to do with masses and springs?") A 2.0 GPA
>was required to graduate, and I felt (and still feel) that graduating
>with 2.01 was a waste of one half of one percent of my time. I did end
>up overshooting, but not by much. I had no trouble finding a job after
>graduating, since while I was going to school I had designed all or a
>major part of ten production instruments for the small company I worked
>for. And after the first job, no one cared less about a GPA, as it
>should be.
>
>About the happiest day of my life was when I finally got finished with
>the stupidity of that "education".
>
>Later on, from time to time I was called on to do screening interviews
>of college students for the large company I worked for. Ironically, I
>wouldn't have qualified for most of the interviews myself, not having
>the minimum GPA required of the students I interviewed. I've found that
>GPA has very little correlation to a person's ability as a design
>engineer. The GPA measures the ability to analyze prepared problems and
>repeat back what's expected, while design work requires synthesizing
>solutions, a very different process (which does, however, require
>analytical skills). What I find to be a much better indicator of
>engineering skill is curiosity, something not generally encouraged in
>engineering school. A good design engineer is simply bugged if something
>shows up that he can't understand or that doesn't work like he thought
>it did, and will stick at the problem until it's understood. In the
>interviews, I was much more interested in any kind of hobby activities
>they did on their own, the problems they had solved, and how they had
>approached and solved them, than I was in a GPA. And ones I selected who
>were hired turned out to be pretty good engineers. (They did,
>admittedly, also have fairly high GPAs, that being required to get the

>interview in the first place.) I saw plenty of students with a 4.0 who
>would have been disasters at doing design.
>
>I'd say that the hams I've known who are design engineers have, on the
>average, been among the better ones. But I don't think they've
>necessarily been the best students. I think it would be great if
>universities would hire more people who had some experience with
>reality. But then they'd have to pay 'em. . .
>
>Roy Lewallen, W7EL

Hi All,

Like Roy, my EE grades were barely enough to escape the draft, but not good enough to motivate me to stay away from it. I soon found myself in Uncle Sam's canoe club in '68 (the lottery was still years ahead, and a 2.0 was the draft breakpoint).

Hardly mattered.

When I emerged to return to academia, I was well educated (courtesy of the navy of course) and a skilled educator in Electronics. I re-entered the EE program, but only for months when I found that the instructors were pathetically trained for instruction, poorly motivated, and they had labs full of instrumentation I could not only fix, but calibrate, and explain the intracies of theory that enabled their operation - all sitting dusty on upper shelves with no apparent use. The last straw was my phD standing before me READING verbatim from the same text I toted to class every day - such a poverty had me out of that morgue quickly.

This is not to denigrate colleges and their engineering schools, I was highly motivated by one particular Dr. Richard Blade (University of Colorado, Cragmor) in three semesters of Physics. The one overriding concept he taught was that numbers add up to nothing (to quote Neil Young) - sorry Punchinello, monkeys can scribble numbers and still have to go home to their trees for all their effort. Of the 100% available for scoring any test, the answer only accounted for 5% and we were allowed to be within one order of magnitude. What we were graded on was how we got the answer. This simple principle quickly separated the wheat from the chaff. The fixation on numbers to the exclusion of thinking was anathema.

So. You go to school to learn, not to find a job. I've been saddled with too many engineers who saw only a salary, not a diploma when they studied. On the other hand I've trained innumerable techs that eclipsed these sad souls who eventually worked for them!

When I walked away from the shocked EE program toward the even more shocked English counselor it was toward an ethic that encouraged analysis and thinking over the soul hardening paralysis of scribbling numbers. That same counselor offered in honest self appraisal that

there were few jobs waiting for English graduates. I responded I had a job, and had been working in that field for nearly 10 years. I later capped that with another degree in Cinema (BA squared if you will).

This is not to say I have an antipathy for numbers. Most here will recognize my web published work is replete with them. Further, my career in Metrology can hardly escape their application out 6-12 places. However, such numbers were a consequence of a method, not a goal. Without the fundamentals, those same 6-12 places could have as easily consumed 5-11 places of numerical noise.

As I pointed out to Jason earlier, if you do not have the experience and talent of a tech, as an engineer you are little better than his tool caddy. If you do not have the motivation to seek out that same experience - you are dead in this economy.

Not an engineering graduate, I have nonetheless done work that most engineers would kill for, but they were on the MBA fast track watching from the sidelines. My design work has included Avionics (sole designer of the black box HW/SW for the 757/767) Medical Electronics (blood-gas chromatographs), Instrumentation (fiber optic based oxygen sensors), Basic Research (contributing editor and researcher to 5 NIH Grants), Optical storage (4 patents), Process Control (1 patent), RF Instrumentation (Spread Spectrum, albeit in the software side of the house), and some several many years of Internet programming (with three dead dot.coms behind me - managed by those surviving MBA's, the exposed corrupt tip of the ENRON/Anderson iceberg).

73's
Richard Clark, KB7QHC, BAï¿½

1737. Do Hams and EEs enjoy the same type of women?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 19:11:17 UTC
From: StarGazer <pti@capnet.com>
Message-ID: <3C52FF55.BDBF3B6C@capnet.com>
Source record: 150025

.

1738. Re: Do Hams and EEs enjoy the same type of women?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 19:39:49 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C5305F6.3BB35303@shaw.ca>
Source record: 150026

StarGazer wrote:
>
> .

It depends on whether the women like shorted stubs! :-)
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1739. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 19:46:26 UTC
From: Frank Lombardi <wb2hmg@arrl.net>
Message-ID: <WzD48.96336$Ee7.6363637@e3500-atl1.usenetserver.com>
Source record: 150027

I just installed a used HF6V and had to replace the 75 ohm linear transformer. I used the formula in the Handbook to calculate the correct length and then an MFJ 259, with an appropriate adaptor, to actually cut it to the correct length. Using the correct coax cable velocity factor and cutting per the formula will work just fine.

Check out their Web site for a lot of interesting information on verticals, including the need for radials.

"Jerry" <jerryaa@prodigy.net> wrote in message news:VYc48.22725$im4.1986553961@newssvr17.news.prodigy.com...
> I have had ongoing problems with swr on my HF6 and now seem to have fixed
> those by proper grounding. I get anywhere from 1.6:1 on 40 and 10 meters and
> 1.9:1 on 15 meters. 80 meters I get a 1.9:1 on a very narrow frequency when
> measured at the antenna.
>
> I am using 35 feet of RG8x as transmission line. measured from the feedline
> point my swr is 1 point higher. I have tried an RG8 AU with the same
> readings.
> The HF6 directions say to use a 11'2" length of 75 ohm transmission line
> connected to any 50 ohm coax. Friends of mine say that shouldn t make much
> difference in efficiency.
>
> What are my likely problems here? I don t want to use a tuner if I don t
> have to use one. Is that 75 ohm line going to make that much diference?
> Instructions say that line is for matching in the 10 meter band.
>
>
>
>

1740. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 19:59:28 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <a2v1pd$d5s$1@slb1.atl.mindspring.net>
Source record: 150028

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:19513-3C52CE1F-143@storefull-117.iap.bryant.webtv.net...
> Jim Bolinger wrote:
> "I am both an EE and ham. (Notice my callsign...) Jim N8EE."
>
> A frind of mine is both an engineer and a ham. His callsign: N5CPA
>
> Best regards, Richard Harrison, KB5WZI
>

I make web sites and watch cartoons. Corry K4D'OH!

--
It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/

Paul Wesley Dunn <wpdunn@ipa.net> wrote in alt.thought.southern: "how about
It Came From C. L. Smith's Tiny Little Mind."

1741. Re: G5RV - Extending one side - Will it help - HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 20:02:54 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C530B68.D875F679@icok.net>
Source record: 150029

Do you mean a 'Windom' or an off center fed dipole? Big
difference...
'Doc

1742. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 20:03:35 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201261203.298f0202@posting.google.com>
Source record: 150030

"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<H_l48.863$S4.546868@paloalto-snr2.gtei.net>...
> GEEZE, I hate to be asking so many questions (but how ELSE to learn - or display my
ignorance...)...
>
> I have found that there is a pronounced observable change in loading of a mobile
whip/capacity hat
> when the capacity element is moved up or down on the whip portion of a center loaded whip
(probably
> true of ALL whips...). Sometimes it SEEMS that substantially LOWERING the mounting point
of the
> capacity hat has relatively small effect on the overall tuning and performance of the
antenna as a
> whole - sometimes I have even mounted the capacity hat immediately above the coil, with
results
> nearly as good as up near the top of the whip.
>
> Any comment?

If you can move it up and down, and see little difference in the
number of coil turns needed, then it's not making much difference as
to it's position. Top hats on mobiles I have never used. Mainly
because my antennas are all light weight, and a hat would add too much
wind drag. As far as X type hats with no connection of the spokes at
the ends, I think they are a waste of time overall, unless you just
have to have every single drop of performance. I think a solid plate,
or an X with connected ends works better. Myself, I avoid all the
hassle of hats, and just use the longest whip I can get away with.
Decreasing a couple of three turns of Hi-Q coil, from use of a small
hat really isn't going to make much of a noticable difference in the
real world. Or I don't think anyway. Now if you can use a BIG hat ,
and lose 1/3 of your windings, now you are getting somewhere. :) MK

1743. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 20:05:40 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u5630nofgljh6d@corp.supernews.com>
Source record: 150031
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

I *knew* there was something abour Roy I liked. He and I made the top half of our class possible and then went on to sign for the highest salary of our graduating classes.

{;-)

Jim

"Roy Lewallen" <w7el@eznec.com> wrote in message news:3C52598F.64FA815F@eznec.com...

> I'm probably an exception. I was a lousy EE student.

1744. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 20:07:59 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u5634uohoos6a3@corp.supernews.com>
Source record: 150032
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna

Oh, dear God. I'da sold my firstborn into slavery to have taken a class from that man.

Jim

> Separated by years, N8EE and I both had W8JK as a mentor and exemplar.

1745. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 20:21:34 UTC
From: Nick Sheldon <nick.sheldon@sheldonassociate.demon.co.uk>
Message-ID: <1012076526.8450.0.nnrp-01.c1eda3cf@news.demon.co.uk>
Source record: 150033
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Fotis Visilias wrote in message ...
>> This is represented in the classical Greek approach to what would have
>> become science had they adopted the simple expedient of testing their
>> theories in practice. eg. the rate at which heavy objects accelerate
>> relative to light ones, and the number of teeth possessed by women.
>
>If this is your philosophy, maybe it's a good idea to learn more about
the
>civilization and history of Greece.
>When we was enjoying the civilization and learning, you was sleeping in the
>caves...
>The word "philosophy" is taken from the Greek language like more of the
>words that you use, for example "psychology" , " technology" "academic",
>"sociology", "arithmetic", "mathematical". Does it means something for you,
>maybe?
>
>Fotis Visilias radio amateur from Greece (sv3eao).
>http://www.qsl.net/sv3eao
>

Hi Fotis

The point I was making is that many hypotheses held by famous classical Greek philosophers are simply wrong theories about the physical universe - the two examples I gave are just that, simply examples.

Others might include:
1. "All movement is an illusion as since vacuum doesn't exist, movement is impossible."
2. "Each new day is actually lit by a different, entirely new sun."
3. "There are four elements."

Naturally I have the greatest respect for modern Greek engineers, technologists and scientists, all of whom test their hypotheses against reality. However, many famous figures from classical Greek history did not.

The link with radio amateurs is that if, as a ham, one builds an RF amplifier and it doesn't work, one will not be able to claim that it does work as this statement will so obviously be false. A theoretician, who states in public that experimentation is beneath him (or perhaps ignores its results) however, may inadvertantly create an entire literature of "knowledge" which is false.

Naturally, we owe a great debt to the Greek language with very many English words, but although their etymology is from the Greek, the modern meanings

of the words psychology and sociology do not have a significant link with classical Greek civilisation. Classical mathematics was of course entirely pre-calculus (not to mention pre-zero!) and a great deal of arithmetic is Arabic in origin.

Finally, regarding my ancestors, my [Great]^112 Grandfather is well known for having been the chief design engineer working on the Stonehenge analogue astronomical computer project ;-)

Best wishes

Nick Sheldon

1746. Re: Non-Inductive Resistors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 20:22:38 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C53100E.2A7BD9EA@IEEE.org>
Source record: 150035
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

zzz wrote:
> Fellow Hams:
> Does anyone know of good sources/prices for non-inductive
> ceramic/carborendum power resistors (25-300 ohms) suitable for making rf
> loads or swamping attenuators (@hf) ???

I have a few 600 ohm 50 watt non-inductive resistors that I sell at
hamfests for $5 each. Two in parallel make a 100 watt 300 ohm load.
--
cheers, CAM http://www.qsl.net/w5dxp

1747. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 20:24:34 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u56443tik2ua1d@corp.supernews.com>
Source record: 150034

I am both a ham AND a flight instructor. Notice my callsign...

... and an active RF engineer for over 40 years...and no, my degree was in Nuclear Physics because the EEs of the early '60s were still dicking around with 6V6s and the Physicists were playing with semiconductors.

Jim

WX 6 RST

>
> And yes, I am both an EE and ham. (Notice my callsign...)
>

1748. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 20:27:34 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <WiE48.23399$AL3.2113966123@newssvr17.news.prodigy.com>
Source record: 150037

Thanks fellas. It's not too shabby of an antenna, especially for the $50 price I paid for it (used). With the help of my MFJ 969 I chatted with a ham from the Czek Republic this morning on 17 meter on 100 watts.(No 17 meter kit.)
"Jerry" <jerryaa@prodigy.net> wrote in message news:VYc48.22725$im4.1986553961@newssvr17.news.prodigy.com...
> I have had ongoing problems with swr on my HF6 and now seem to have fixed
> those by proper grounding. I get anywhere from 1.6:1 on 40 and 10 meters and
> 1.9:1 on 15 meters. 80 meters I get a 1.9:1 on a very narrow frequency when
> measured at the antenna.
>
> I am using 35 feet of RG8x as transmission line. measured from the feedline
> point my swr is 1 point higher. I have tried an RG8 AU with the same
> readings.
> The HF6 directions say to use a 11'2" length of 75 ohm transmission line
> connected to any 50 ohm coax. Friends of mine say that shouldn t make much
> difference in efficiency.
>
> What are my likely problems here? I don t want to use a tuner if I don t
> have to use one. Is that 75 ohm line going to make that much diference?
> Instructions say that line is for matching in the 10 meter band.
>
>
>
>

1749. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 20:29:20 UTC
From: Mitchell Enterprises <sales@kenmitchell.com>
Message-ID: <3C5311A0.149745FE@kenmitchell.com>
Source record: 150036
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

I had this very samething happen. They put the wrong label on my package and my label on another package thus, the two packages were sent to the wrong parties. I contacted UPS and they took care of it for me. Not willingly at first because they couldn't believe that could happen. They contacted both parties and explain their mistake, picked up the packages, and made it right.

--
Kenneth Allan Mitchell
Mitchell Enterprises
mailto:sales@kenmitchell.com
http://www.kenmitchell.com
(916) 772-1400
(916) 772-1401 (Fax)

1750. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 21:15:35 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <X%E48.1115$3Y3.419015@paloalto-snr1.gtei.net>
Source record: 150038

WELL, if you're already "pushing the envelope" of available height in the mobile antenna system, and
modeling programs show a fairly significant gain to be had with a couple more feet in the whip, the
added effective impact of the top hat IS worth going after - AND, if that benefit IS obtainable even
with the hat slid down significantly on the whip, it's almost like getting something-for-nothing...

I agree, and my own testing proves (to ME!). that about 6 top hat radials, tied circularly together
at the ends and mid-point provide a very effective capacity element - and as is the case with many
HF antennas, the benefits just keep increasing as size does... It's just a matter of how much you
can physically install on a vehicle that actually must be driven, and how much ugliness you can
tolerate! :-)

--
Gary - KJ6Q
****

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0201261203.298f0202@posting.google.com...
> "Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<H_l48.863$S4.546868@paloalto-snr2.gtei.net>...
> > GEEZE, I hate to be asking so many questions (but how ELSE to learn - or display my ignorance...)...
> >
> > I have found that there is a pronounced observable change in loading of a mobile whip/capacity
hat
> > when the capacity element is moved up or down on the whip portion of a center loaded whip
(probably
> > true of ALL whips...). Sometimes it SEEMS that substantially LOWERING the mounting point of the
> > capacity hat has relatively small effect on the overall tuning and performance of the antenna as
a
> > whole - sometimes I have even mounted the capacity hat immediately above the coil, with results
> > nearly as good as up near the top of the whip.
> >

> > Any comment?
>
> If you can move it up and down, and see little difference in the
> number of coil turns needed, then it's not making much difference as
> to it's position. Top hats on mobiles I have never used. Mainly
> because my antennas are all light weight, and a hat would add too much
> wind drag. As far as X type hats with no connection of the spokes at
> the ends, I think they are a waste of time overall, unless you just
> have to have every single drop of performance. I think a solid plate,
> or an X with connected ends works better. Myself, I avoid all the
> hassle of hats, and just use the longest whip I can get away with.
> Decreasing a couple of three turns of Hi-Q coil, from use of a small
> hat really isn't going to make much of a noticable difference in the
> real world. Or I don't think anyway. Now if you can use a BIG hat ,
> and lose 1/3 of your windings, now you are getting somewhere. :) MK

1751. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 21:20:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C531D8B.5B102291@eznec.com>
Source record: 150039

Tdonaly wrote:
>
> I hope they weren't using a real mathematician to teach engineering math. If
> they were,
> you should go back to the institution you attended, Roy, and ask for your money
> back.
>
> Tom Donaly KA6RUH

They were, and the money spent for the course was wasted. But that was only one of many courses in that category. I did learn differential equations, finally, in a course in linear control systems, taught by one of the few capable engineering professors I had.

I have to say, though, that I definitely did learn something in those years of EE schooling. Over my career, I noticed something very interesting. With rare exceptions, there's a striking difference between how a graduate engineer and one without the formal education approach a problem. The person with the formal education takes an analytical approach, while the person lacking the education takes a more emperical approach. The latter can be used to solve some problems, but isn't nearly as powerful as the first, and is inadequate and fails in many cases, particularly when dealing with design problems. I'm not certain how this comes about -- I guess just seeing so many problems being solved by brute force analysis, plus the knowledge that we can dig out an analytical answer, with books or whatever, gives the confidence to look at problems the way we do. Only a very small fraction of working design engineers could solve even freshman integral calculus problems, let alone a differential equation, a few years after graduating, but then very few ever have to. But it's nearly always possible to spot whether someone has undergone the formal education just by the way they approach a problem. I've often wondered if an EE education could be made tremendously more efficient and effective if the schools only knew what the students were really learning. (More likely, they would screw that up, too, so it's probably better to let it lie.) Education, it's said, is what you have after you forget everything you've learned. I maintain that the education gives us this approach to solving problems, and some basic tools to do it with.

Of course, I've also known some striking exceptions to this generalization. I know a number of excellent engineers who solve problems with an analytical approach but who haven't had a formal EE education. But they make up no more than a couple of percent of the engineers I know. So I'm convinced that there is something we learn in grinding through that process. Whatever it is, though, it doesn't seem

to have much to do with GPA.

Roy Lewallen, W7EL

1752. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 21:30:29 UTC
From: ik7565@erols.com
Message-ID: <3C531FF5.50447BAF@erols.com>
Source record: 150040

You have a good point here. As a former military flight instructor some
of my most problematic students were those who had private pilot
licenses. I knew a guy with a commercial ticket who flunked out of Navy
flight school - couldn't teach the old dog new tricks.

73 de Ian
N8IK

Milesnz wrote:
>
> As an EE who was involved in electrical and electronic stuff prior to going
> to engineering school, I have to say the previous experience probably makes
> you a *worse* student, not a better one. The plain and simple reason is
> that with "a little knowledge" you tend to assume you know more than you
> really do and that is definitely a bad thing when entering a field such as
> electrical engineering. Yes it's easier to learn stuff because you already
> know *some* of it, but it's also even easier to *assume* you know stuff that
> you don't.
>
> In addition, not all of the training associated with something like ham
> radio (or any other hobby fields) is kosher, so some of what was learned
> before studying engineering may well be wrong, or incomplete.
>
> If I was the head of the EE department I'd take people on their merits and
> not favour them on such inappropriate grounds as whether they've got a radio
> ham license. If anything it would work against them on the basis that "a
> little knowledge is dangerous".
>
> My thoughts fwiw.
> --------------------------------
> Jason Hsu <jason_hsu@my-deja.com> wrote in message
> news:f7d9a152.0201251937.16da6ee5@posting.google.com...
> > Have any study been done on this? I'm surprised that the ARRL hasn't
> > researched this. (Or have they?)
> >
> > I am willing to bet that electrical engineering majors who operate ham
> > radio (or who participate in other EE-related hobbies) tend to do
> > better than their nonham counterparts. I know I would have been a
> > MUCH better student if I had been a ham radio operator when I entered
> > college as an electrical engineering major. Without ham radio (or any
> > other practical experience), SWR, Smith Charts, matching networks, and
> > other concepts were just mumbo jumbo I had to plow through in order to
> > get through classes. It took ham radio to enable me to truly grasp
> > what I studied.
> >

> > I would expect to see that EE hams, as a group, earn better GPAs, are
> > less likely to drop out or change majors, are more likely to be
> > actively involved in EE-related extracurricular activities (like IEEE
> > and various contests), get better jobs, and are more likely to earn
> > graduate degrees in EE.
> >
> > I'm also willing to bet that even after one adjusts for differences in
> > SAT scores, high school class rank, and other admission criteria, EE
> > hams still earn better GPAs than their nonham counterparts.
> >
> > If I were the head of a college or university EE department, I would
> > pull out all stops to recruit ham radio operators into the student
> > body and faculty. I would also work with the school ham radio club to
> > recruit new hams on campus and in the surrounding community.
> >
> > Jason Hsu, AG4DG
> > jason_hsu_802701@@@@@yahoo.com
> > http://www.jasonhsu.com/ham_radio-technical.html

1753. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 21:39:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C53222B.80C4E8D4@eznec.com>
Source record: 150041

Most of Tektronix's products are time-domain oriented rather than classical RF, but for many years Tek had a line of spectrum analyzers as good as any in the world. Spectrum analyzer design requires some of the most demanding RF engineering talent, and the spectrum analyzer group at Tektronix had some truly world-class RF engineers. Many of them were hams. (One of the better known is Wes Hayward, W7ZOI, who was in that group for years but left some years back to finish his career at TriQuint.) All those I knew in that group who were hams had gotten their licenses as kids, and gone on to make a career out of electronics, as I had. All the engineers in that group had EE degrees, some BS and some MS, except one who had a physics degree and one with a BS in physics and a masters in EE. Incidentally, one of the very best electronics design engineers I know has a BS in physics and no engineering degree. He's also a ham that started as a kid.

Roy Lewallen, W7EL

Rick Littlefield wrote:
>
> >Of the more well known Hams, which do you think (or know) have EE...<
>
> Of all the well known "RF engineers", how many actually have EE degrees?
>
> Rick K1BQT

1754. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 21:43:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C532307.2022789B@eznec.com>
Source record: 150042

Philip de Cadanet wrote:
>
> Stefano,
>
> > If you want
> >prove your self the CFA CAN have the same efficiency of a full size vertical
> >(with no traps) you can look for "stefano's cfa experiments" in the antennex
> >archive.
>
> Last years CFA tests conducted at NTL's Weston Park here in the UK had
> poor results.
> . . .

Were the results of these tests published somewhere?

Roy Lewallen, W7EL

1755. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 21:49:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C532470.779D77C2@eznec.com>
Source record: 150043

Philip de Cadanet wrote:

>. . .

> On the subject of antennas, the biggest advantage that the Folded
> Unipole has over the series fed antenna, is the fact that the bandwidth
> is always greater for a given geometry.
> This will always be disputed by various pundits, but is a feature of the
> shorted transmission line in parallel with the radiating element.
> The slope of reactance for both elements of the antenna is opposite, and
> has a tendency to cancel.

>. . .

I did an analysis of this effect some time ago in quarter wave folded monopoles, and found that although the stub reactance change is in the opposite direction to the antenna reactance change, the contribution of the stub's reactance is so small that it's virtually negligible. The transmission lines making up the stubs would have to have a characteristic impedance of only a few ohms in order to have an appreciable effect on the bandwidth. The bandwidth increase seen in a folded monopole is nearly entirely due to the larger effective diameter of the radiating structure, and you can get very nearly as much increase simply by paralleling the same two conductors and feeding it as an unfolded monopole.

Roy Lewallen, W7EL

1756. Re: Balun question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 21:54:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C532589.D31CBE1E@eznec.com>
Source record: 150044

I'm not sure of the makeup of your balun, but you don't want a 4:1
impedance transformation. In a Yagi, mutual coupling lowers the
feedpoint impedance of the driven element. The driven element is folded
to get the impedance back up, probably to the vicinity of 50 or 75 ohms.
Whatever the feedpoint impedance, it's almost certainly well below 200
or 300 ohms.

If the SWR is good, the impedance transformation is correct.

Roy Lewallen, W7EL

John Mortlock wrote:
>
> I just purchased a used 16 ele NBS 2m yagi from a nearby ham.
>
> The driven element is a folded dipole.
> I noticed that the length of the coax cable used to form the coaxial
> balun has a total length of 26".
>
> The usual 4:1 coaxial balun is 1/2 wave long or about 41" for 144.300 MHz.
>
> Can anyone suggest a reason as to why the coaxial balun is 26" on the used
> 2m yagi I just bought ?
>
> Different impedance transformation ratio maybe or just downright wrong ??
>
> Thanks,

1757. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 22:06:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2va6k$13qse1$1@ID-124126.news.dfncis.de>
Source record: 150048

> Were the results of these tests published somewhere?

Yes, here they are -

http://www.dlr.com/dlrweb/papers/nabpaper/Nabpaper.htm

1758. Re: Mobile antenna installations - question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 22:06:39 UTC
From: JG in NY <n1aep@yahoo.com>
Message-ID: <PLF48.14873$Ki1.1494934@typhoon.nyroc.rr.com>
Source record: 150046

I guess what I meant was that the radiator is running vertically parallel to
the vehicle body up to the point where it clears the top of the car
.
So the radiator ends up parallel to and close to the "ground plane" for some
distance.

If it is a bumper mounted 8' whip, say, on the back of a van, this parallel
condition is present along most of the antenna!

I hope this might clarify my question...

thanks
jg
"'Doc" <w5lz@icok.net> wrote in message news:3C525FCD.8B19C346@icok.net...
> JG,
> The feed point impedance is lowered to something on
> the order of 15-35 ohms.
> Instead of saying a dipole's legs are folded back so
> they are parallel, it's more 'correct' to say that the
> dipole's legs are at right angles to each other. The
> resulting radiation pattern tends to be in the direction
> of the body of the vehicle. The pattern isn't what I
> would call 'directional', as in a beam antenna, but more
> of a 'lop-sided' omnidirectional pattern. This 'trend'
> in direction doesn't seem all that desirable in a mobile
> antenna system, but that's what you end up with when you
> have to adapt to 'practical' places to mount an antenna.
> 'Doc

1759. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 22:07:10 UTC
From: michael jantzen <jantzen_michael@hotmail.com>
Message-ID: <iMF48.14490$RD5.35210@rwcrnsc52.ops.asp.att.net>
Source record: 150045
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

This is why I kinda like the usps - they take just about anything - they don't abuse packages like fedex and ups do and they are much cheaper. Plus they offer insurance, delivery confirmation and other online tracking services.

1760. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 22:09:04 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <VquN6EAAkyU8EwJP@invest.fsbusiness.co.uk>
Source record: 150049

Roy,

>> Last years CFA tests conducted at NTL's Weston Park here in the UK had
>> poor results.
>> . . .
>
>Were the results of these tests published somewhere?
Not as far as I'm aware.

Phil G4ZOW

1761. Re: Balun question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 22:16:22 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <a2v9n0ive1@news6.svr.pol.co.uk>
Source record: 150047

The makeup of the balun is:

Inner of feeder coax to one side of folded dipole and also to the inner of balun loop coax.
Inner of the other end of the balun loop coax to the other side of the folded dipole.
Outer of feeder coax and outer of both ends of balun loop coax joined together.

The balun loop coax is 26" long.

"Roy Lewallen" <w7el@eznec.com> wrote in message news:3C532589.D31CBE1E@eznec.com...
> I'm not sure of the makeup of your balun, but you don't want a 4:1
> impedance transformation. In a Yagi, mutual coupling lowers the
> feedpoint impedance of the driven element. The driven element is folded
> to get the impedance back up, probably to the vicinity of 50 or 75 ohms.
> Whatever the feedpoint impedance, it's almost certainly well below 200
> or 300 ohms.
>
> If the SWR is good, the impedance transformation is correct.
>
> Roy Lewallen, W7EL
>
> John Mortlock wrote:
> >
> > I just purchased a used 16 ele NBS 2m yagi from a nearby ham.
> >
> > The driven element is a folded dipole.
> > I noticed that the length of the coax cable used to form the coaxial
> > balun has a total length of 26".
> >
> > The usual 4:1 coaxial balun is 1/2 wave long or about 41" for 144.300 MHz.
> >
> > Can anyone suggest a reason as to why the coaxial balun is 26" on the used
> > 2m yagi I just bought ?
> >
> > Different impedance transformation ratio maybe or just downright wrong ??
> >
> > Thanks,

1762. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 23:06:42 UTC
From: n2ey@aol.com
Message-ID: <20020126180642.05154.00001519@mb-fm.aol.com>
Source record: 150050

In article <20020126100723.12450.00000588@mb-mn.news.cs.com>, tdonaly@cs.com (Tdonaly) writes:

>I didn't know there were any well known RF
>engineers, except dead ones such as Marconi, or Armstrong. Did those fellows
>have degrees?
>
Marconi didn't. Armstrong did (Columbia University)

73 de Jim, N2EY

(BSEE & MSEE)

1763. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 23:14:07 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a2vd7u$m2o$1@nntp9.atl.mindspring.net>
Source record: 150052

Roy:

Do you know if Barrie Gilbert is or was a ham?

--Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C53222B.80C4E8D4@eznec.com...
> Most of Tektronix's products are time-domain oriented rather than
> classical RF, but for many years Tek had a line of spectrum analyzers as
> good as any in the world. Spectrum analyzer design requires some of the
> most demanding RF engineering talent, and the spectrum analyzer group at
> Tektronix had some truly world-class RF engineers. Many of them were
> hams. (One of the better known is Wes Hayward, W7ZOI, who was in that
> group for years but left some years back to finish his career at
> TriQuint.) All those I knew in that group who were hams had gotten their
> licenses as kids, and gone on to make a career out of electronics, as I
> had. All the engineers in that group had EE degrees, some BS and some
> MS, except one who had a physics degree and one with a BS in physics and
> a masters in EE. Incidentally, one of the very best electronics design
> engineers I know has a BS in physics and no engineering degree. He's
> also a ham that started as a kid.
>
> Roy Lewallen, W7EL
>
> Rick Littlefield wrote:
> >
> > >Of the more well known Hams, which do you think (or know) have EE...<
> >
> > Of all the well known "RF engineers", how many actually have EE degrees?
> >
> > Rick K1BQT

1764. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 23:14:16 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201261514.25819fb0@posting.google.com>
Source record: 150051

"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<1jC48.942$3Y3.267595@paloalto-snr1.gtei.net>...
> That pretty well duplicates my experiments as well - which at least helps keep larger
capacity hats
> outta the trees and overhead wires - and here's still ANOTHER variation... After a small
"incident"
> with a tree, I found that when the same circular array capacity hat had all the "spikes"
rearranged
> to the REAR area of the vertical whip, it still loaded the same as it did when they were
arranged
> radially around the whip - it seems the physical area/number of hat radials is more
critical than
> actual layout (only to a degree, I'm sure!), at least in terms of system loading. Sure
would be
> interesting to see accurate, in-depth test data on the subject!

Thats why I think unconnected hats are a bit of a waste compared to ease of use vs performance gains. If you had the hat at the top with unconnected ends, you can have 8 spokes 2 ft long, or 2 spokes 2 ft long , and the performance is not going to be much different either way I don't think. The total length added is still going to be about 2 ft either way electrically. Myself, for the light antennas I use, I'd prefer to just add the 2 ft as a taller stinger with no hat. It does about the same thing with less clutter. I use long thin stingers that just flop across anything they hit. Now, I would think an 8 spoke 2 ft hat with connected ends would outdo the two 2 ft spokes by a decent amount. But I'm not sure how much without looking into it farther. I think if I ever added a hat, which I may do for 160m, it will use a solid plate , or spokes with connected ends. You don't really get your moneys worth otherwise I don't think. MK

1765. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 23:15:42 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a2vdat$h7d$1@slb0.atl.mindspring.net>
Source record: 150053

Thread:

Marconi was a Nobel Prize winner. Does that count?

I wonder what he did with the prize money?

--Peter K1PO

"N2EY" <n2ey@aol.com> wrote in message
news:20020126180642.05154.00001519@mb-fm.aol.com...
> In article <20020126100723.12450.00000588@mb-mn.news.cs.com>,
tdonaly@cs.com
> (Tdonaly) writes:
>
> >I didn't know there were any well known RF
> >engineers, except dead ones such as Marconi, or Armstrong. Did those
fellows
> >have degrees?
> >
> Marconi didn't. Armstrong did (Columbia University)
>
> 73 de Jim, N2EY
>
> (BSEE & MSEE)
>

1766. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 23:18:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C533934.700CDF0A@eznec.com>
Source record: 150054

Marconi wasn't an RF engineer, but rather an entrepreneur and businessman. Calling Marconi an RF engineer is like calling Henry Ford a mechanical engineer.

Roy Lewallen, W7EL

N2EY wrote:
>
> In article <20020126100723.12450.00000588@mb-mn.news.cs.com>, tdonaly@cs.com
> (Tdonaly) writes:
>
> >I didn't know there were any well known RF
> >engineers, except dead ones such as Marconi, or Armstrong. Did those fellows
> >have degrees?
> >
> Marconi didn't. Armstrong did (Columbia University)
>
> 73 de Jim, N2EY
>
> (BSEE & MSEE)

1767. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 23:21:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5339EB.868C5C4C@eznec.com>
Source record: 150055

I don't see any reference in this paper to a CFA or the tests at Weston Park. Am I missing something?

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> > Were the results of these tests published somewhere?
>
> Yes, here they are -
>
> http://www.dlr.com/dlrweb/papers/nabpaper/Nabpaper.htm

1768. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 23:24:14 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a2ve2a$5em$1@slb4.atl.mindspring.net>
Source record: 150056
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna

Corry:

[snip]
> Do they teach much about RF in undergrad EE programs these days? Or power
> engineering? Or is power now in the domain of ME?
[snip]

No comment, Heh, heh...

[snip]
> I have sold more books about physics than Madonna has about sex.
> - Stephen Hawking
[snip]

Stephen Hawking, now there's a real "hero" for you.

Stephen apparently does not waste his time admiring kamikaze evangelizers in Afganistan! He's got better things to do with life.

Now Stephen Hawking could have been a ham if he wanted to, probably could have been almost anything he wanted to be, despite his hugely incapacitating handicap. I wonder...

I wonder if he ever wanted to become a ham, or even tried.

--Peter K1PO

1769. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 23:29:44 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a2ve58$l0n$1@slb2.atl.mindspring.net>
Source record: 150057

Frac:

[snip]
> Analog RF at universities is truly moribund.That DOES rate a
disappointment,
> from me anyway.
>
> 73
> Chip N1IR
[snip]

That all depends upon which University you are talking about. There are
still a few who do...

but the "mainline" campuses are far too enamored with the "hot topics",
which can generate high salaries for their graduates, i.e. Internet
protocols, ATM, VLSI design, etc...

In the old "radio days" we never studied Morse Code at University, why do we
study tcp/ip, atm and frame relay, at University today?

Cuz it pays the big bucks.

--Peter K1PO

1770. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 23:33:20 UTC
From: "John S. Dyson" <dyson@iquest.net>
Message-ID: <C%G48.1473$vb1.191120@news1.iquest.net>
Source record: 150058
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Jim Weir" <jim@rst-engr.com> wrote in message
news:u54fn8ml184696@corp.supernews.com...
> Depends. If they are like that idiot DaveD that responded that he only did
> it for the fun of passing the exam, the license has all the worth of breasts
> on a bull.
>
> If they are like most of us who earned the damned thing in high school and
> experimented (and got zapped a few times) all the way through graduate
> school...I'd hire one of those persons in a second over a PhD that never
> smelled hot solder in their life.
>
Frankly, I got my Ham License (30 yrs ago), a few months before my
1st phone, just to test the waters for FCC licenses. Both were quite
easy, but I was 15yrs old, and things seem to be easier when one
is both interested and young :-).

When in college (EE), I found that true technical knowledge actually does
help (for context issues), but there is alot of technologist malarkey
that isn't real 'knowledge'. One of the most important maxims no matter
where one is: don't think that you know more than you really do.

I aced practically all of my EE classes (easily.) However, I had a good concept of
what I didn't know, so was happy to learn new things (not trying to be
Joe Stud about all things EE.) Later on in my school career, one of my
profs ended upon working on my projects for me in industry. In his classes,
my grades became more difficult to get, so as to avoid conflict of interest.
He is one person who is my senior, who I still have great respect for, and
hope to contact him someday again.

It is pretty clear that there is some value in having previous experience, but
perhaps some pseudo-old-pros (without adequate deep theoretical
knowledge) should recognize that practical experience (and alot of ad-hoc
know-how) aren't everything that make up a successful and functional
EE. There have been some allusions to Physics people being good EE's,
and I have also found that those Physics people who choose to be good
EE's are often VERY VERY successful.

John

1771. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-26 23:34:53 UTC
From: katanaz <katanaz@hotmail.com>
Message-ID: <u56f8jjdoaitab@corp.supernews.com>
Source record: 150059
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

I agree. I've been shipping my Ebay packages exclusively with Fed-Ex Ground and haven't had a single problem. They are faster, cheaper, and friendlier than UPS will ever be. I haven't had them once ask about how an item was packaged or opened a package at the counter to find out. Fed-Ex Ground will usually beat their "estimated delivery date" by a day or two and they've been known to deliver packages on Saturdays and Sundays at no extra charge.

"Murray Neece" <radioranch@cableone.net> wrote in message news:3C50F029.5FBB21D2@cableone.net...
> I have only been using them two months, but so far, even though they lost
> a set of tubes...Im much more impressed....UPS damaged about 1 out of 8
> packages over 35 lbs. that I sent....THEY SUCK and now YOU KNOW....BOYCOTT
> em..use fedex they are pretty good so far..73 Murray

1772. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 00:02:15 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C534387.C27F9E3F@coqui.net>
Source record: 150060
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.amateur.antenna

katanaz wrote:
>
> I agree. I've been shipping my Ebay packages exclusively with Fed-Ex Ground
> and haven't had a single problem. They are faster, cheaper, and friendlier
> than UPS will ever be. I haven't had them once ask about how an item was
> packaged or opened a package at the counter to find out. Fed-Ex Ground will
> usually beat their "estimated delivery date" by a day or two and they've
> been known to deliver packages on Saturdays and Sundays at no extra charge.

I'm in Puerto Rico and Fedex treats this part of the US like rural
Zambia or something. By their definition, PR is an "international"
destination. A recent ebay purchaser pointed out to me that he could
ship a 15 pound printer from Indianapolis to Miami, dropoff/Fedex ground
for $7 and change. Same item to me costs $40+. And if I'm the sender I
get stuck with pickup charges (no local dropoff point) and we don't have
Ground Service anyway. (They don't publish the tariffs on the local
website but my last ENVELOPE sent was $27)
As much as I despise that sort of overtly discriminatory business
practice, I'd sure like to have the same service available so that I
could thumb my nose at the ever-increasing USPS Priority rates....even
tho I can't complain about their service.
-Bill

-Bill

1773. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 00:12:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a2vihh$13uk0f$1@ID-124126.news.dfncis.de>
Source record: 150066

> I don't see any reference in this paper to a CFA or the tests at Weston
==========
Sorry Roy, my mistake. I don't know where CFA papers are - if any exist.

1774. Antenna Req Needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 00:14:49 UTC
From: Charles Gallo <Charlie@thegallos.com>
Message-ID: <bmh65u0rilcbtgngts8rsrk92jdrqdlj2f@4ax.com>
Source record: 150061

Hi,
It's time to do an antenna upgrade, and I need a recommendation.
Right now I use a Icom t7H HT (2m/440 Mhz) as my main rig. I have the
stock antenna, and a roll up j-pole for emergency use - I've joined
ARES and want to do an equipment upgrade

I'm looking for 2 or 3 antennas

1)a good Gain antenna (prefer flexible) for portable use
2)a good Magnetic mount antenna
3)a Base antenna

Help

Charlie

--
73
KC2IXE

For the Children - RKBA!

Secrecy is the beginning of tyranny.
--Lazarus Long

1775. Re: Do Hams and EEs enjoy the same type of women?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 00:24:33 UTC
From: Stahr <w6nyc@earthlink.net>
Message-ID: <5NH48.18967$Fh4.1626516@newsread1.prod.itd.earthlink.net>
Source record: 150062

Hams do it with Very High Frequency....

W6NYC

"StarGazer" <pti@capnet.com> wrote in message
news:3C52FF55.BDBF3B6C@capnet.com...
> .
>
>

1776. South Georgia Is. - UPDATE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 00:28:04 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c534997@news.bnb-lp.com>
Source record: 150063
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx

Small snippet from the most recent Daily DX email news letter.....

< snip >

Franz, DJ9ZB, spoke to Dick, PA3FQA/MM, who is aboard the Braveheart. Everyone is OK on the ship. They have been delayed due to weather conditions. They expect to be QRV on the island Sunday. No exact time was given, however I would suspect it will be late in the day as they must set up.

< snip >

Get two FREE weeks of the daily DX....
http://www.dailydx.com

I am on my 3rd year's subscription and would never do without it.....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

1777. Re: How Good Is the "Lattin" Dipole Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 00:34:43 UTC
From: carkenord@juno.com
Message-ID: <4346b55e.0201261634.508b2da2@posting.google.com>
Source record: 150064
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

> Has anyone tried the "Lattin" dipole antenna described at this URL? How
> does it perform? Are the measurements correct? How much pruning did you
> have to do? How does its efficiancy compare to that of commercial trap
> dipoles?>
> http://www.g3ycc.karoo.net/lattin.htm

Pete........the Lattin has been discussed here more than once. As far as I know, no one in this group has been successful in building a Lattin. I tried, several times....used up a lot of wire, but had confusing results......non-satisfactory results.

You might try searching this group using keyword "lattin" ......
You will get several "hits", and those hits, if read, will more or less summarize the efforts and interest of this group in the Lattin antenna.

I still wonder......if a knowledgeable person, using a combination of antenna modelling.....and one of those "Antenna Analyzers"......might that person successfully build a Lattin? I would sure like to see that happen. I have been intrigued by the Lattin antenna for a REAL long time.

Lee Carkenord KA0FPJ

1778. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 00:40:21 UTC
From: none@here.there.com
Message-ID: <a2via3vui1@slb0.atl.mindspring.net>
Source record: 150065

No, but prior to that his people were enslaved in a similar fashion by the Romans. Slavery was not invented by Americans and other groups can claim victim status. But you just keep believing that liberal, class-warfare crap.

In article <mpdNPOkMvnPXCCBaq5SKiEJAb4GC@4ax.com>, Bob Miller <bamiller@texas.net> wrote:
>"KB9TMP" <NoMoreSpam4Me@antisocial.com> wrote:
>
>
>>
>>My family came to the USA from Scotland in the mid 1800's,
>>that makes me part of a minority group so when do I get the
>>FREE HAND OUT ?
>
>I don't suppose your family came over from Scotland in chains, on a
>slave-trader's ship, to be sold like cattle once they arrived on these shores?
>
>Bob
>k5qwg
>

1779. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 01:06:52 UTC
From: n2ey@aol.com
Message-ID: <20020126200652.16072.00000571@mb-fz.aol.com>
Source record: 150068

In article <3C533934.700CDF0A@eznec.com>, Roy Lewallen <w7el@eznec.com> writes:

>Marconi wasn't an RF engineer, but rather an entrepreneur and
>businessman. Calling Marconi an RF engineer is like calling Henry Ford a
>mechanical engineer.

Agreed! His main accomplishment was turning the theoretical work of others into a commercially successful communications system.

Major Edwin H. Armstrong, on the other hand, was the genuine engineering article.

Would Philo T. Farnsworth be considered an "RF engineer"? How about Jim Lamb?

73 de Jim, N2EY

1780. Rohn Mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 01:06:58 UTC
From: John Porter <k4nky@fuse.net>
Message-ID: <u56klk9qao92bd@corp.supernews.com>
Source record: 150067

Thinking about using a rohn h40 or 50 mast for a mosley ta-33
jr.......leaning more to the h40....need to have abt 35 feet.to clear the
peak....have a alliance hd-73 for the rotor ....attach rotor to mast and use
maybe a 5 foot mast for the beam.....the mast would be secured at the base
of course and will be secured at the house at about the 20 foot mark(2-story
house)....then could be guyed above that by 3 points......Do you think this
would work and if anyone has...did you have any problems...since i have
never used a telescoping mast ...how strong are they extended.....and can
they be raised to the verticle once extended...if anyone has ever done this
would be interested in your expierences

k4nky@qsl.net

1781. Re: How Good Is the "Lattin" Dipole Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 01:11:15 UTC
From: Richard McCollum <rmccollOMA@worldnet.att.net>
Message-ID: <TsI48.4187$Ab1.261364@bgtnsc04-news.ops.worldnet.att.net>
Source record: 149969
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Lee Carkenord" <carkenord@juno.com> wrote in message
news:4346b55e.0201261634.508b2da2@posting.google.com...
> > Has anyone tried the "Lattin" dipole antenna described at this URL?
How
> > does it perform? Are the measurements correct? How much pruning did
you
> > have to do? How does its efficiancy compare to that of commercial
trap
> > dipoles?>
> > http://www.g3ycc.karoo.net/lattin.htm
>
>
> Pete........the Lattin has been discussed here more than once. As far
> as I know, no one in this group has been successful in building a
> Lattin. I tried, several times....used up a lot of wire, but had
> confusing results......non-satisfactory results.
>
> You might try searching this group using keyword "lattin" ......
> You will get several "hits", and those hits, if read, will more or
> less summarize the efforts and interest of this group in the Lattin
> antenna.
>
> I still wonder......if a knowledgeable person, using a combination of
> antenna modelling.....and one of those "Antenna Analyzers"......might
> that person successfully build a Lattin? I would sure like to see
> that happen. I have been intrigued by the Lattin antenna for a REAL
> long time.
>
> Lee Carkenord KA0FPJ

I am just seeing it for the first time and your experience does not
surprise me. It looks like a 'chimera' to me. Stubs are nice but they do
not replace or even perform the same function as a parallel trap.

Dick NBK

1782. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 01:25:12 UTC
From: richardharrison@webtv.net
Message-ID: <19515-3C5356F8-27@storefull-117.iap.bryant.webtv.net>
Source record: 149970

Roy Lewallen wrote:
"Marconi wasn`t an RF engineer, but rather an entrepreneur and businessman. Calling Marconi an RF engineer is like calling Henry Ford a mechanical engineer."

That is probably an apt analogy. Both men had a genius instinct for knowing what was practical. Both were hands-on operators.

Ford was an automotive innovator before becoming a mass manufacturer. He hand-built his first racing engine on his wife`s kitchen table.

When Ford took his race cars to the track, people thought FORD was an acronym for First On Race Day.

Best regards, Richard Harrison, KB5WZI

1783. Re: Rohn Mast question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 01:43:11 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c535f94_1@news1.prserv.net>
Source record: 149971

John Porter <k4nky@fuse.net> wrote in message
news:u56klk9qao92bd@corp.supernews.com...
> Thinking about using a rohn h40 or 50 mast for a mosley ta-33
> jr.......leaning more to the h40....need to have abt 35 feet.to clear the
> peak....have a alliance hd-73 for the rotor ....attach rotor to mast and
use
> maybe a 5 foot mast for the beam.....the mast would be secured at the base
> of course and will be secured at the house at about the 20 foot
mark(2-story
> house)....then could be guyed above that by 3 points......Do you think
this
> would work and if anyone has...

It will work fine until the wind blows. We've done this on field day for
years. Fortunately, the wind has held off so far.

> did you have any problems...since i have
> never used a telescoping mast ...how strong are they extended.....

Not very. Heavy guys at each joint would still be marginal with a 3 element
beam on top, especially with the 5 foot lever arm above the rotator.

> and can
> they be raised to the verticle once extended...

Not easily. You need to lift each section to keep it from bending.

> if anyone has ever done this
> would be interested in your expierences
>
>
> k4nky@qsl.net
>
>
--
Crazy George
Remove NO and SPAM from return address

1784. Re: G5RV - Extending one side - Will it help - HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 01:44:25 UTC
From: Anthony Duffy <a.duffy@sympatico.ca>
Message-ID: <3C535B79.3030409@sympatico.ca>
Source record: 149974

Ahh, this is true..... The simpler of the two would be an off center fed dipole.

A book I have in my collection by G4LQI, Erwin David, also shows a "Windom" (by I7SWX, Gain Moda) using a 4:1 transformer at the feed point with 75 ohm coax feeder that looks like a new spin on the OCFD. The ARRL antenna bible shows the classic Windom configuration only.

I had been reading the book last week, that's why it popped into my head

73, Tony
VA3ATD
London, Ontario

'Doc wrote:

>
> Do you mean a 'Windom' or an off center fed dipole? Big
> difference...
> 'Doc
>

1785. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 01:48:35 UTC
From: richardharrison@webtv.net
Message-ID: <19513-3C535C73-234@storefull-117.iap.bryant.webtv.net>
Source record: 149977

Mark Keith wrote:
"The total length added is still going to be 2 feet either way
electrically."

You guys need to add somthing flashy to serve as an antenna. Add one of those elevators race cars use to give high-speed traction to the rear wheels, and insulate its attachment to the car (truck) body. Make it from metal and it`s your capacitive antenna hat. A wire down from the center is your inobtrusive antenna.

Best regards, Richard Harrison, KB5WZI

1786. Cushcraf R-8 verical --- Any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 01:49:41 UTC
From: Rob <Pse@NoEmail.Com>
Message-ID: <q4J48.1932$EI.10637@tor-nn1.netcom.ca>
Source record: 149973

Hi,

I have a R-7000 which is giving me a lot of problems on 15 meters. I am thinking of buying a R8 which has a wider bandwidth on 20 plus 6 meters.

Is the R8 any good? Is it durable? How does it compare to the R-7000 for DX?

Rob

1787. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 01:55:09 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C535DFD.8B095F5F@coqui.net>
Source record: 149972

Richard Harrison wrote:

> Ford was an automotive innovator before becoming a mass manufacturer. He
> hand-built his first racing engine on his wife`s kitchen table.

Did he have a separate kitchen table apart from his wife? These days
one might have to say "wife's kitchen table" but I would like to think
Mr. Ford in that era had the cojones to claim the table as his own, or
at a minimum, "the kitchen table".
When friviolities like that are added to a statement, it makes one doubt
the whole story.

Don't get excited, I'm just nit-picking.

-Bill

1788. Re: Cushcraf R-8 verical --- Any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 01:59:51 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c535f15$1@news.bnb-lp.com>
Source record: 149975

There are 23 owner reviews of the Cushcraft R-8 vertical at the
following URL...

http://www.eham.net/reviews/detail/529

I didn't realize they were $399 list..ouch!

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

1789. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 02:06:19 UTC
From: richardharrison@webtv.net
Message-ID: <19513-3C53609B-241@storefull-117.iap.bryant.webtv.net>
Source record: 149978

Jim, N2EY wrote:
"Major Edwin H. Armstrong, on the other hand, was the genuine article.
Would Philo T. Farnsworth be considered an "RF engineer"?"

Armstrong and Farnsworth had a few things in common. Armstrong developed a workable FM system. Farnsworth developed a workable TV system. Both were shafted by Sarnoff.

Best regards, Richard Harrison, KB5WZI

1790. Re: How Good Is the "Lattin" Dipole Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 02:10:52 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C53619A.3BCF535D@shaw.ca>
Source record: 149976
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Pete Ritter wrote:
>
> Has anyone tried the "Lattin" dipole antenna described at this URL? How
> does it perform? Are the measurements correct? How much pruning did you
> have to do? How does its efficiancy compare to that of commercial trap
> dipoles?
>
> Thanks for your comments.
>
> http://www.g3ycc.karoo.net/lattin.htm
>
> --
> **
> ** You know what to do to fix this email address: CPRitter-attbi-com
> **

I had a friend, recently a Silent Key, VE6TD (Bob), used a
Lattin for 75 thru 10 meters and seemed to have success. I
have one cut in my basement waiting for spring -- as soon as
I string it up and run my MFJ-259B on it, I'll try to
remember to let this group know. I see no reason why it
shouldn't work -- the princples are well known.

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1791. Re: Minibean Antenna I looking for

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 02:21:16 UTC
From: "J. David Schronce" <david.nospam@schronce.f2s.com>
Message-ID: <3C53640B.7070006@schronce.f2s.com>
Source record: 149981

You might want to look into Moxon Rectangles - small with decent gain.

Jose Manuel wrote:

>Waht is the best minibeam antenna??
>--
>www.ea8ee.es.fm
>
>

1792. Re: Do Hams and EEs enjoy the same type of women?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 02:28:00 UTC
From: richardharrison@webtv.net
Message-ID: <19516-3C5365B0-12@storefull-117.iap.bryant.webtv.net>
Source record: 149980

Stahr, W6NYC wrote:
"Hams do it with Very High Frequency."

Is there a suggestion here that a ham who is also an EE might suffer a
Dr. Jeckyl and Mr. Hyde personality? (Sorry RLS)

Best regards, Richard Harrison, KB5WZI

1793. Re: Cushcraf R-8 verical --- Any good?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 02:31:22 UTC
From: ac6v <ac6v@amsat.org>
Message-ID: <3C53667A.73A8F860@amsat.org>
Source record: 149979

I have the R-7000 and the major problem is the aluminum wire coming out of the traps getting corroded or loose or both. Using a slightly larger screw and a star/lock washer and penetrox has taken care of the problem. Also mount the R-7000 right at the top of the base mounting mast (fence post for me), if lower it screws up the pattern. I use a coaxial choke in the feedline and this helped keep RF off of it. I run a kilowatt to it -- as long as you stay in the R-7000 bandwidth - no problems here. Others that I know have used an external tuner and hi power and have blown the traps.

Works well for a vertical on all bands but 40M -- suspect its rather inefficient there and the band width is grim, otherwise happy with it in the other bands.

Maybe save u from buying a new one.
--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
==========
Rob wrote:

> Hi,
>
> I have a R-7000 which is giving me a lot of problems on 15 meters. I am
> thinking of buying a R8 which has a wider bandwidth on 20 plus 6 meters.
>
> Is the R8 any good? Is it durable? How does it compare to the R-7000 for
> DX?
>
> Rob

1794. Re: Do Hams and EEs enjoy the same type of women?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 03:08:14 UTC
From: richardharrison@webtv.net
Message-ID: <19514-3C536F1E-92@storefull-117.iap.bryant.webtv.net>
Source record: 149984

Irv, VE6BP wrote:
"It all depends on whether the women like the shorted stubs!"

For sure the women won`t like the telegraph engineer`s "open leg annullers".

Best regards, Richard Harrison, KB5WZI

1795. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 03:14:49 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C537143.6797B539@home.com>
Source record: 149982

I thought FORD stood for Fixed Or Repaired Daily!

Then EDSEL came along.... Every Day Something Else Loose.

Les, AA4F

Richard Harrison wrote:
>
> Roy Lewallen wrote:
> "Marconi wasn`t an RF engineer, but rather an entrepreneur and
> businessman. Calling Marconi an RF engineer is like calling Henry Ford a
> mechanical engineer."
>
> That is probably an apt analogy. Both men had a genius instinct for
> knowing what was practical. Both were hands-on operators.
>
> Ford was an automotive innovator before becoming a mass manufacturer. He
> hand-built his first racing engine on his wife`s kitchen table.
>
> When Ford took his race cars to the track, people thought FORD was an
> acronym for First On Race Day.
>
> Best regards, Richard Harrison, KB5WZI

1796. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 03:24:56 UTC
From: andy <inthelead234@mickle.net>
Message-ID: <BhK48.345$Ub7.13005@eagle.america.net>
Source record: 149983
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

"Security Unlimited Inc." <securit1951@earthlink.net> wrote in message news:Ato48.15843$ag5.1386642@newsread2.prod.itd.earthlink.net...
> LIKE I SAID UPS IS FULL OF SHIT 24/7!
> > Brian

I will never use them and I'll bet most of the people standing up for them either work there or own stock in the company! There is no way they can give proper care to your parcels as they hire college kids and most of the handlers are replaced every semester, I worked there and they had no training, no breaks, and you were told to run to the time clock when they got to the point they could spare you for the night.

I had a person ship an item to me ups and it arrived with a split in it, from a drop of at least 10 feet. They acted decent on the phone, but gave me the royal run around. They give you a step by step process that just goes on and on until most people give up. They wanted to have a driver pick the item up and then give it a ride back to the original shipper and have him deal with the damage----but I had already paid the individual for it, and he had little motivation to collect for me! I was told by ups that I had no rights to make a claim, as if I had no idea what the item was worth, although I had just paid for it!

At first they said that if the claim amount was less than $100, they could just pay me and let me keep the item. When I took the package up to the ups customer service office here, the girl started telling me she could not do what she had said earlier on the phone and again started to try to just send it back to the sender. I asked for her supervisor. Now I got the full UPS BS--it was probably shipped pre-damaged, it was re-used packaging, it was improperly packaged, etc. The fact you have insurance means nothing, they can still use all their delay tactics on you until you give up. They would only send it back to the shipper, and he had to spend a lot of time going around and around with them to get the claim paid a long time later.

The sick thing about this is that people use UPS authorized service centers that are conveniently nearby, and most people think it is the same rate everywhere just like the post office! In reality the Mailbox etc. and all of them charge whatever they want---and most people never question it. For what you are paying you could be paying less for FedEx overnight! The last time I went to Mailbox Etc. they wanted $36, I asked how much of that was their upcharge and they said, we don't know, it is figured in the computer! I drove it over to the real UPS shipping office and it was only $18!

1797. Re: Mast Issues

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 03:35:13 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <RzK48.2732$Qg2.181198@news1.east.cox.net>
Source record: 149985

I think a Google search will bring up discussions about this from
a year or so back. If RF being coupled to the mast is an issue,
which would affect the take-off angle, you would also have to
include a choke balun at the bottom of the antenna if you go to
an insulated mast. after all, if the RF
will couple to the mast it will also be an issue on the coax feed's
outside shield.

"Ken Coghill III" <WB4ZOH@ARRL.NET> wrote in message
news:3C5124E8.10C44B96@ARRL.NET...
> HI
> I've completed building a 'copper cactus' J-Pole for 2 meters.
> Temporarily I want to mount the antenna on a 10' pole secured to our
> wooden fence. I have been told this type of antenna performs better if
> you use 1 1/2" PVC pipe instead of traditional TV masts. Comment &
> suggestions are most welcome.
>
> 73's
> --
> Ken Coghill III, WB4ZOH
>
> This message has been scanned for viruses: NONE FOUND!
>
>

1798. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 03:44:51 UTC
From: Dave D <Dave_d@default.com>
Message-ID: <a2vt3j$8rf$1@helle.btinternet.com>
Source record: 149986
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Jim Weir" <jim@rst-engr.com> wrote in message
news:u54fn8mll84696@corp.supernews.com...
> Depends. If they are like that idiot DaveD that responded that he only
did
> it for the fun of passing the exam, the license has all the worth of
breasts
> on a bull.
>
> If they are like most of us who earned the damned thing in high school and
> experimented (and got zapped a few times) all the way through graduate
> school...I'd hire one of those persons in a second over a PhD that never
> smelled hot solder in their life.
>
> Jim
>
Who the f*ck are you calling an idiot, you dickhead. I'm not so much of an idiot that I sailed through the RAE without a struggle. I *did* the legwork, you cheeky F*ckwit, by having a passion for electronics, building cicuits since I was in primary school and working in the trade, without schematics, for several years. Who the hell are you to judge me? If you didn't sit the RAE for fun, then why the hell *did* you sit it? Read the title *Radio Amateur Examination*. It's for hobbyists who want to participate in the *hobby* of Ham Radio, not just for professional gain as a certificate to wave in an employers face. I went into the exam to see if I could pass, simple, and gave it a year before I decided to jack it in. If I don't meet your criteria for sitting the exam then tough sh1t, the examiners didn't seem to mind. I guess all the other people who sat it for fun are idiots too, just don't mention that at the next RSGB meeting, you pr1ck. I knew the theory before I sat the exam, and had close friends who are radio amateurs. I guess that makes me an idiot

Dave

1799. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 03:48:52 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C5378A4.73A2089F@coqui.net>
Source record: 149987

Leland Cox wrote:
>
> I thought FORD stood for Fixed Or Repaired Daily!
>
> Then EDSEL came along.... Every Day Something Else Loose.
>
> Les, AA4F

Which in the UK is pronounced 'LEYLAND'
-BM

1800. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 03:57:19 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C537A9F.EFB5EE9F@coqui.net>
Source record: 149988
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

```
Dave D wrote:
>
> "Jim Weir" <jim@rst-engr.com> wrote in message
> news:u54fn8mll84696@corp.supernews.com...
> > Depends. If they are like that idiot DaveD that responded that he only
> did
> > it for the fun of passing the exam, the license has all the worth of
> breasts
> > on a bull.
> >
> > If they are like most of us who earned the damned thing in high school and
> > experimented (and got zapped a few times) all the way through graduate
> > school...I'd hire one of those persons in a second over a PhD that never
> > smelled hot solder in their life.
> >
> > Jim
> >
> Who the f*ck are you calling an idiot, you dickhead. you pr1ck. I knew the
> theory before I sat the exam, and had close friends who are radio amateurs.
> I guess that makes me an idiot
>
> Dave

No, but your manner of response does.
-Bill
```

1801. F/A Magnum Delta Force

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 04:04:01 UTC
From: vdubman <charles1224@yahoo.comnospam>
Message-ID: <R_K48.4682$mU4.290501@bgtnsc06-news.ops.worldnet.att.net>
Source record: 149989

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327846987

1802. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 04:07:33 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C537D05.B1FDB044@IEEE.org>
Source record: 149990

Mark Keith wrote:
> Thats why I think unconnected hats are a bit of a waste compared to
> ease of use vs performance gains. If you had the hat at the top with
> unconnected ends, you can have 8 spokes 2 ft long, or 2 spokes 2 ft
> long , and the performance is not going to be much different either
> way I don't think. The total length added is still going to be about 2
> ft either way electrically.

Nope, that's not true. Every spoke that is added reduces the number
of turns required on the loading coil.
--
cheers, CAM http://www.qsl.net/w5dxp

1803. Re: How Good Is the "Lattin" Dipole Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 05:18:25 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C538D98.EE3D59B6@icok.net>
Source record: 149991
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Pete,
A couple of years ago I tried something simular to the
'Lattin' antenna. After a few days of 'fooling' with it,
I decided it was one of my more spectaular failures. I
couldn't get it to resonate anywhere except 80 meters, the
'stubs/traps' seemed to have no affect at all other than
to add weight to the antenna.
I didn't know the thing had a name, or that it had been
tried before. Think I'll go look for that thread...
'Doc

1804. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 05:23:24 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u573mf5qcfpadf@corp.supernews.com>
Source record: 149992
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Your words, not mine.

Jim

"Dave D" <Dave_d@default.com> wrote in message
news:a2vt3j$8rf$1@helle.btinternet.com...

> I guess that makes me an idiot

1805. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 05:24:55 UTC
From: Dave D <Dave_d@default.com>
Message-ID: <a302v7$p1u$1@paris.btinternet.com>
Source record: 149993
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

```
" .Your Friend Bill" <none@coqui.net> wrote in message
news:3C537A9F.EFB5EE9F@coqui.net...
> Dave D wrote:
> >
> > "Jim Weir" <jim@rst-engr.com> wrote in message
> > news:u54fn8mll84696@corp.supernews.com...
> > > Depends. If they are like that idiot DaveD that responded that he
only
> > did
> > > it for the fun of passing the exam, the license has all the worth of
> > breasts
> > > on a bull.
> > >
> > > If they are like most of us who earned the damned thing in high school
and
> > > experimented (and got zapped a few times) all the way through graduate
> > > school...I'd hire one of those persons in a second over a PhD that
never
> > > smelled hot solder in their life.
> > >
> > > Jim
> > >
> > Who the f*ck are you calling an idiot, you dickhead. you pr1ck. I knew
the
> > theory before I sat the exam, and had close friends who are radio
amateurs.
> > I guess that makes me an idiot
> >
> > Dave
>
> No, but your manner of response does.
> -Bill
>

Yeah OK I was *really* angry when I wrote that, but I responded to an
insult, I didn't start anything. I guess I don't like people insulting me in
public and I blew a fuse, but I guess I'm not the first and I won't be the
last. Have you never lost it? I guess you are a special breed. The whole
point is that Jim Weir seems to think those of us who served our time and
been hobbyists all our lives aren't worth as much as someone with a piece of
paper, and he insulted all radio amateurs who do it for fun, rather than
personal gain. Despite what he wrote, I studied for my RAE, but by teaching
myself electronics from a very early age, rather going to college, and I
```

felt he directed a slur at me and others like me. He implied I did nothing to earn my passes, and that was unacceptable to me. I made it perfectly clear in my post that I was a long-time hobbyist and professional, a point Mr Weir seems to have ignored. I did find the RAE easy, so what? Mr Weir seems to resent that, but I must have learned is somehow, you can't guess your way to a distinction.

Dave

1806. What does a Hustler "30-MTK" consist of? (30 meter add-on)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 05:26:18 UTC
From: rasw <atdot.dotat@at.sorry>
Message-ID: <a30320$3n5ud$1@rn.area.com>
Source record: 149994

I'd like to add 30 meters to my hustler vertical. What does the 30-MTK consist of? What's involved in installing it? Is the antenna harder to tune for the other bands with it?

I can't get a photo of it--I presume it's a trap and a pipe--from the Huster website or any on-line catalog.

--
Robert "AF2M"

AF2M (at) robert.to

1807. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 06:30:06 UTC
From: Dave D <Dave_d@default.com>
Message-ID: <a306pe$8e2$1@knossos.btinternet.com>
Source record: 149995
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Jim Weir" <jim@rst-engr.com> wrote in message
news:u573mf5qcfpadf@corp.supernews.com...
> Your words, not mine.
>
> Jim
>
>
>
> "Dave D" <Dave_d@default.com> wrote in message
> news:a2vt3j$8rf$1@helle.btinternet.com...
>
> > I guess that makes me an idiot
>
>
>
You really are trying your best to get on my nerves aren't you? I can't for the life of me remember offending you in the past, so perhaps we'll call it evens and I hope you'll leave me alone now.

Dave

1808. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 06:38:25 UTC
From: Rob Taylor <fireboy001@hotmail.com>
Message-ID: <SfN48.1548$f11.147438@news.uswest.net>
Source record: 149996
Cross-posted to: rec.radio.swap,rec.radio.amateur,rec.radio.scanner,rec.radio.shortwave,rec.radio.amateur.antenna

You paid in cash and never got a receipt?

"Bill Nelson" <billn@spock.peak.org> wrote in message
news:a2tng8$l4u$3@quark.scn.rain.com...
> In rec.radio.amateur.antenna rickm <rickm_msn@email.msn.com> wrote:
>
> > Several years ago, when I owned my own business, I had UPS deliver some
> > C.O.D. packages. I made a mistake and paid for them with cash. A few
weeks
> > later, UPS comes back to me and tells me they lost my check and asks me
to
> > rewrite the check. When I explained that I paid in cash, they told me I
was
> > mistaken, and demanded another check. This went on for a couple of
months
> > and then I started getting harrasing phone calls from attorneys
representing
> > UPS. It was a total mess, and ended up costing me several thousand
dollars.
> > I agree, I'll never use UPS again.
>
> Why did it cost you any money? You had to pay the driver to get the
> package. That is sufficient proof that you paid. If UPS lost the payment,
> that is not your fault.
>
> I have been that route. A quick letter from my attorney set them straight.
>
> But I avoid UPS whenever possible. They often leave packages sitting on
> my front doorstep in the rain. The sometimes leave packages that require
> a signature - good thing that I am honest and don't claim that it was
> never delivered.
>
> --
> Bill Nelson (billn@peak.org)
>

1809. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 07:27:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C53ABFA.9F62953@eznec.com>
Source record: 149997

No, I don't. Although Barrie is well known around these parts, I've only met him a couple of times. A search of the U.S. callbook listings don't show him, although he might have once had a license in his native country (which by his accent is England).

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Roy:
>
> Do you know if Barrie Gilbert is or was a ham?
>
> --Peter K1PO

1810. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 07:28:47 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201262328.307d6ee5@posting.google.com>
Source record: 149998

"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<X%E48.1115$3Y3.419015@paloalto-snr1.gtei.net>...
> WELL, if you're already "pushing the envelope" of available height in the mobile antenna system, and
> modeling programs show a fairly significant gain to be had with a couple more feet in the whip, the
> added effective impact of the top hat IS worth going after - AND, if that benefit IS obtainable even
> with the hat slid down significantly on the whip, it's almost like getting something-for-nothing...
>
> I agree, and my own testing proves (to ME!). that about 6 top hat radials, tied circularly together
> at the ends and mid-point provide a very effective capacity element - and as is the case with many
> HF antennas, the benefits just keep increasing as size does... It's just a matter of how much you
> can physically install on a vehicle that actually must be driven, and how much ugliness you can
> tolerate! :-)
>
> --
> Gary - KJ6Q
> **********

They do pretty well if you connect the ends. If I were to add a hat on mine, it would have to be about 2 ft above the coil. Being mine is so flexible, I'm afraid if I put a hat on it, the wind will really cause it to flop around. Also I'd be likely to whack it on trees quite often. So I take the loss of not using one. But I may need one on 160 to get decent results. I haven't had any trouble on 80m without one. Using a bugcatcher at 40m with 6 ft mast, 3 inch coil, 5 ft stinger and 4 ohms ground loss will give about 56% efficiency using about 33 turns of 3 inch coil. Adding enough hat to electrically add 2 more ft to the stinger would raise to 62% and you would need about 29 turns of coil. It's an increase, but not huge. But being as you want to get every last drop, you want to use one. I'd also pay real close attention to the grounding. That will make more of a difference in performance. I have a car and a truck. You would think the truck would be better, but the car is so far. The reason is on the car, I have the antenna mounted on a hole mount on the trunk with lots of metal under it. On the truck, I have it mounted on the front of the bed behind the back window. It doesn't have much metal under the base in comparison. I could tell the difference on 80m, right off the bat. I think I'm

going to move the antenna to a better place on the truck, or put a metal plate under it. I've already done the bonding drill with strap and all that. It might have helped a bit, but I think my car is still the better platform due to the trunk mount. I've found metal under the antenna seems to make quite a difference on the low bands. MK

1811. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 07:44:00 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201262344.464ca783@posting.google.com>
Source record: 149999

richardharrison@webtv.net (Richard Harrison) wrote in message news:<19513-3C535C73-234@storefull-117.iap.bryant.webtv.net>...
> Mark Keith wrote:
> "The total length added is still going to be 2 feet either way
> electrically."
>
> You guys need to add somthing flashy to serve as an antenna. Add one of
> those elevators race cars use to give high-speed traction to the rear
> wheels, and insulate its attachment to the car (truck) body. Make it
> from metal and it`s your capacitive antenna hat. A wire down from the
> center is your inobtrusive antenna.
>
> Best regards, Richard Harrison, KB5WZI

I've tried a few weird things but found you don't want any part of the antenna close to the car body. I once tried wires running from the antenna up to the front of the car, and tied off with insulators as a long hat. It worked terrible. It only works if you lead it away from the car to be tied off say to a tree. I'm not sure what you mean by elevators. Traction bars maybe?? MK

1812. Re: Mobile antenna installations - question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 07:49:16 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201262349.4a01abf6@posting.google.com>
Source record: 150000

"JG in NY" <n1aep@yahoo.com> wrote in message
news:<%xr48.6189$Ki1.638330@typhoon.nyroc.rr.com>...
> I notice that a lot of mobile antenna situations involve the whip extending
> up along the side or back of the vehicle for some distance (esp. with a
> bumper or ball mount).
>
> Wouldn't this pose problems?

It's not desirable. They do it probably because they have no other
choice. it does effect the antenna. If the car body is next to the
coil or stinger above the coil, it will kill the antenna deader than a
doornail. The SWR will look ok, and it will act like it's working, but
it won't radiate worth beans. Having the lower part below the coil
against metal has a less drastic effect, but it's still not really
good. MK

1813. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 08:37:05 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a30e7gru1@nntp9.atl.mindspring.net>
Source record: 150001

Roy:

About Marconi... Agreed!

But how do you explain the Nobel Prize awarded to Marconi? Nothing against Marconi, but I always wondered what justified that particular award.

I believe that in years past there were a great many more professionals in our hobby than today. Incidently I have a copy here in my personal library of a facinating old hardcover radio book/manual...

Elmer E. Bucher, "The Wireless Experimenters Manual", Wireless Press, Inc., 1920 New York. p.360

It is quite scientific contains a lot of early 20th century radio engineering oriented material in its' presentation and content. This copy is in pretty good shape as well. The forward is dated May 1919.

In the back of this wonderful book is a one page advertisement and a solicitation from one...

Gugliemo Marconi
President - National Amateur Wireless Association
326 Broadway, Room 303, New York, New York.

I quote... "President Marconi...extends a cordial invitation to all amateurs and clubs to affiliate with a forward moving organization of amateurs..."

Was Marconi a professional or an amateur? Was he an EE? Clearly he regarded himself as an amateur in this context.

I suppose the NAWA was an early competitor for the ARRL, but jeesh... with a Nobel Prize winner as President... what were the ARRL founders up against? Maxim and Tekla were great, but couldn't really hold a candle to Marconi and his prestige.

Here's the names of of the National Advisory Board of Vice Presidents of the NAWA listed below President Marconi's name, all hams...

Prof. Arthur E. Kennelly, Harvard
-Co-discoverer, with Oliver Heaviside, of the ionosphere!
Prof. Alfred N. Goldsmith, College of the City of New
-A founder of the IRE, predecessor of IEEE, and first editor of Proc. IRE.
Rear Admiral W. H. G. Bullard, USN Director of Naval Communications -Need I say more...
Major General Go. O. Squier, Chief Signal Officer US

-Ditto...
Prof Charles R. Cross,
-One of the early great's in EE at MIT.
Elmer E. Bucher, Instructing
-Author and ham who calls himself an Engineer and was one as well.

Notice that Elmer capitalizes the word Engineer, he does not use lower case engineer!

Other interesting stuff: In the application for NAWA membership is a questionaire that requires the applicant to give two good character references along with their addresses! They also want to know the applicants age and call sign, and inquire if the applicant holds a government licence or proposes to apply for one! Apparently it was voluntary and not required. Incidently the yearly dues for membership in the NAWA were $2.50!

So... tell me... DID EE majors make good hams in the "old days"?

Best,

--Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message news:3C533934.700CDF0A@eznec.com...
> Marconi wasn't an RF engineer, but rather an entrepreneur and
> businessman. Calling Marconi an RF engineer is like calling Henry Ford a
> mechanical engineer.
>
> Roy Lewallen, W7EL
>
> N2EY wrote:
> >
> > In article <20020126100723.12450.00000588@mb-mn.news.cs.com>, tdonaly@cs.com
> > (Tdonaly) writes:
> >
> > >I didn't know there were any well known RF
> > >engineers, except dead ones such as Marconi, or Armstrong. Did those fellows
> > >have degrees?
> > >
> > Marconi didn't. Armstrong did (Columbia University)
> >
> > 73 de Jim, N2EY
> >
> > (BSEE & MSEE)

1814. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 09:10:08 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <$ssJi0EwP8U8EA8h@ifwtech.com>
Source record: 150010

Roy Lewallen wrote:

>> Do you know if Barrie Gilbert is or was a ham?
>>
>No, I don't. Although Barrie is well known around these parts, I've only
>met him a couple of times. A search of the U.S. callbook listings don't
>show him, although he might have once had a license in his native
>country (which by his accent is England).
>
He was surrounded by licensed colleagues, but I've never heard anyone
tag a callsign on to his name.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

1815. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 09:19:27 UTC
From: berdpee@ami.com.au
Message-ID: <3c53c49b.5290095@news.ami.com.au>
Source record: 150002
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna

Hello Garrett,

Good luck in your job hunting, things are tough for young graduates
these days. My disciple was trained initially before he started his EE
course in my workshop in practical skills during his vacation he
worked as a tech for his current employer(SMART MOVE) when he
graduated they knew him and gave him a job from which he has never
looked back.

On Sat, 26 Jan 2002 09:24:27 -0500, Garrett Mace
<garrett.r.mace@rose-hulman.edu> wrote:

>
>>
>> Do they teach much about RF in undergrad EE programs these days? Or power
>> engineering? Or is power now in the domain of ME?
>>
>
>
>Well, considering that I currently have a class in each, yes. :-) At
>least my college (voted the #1 in undergraduate engineering for three
>years running, according to US News and World Report) has a wide variety
>of both required and elective classes one can take in these fields. For
>example, right now I'm taking a required power systems course, which
>builds on the power concepts taught throughout the other classes, and
>goes into some detail on three-phase power, transformers, DC and AC
>machines, and the requisite analysis methods. Should I want more, there
>are several additional power electives, some involving power control
>systems, high-power transmission, etc. Now, regarding wireless; I'm in
>an elective right now which covers topics ranging from antenna gain and
>noise calculations to cellular sectoring methods and multiple-path
>propagation models to the various flavors of digital keying. These
>concepts also have been discussed throughout my education; I recall last
>year one class required us to design an FM transmitter in lab. Ours
>worked pretty well; essentially broadcasting a few hundred feet every
>whisper in a room. Should I want another wireless class, there is a
>wireless electronics class offered next quarter, in which various radio
>constructon methods are covered and 10% bonuses go to those with ham
>radio licenses. But I'll be taking electronic music synthesis
>instead...sounds like more fun and I like thinking about things in
>digital terms anyway (even if it really is all analog).
>
>So I have only one quarter left...but yeah, I think there are some
>undergraduate programs with a decent amount of specialization

>opportunities. I didn't really specialize, though; I picked up most of
>my electives from an experimental entrepreneurial team study. Right now
>the team is working on the same project for senior design; a USB robotic
>webcam mount with integrated hub. I got stuck with programming all of
>the PC client software (usb interfacing, tcp/ip, video capture) and all
>of the firmware code (microcontroller usb implementation, motor
>control). Now I've only had one computer programming class; a freshman
>C++ course. But somehow, through hundreds of pages of documentation,
>all-nighters, and some luck, I'm making really good progress and already
>have a two-way data pipe set up over USB. Assembly code really isn't
>that bad :-).
>
>That said, I'm going to graduate in May and still don't have a job.
>Anybody out there know of a good position? I don't take up much space! I
>eat very little! I can start a fire by rubbing two sticks! I would be
>more than happy to send you a resume or give you a call!
>
>Later,
>---Garrett
>

aeolus

1816. Re: Mobile antenna installations - question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 10:30:46 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a30o8m$143kns$1@ID-124126.news.dfncis.de>
Source record: 150004

```
> If the car body is next to the
> coil or stinger above the coil,
> it will kill the antenna deader than a
> doornail.
======================

Don't you mean 'coffin nail' ?
```

1817. Re: ft1000

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 11:10:38 UTC
From: F1MJM <f1mjm@wanadoo.fr>
Message-ID: <3C53E02E.2AC47478@wanadoo.fr>
Source record: 150003

73 je ne comprend rien a l'anglais y a t'il un moyen de traduc de ces news hi ,merci

Ghislain Maquet a ï¿½crit :

> Je cherche le manuel de l'utilisateur du ft 1000 en francais.
> Qui peut m'aider?
> Merci d'avance et 73' a tous.ON1MHS
>
> gh.maquet@wanadoo.be

1818. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 11:11:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a30o8n$143kns$2@ID-124126.news.dfncis.de>
Source record: 150005

Capacitance is not, as might be expected, proportional to hat area.

For N greater than 3 or 4, top hat capacitance of a set of N radials is
approximately proportional to diameter and to Log(N).

Program TOPHAT1 says that a circle of wire around a set of radials is worth
another 3 radials.

So 2 radial plus a circle = 5 radials, which is very worth while.

120 radials plus a circle = 123 radials, which, electrically, is clearly not
worth the time and trouble of another 120 soldered joints. The circle,
however, does make a much more stable mechanical structure. It also
reduces the risk of having an eye poked out.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

CAM wrote
> Mark Keith wrote:
> > Thats why I think unconnected hats are a bit of a waste compared to
> > ease of use vs performance gains. If you had the hat at the top with
> > unconnected ends, you can have 8 spokes 2 ft long, or 2 spokes 2 ft
> > long , and the performance is not going to be much different either
> > way I don't think. The total length added is still going to be about 2
> > ft either way electrically.
>
> Nope, that's not true. Every spoke that is added reduces the number
> of turns required on the loading coil.
> --
> cheers, CAM http://www.qsl.net/w5dxp

1819. Re: Condo Isoloop RFI problems - advice? *see web page photos*

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 11:47:30 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c53e5cb_4@corp.newsgroups.com>
Source record: 150006

"Tom" <tegwilym@hotmail.com> wrote in message
news:efb6d1ef.0201242141.1ae981bb@posting.google.com...
> > Hi Tom,
> >
> > You are doing your best when it comes to checking the radiative path
> > of interference, but there is also the conductive path.
> >
> > That is, if your TV and transmitter share the same 120VAC circuit
> > (they go to the same breaker), there is every chance that is the means
> > of coupling.
> >
> > Move the TV's or the transmitter's power connection to a separate
> > circuit (breaker). If this clears up the problem, you might be able
> > to reconnect to the original circuit (if a necessity of the apartment
> > layout or other consideration) and use snap on suppressors around the
> > power lead(s). Snubbing the transmitter's lead is preferred (stop the
> > interference at the source).
> >
> > 73's
> > Richard Clark, KB7QHC
>
>
> Someone on another board that I have been asking about suggested that
> I might have short range magnetic interferrence to my TV.
> Last night I tuned up on 20 meters and set my keyer to send out a
> beaconing signal so I could step away from it and look out the window.
> I peeked across the lawn at my nieghbor's tv (which was on) and
> didn't see anything unusual from about ~80 feet away. I was only
> putting out about 20 watts, and my tv was flashing on and off.
> I'm wondering if this is just a short range thing to my own tv, and
> the problem may not show up next door? I guess I should try it with
> 50 watts or something higher, and see if it shows up next door. I
> guess if it's clear, I'm good to go.
> I live in kind of a T-shaped building. Kind of looks like this (if
> this comes across right) Looking down from the top.
>
>
> _____________ _____________
> | Pation | | X Patio | The 'x' is my Isoloop
> location
> ------------------------------------
> I I I
> I Neighbor I My Unit I
> I I I

> ---------------------------------------
> I I
> I I
> I Neighbor I
> I I
> I------------ I
> I I
> I Neighbor I
> I I
> I I
> ----------------
>
>
> So my main concern are the 2 adjoining neighbors behind me and next to
> me. all the units are 2 floors so I just have the coner shared with
> neighbors.
> The other units are across the lawn and across the parking lot.
>
> Thanks again for the ideas!
>
I Think what your experienceing is signal overload of your TV. this is a
tuff one to beat.. Suspect your getting into the preamp in the Sat dish.
Try placing those Ferrite chokes on the incoming Sat. Dish feedline.. also
on the power cord of your rig.. ,The Radio Shack snap ons are ok but you
need more that just a few usually about 10 to fifteen of them to make a real
difference but use what you have and see if it make any difference.
73 Dave

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.317 / Virus Database: 176 - Release Date: 1/21/02

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

1820. Re: Condo Isoloop RFI problems - advice? *see web page photos*

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 11:50:03 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c53e6ce_1@corp.newsgroups.com>
Source record: 150007

Tom
Also forgot to mention.. the strap connected to the Hot water line may not provide any Rf Grounding at all. Most domestic water lines are brought into the house with plastic pipe these days and provide very poor grounding potential if any at all. Just because they used copper in the apartment does not mean they did coming in to the house.
73 Dave

"Tom" <tegwilym@hotmail.com> wrote in message
news:efb6d1ef.0201242141.1ae981bb@posting.google.com...
> > Hi Tom,
> >
> > You are doing your best when it comes to checking the radiative path
> > of interference, but there is also the conductive path.
> >
> > That is, if your TV and transmitter share the same 120VAC circuit
> > (they go to the same breaker), there is every chance that is the means
> > of coupling.
> >
> > Move the TV's or the transmitter's power connection to a separate
> > circuit (breaker). If this clears up the problem, you might be able
> > to reconnect to the original circuit (if a necessity of the apartment
> > layout or other consideration) and use snap on suppressors around the
> > power lead(s). Snubbing the transmitter's lead is preferred (stop the
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> > 73's
> > Richard Clark, KB7QHC
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> guess if it's clear, I'm good to go.
> I live in kind of a T-shaped building. Kind of looks like this (if
> this comes across right) Looking down from the top.
>

>
> _____________ _____________
> | Pation | | X Patio | The 'x' is my Isoloop
> location
> ------------------------------------
> I I I
> I Neighbor I My Unit I
> I I I
> ------------------------------------
> I I
> I I
> I Neighbor I
> I I
> I------------ I
> I I
> I Neighbor I
> I I
> I I
> ----------------
>
>
> So my main concern are the 2 adjoining neighbors behind me and next to
> me. all the units are 2 floors so I just have the coner shared with
> neighbors.
> The other units are across the lawn and across the parking lot.
>
> Thanks again for the ideas!
>
> Tom KA7VIK

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Version: 6.0.317 / Virus Database: 176 - Release Date: 1/21/02

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

1821. Re: Condo Isoloop RFI problems - advice? *see web page photos*

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 11:50:03 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c53e66b_3@corp.newsgroups.com>
Source record: 150008

Tom
Also forgot to mention.. the strap connected to the Hot water line may not provide any Rf Grounding at all. Most domestic water lines are brought into the house with plastic pipe these days and provide very poor grounding potential if any at all. Just because they used copper in the apartment does not mean they did coming in to the house.
73 Dave

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news:efb6d1ef.0201242141.1ae981bb@posting.google.com...
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> I'm wondering if this is just a short range thing to my own tv, and
> the problem may not show up next door? I guess I should try it with
> 50 watts or something higher, and see if it shows up next door. I
> guess if it's clear, I'm good to go.
> I live in kind of a T-shaped building. Kind of looks like this (if
> this comes across right) Looking down from the top.
>

>
> _____________ _____________
> | Pation | | X Patio | The 'x' is my Isoloop
> location
> ------------------------------------
> I I I
> I Neighbor I My Unit I
> I I I
> ------------------------------------
> I I
> I I
> I Neighbor I
> I I
> I------------ I
> I I
> I Neighbor I
> I I
> I I
> ----------------
>
>
> So my main concern are the 2 adjoining neighbors behind me and next to
> me. all the units are 2 floors so I just have the coner shared with
> neighbors.
> The other units are across the lawn and across the parking lot.
>
> Thanks again for the ideas!
>
> Tom KA7VIK

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.317 / Virus Database: 176 - Release Date: 1/21/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

1822. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 12:43:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C53F5DF.27EA297A@eznec.com>
Source record: 150009

I see that I sold Marconi short. A web bio of him indicates that he was quite an experimenter, and got a patent for "the world's first wireless telegraph" and several others. He also did considerable experimenting with propagation, and was awarded numerous honorary doctorate degrees. The Nobel prize was for physics. A short biography that should be credible can be found at http://www.nobel.se/physics/laureates/1909/marconi-bio.html. It looks like he could justifiably be considered to be an EE as well as a physicist. My apology for minimizing his contributions.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Roy:
>
> About Marconi... Agreed!
>
> But how do you explain the Nobel Prize awarded to Marconi? Nothing against
> Marconi, but I always wondered what justified that particular award.
> . . .

1823. Re: Balun question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 12:49:50 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C53F69D.CC7669DF@gte.net>
Source record: 150011

John Mortlock wrote:

> The makeup of the balun is:
>
> Inner of feeder coax to one side of folded dipole and also to the inner of
> balun loop coax.
> Inner of the other end of the balun loop coax to the other side of the
> folded dipole.
> Outer of feeder coax and outer of both ends of balun loop coax joined
> together.
>
> The balun loop coax is 26" long.
>

The balun must take into account the velocity factor of the coax. solid poly
is around 0.66 and this equates with your length.
It is not unusal for V/U yagis to use a balanced Tee match- where the feed
then is 200 Ohms balanced and the 4:1 brings this back to 50 Ohms. Every 2M
EME yagi I have seen uses this technique.

Dale W4OP

1824. Re: 160M on R-5 Vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 13:27:10 UTC
From: Ken Ashcroft <ken@g3msw.demon.co.uk>
Message-ID: <ZASURGCuAAV8Ewj7@g3msw.demon.co.uk>
Source record: 150012

I have 2 R5, and I would put them back in the air if I could get 160m. I
missed the original post.
In article <F1B48.1946$Qg2.129358@news1.east.cox.net>, Uncle Peter
<radioconnectionNO@cox.netSPAM> writes
>The SWR at the antenna matchbox will remain the same, regardless of what
>the SWR at the rig is tuned to. Why not just run a length of random wire
>for
>160 meters against a ground, such as your home plumbing and then use
>the tuner to achieve a good match?
>
>If you must use the R-5, I'd be tempted to bypass the matchbox with the
>coax directly feeding the R-5. The biggest problems with those antennas
>seems to be toasting the matching transformer which CC will not replace
>or provide engineering specifics for. Another point, the matchbox may
>be extremely lossy when the antenna is used for 160 meters, or it may
>provide
>some matching. Who knows what the antenna impedance is at 1.8 MHz?
>
>Pete
>
>
>"Richard Valentine" <rwvNOSPAM@attbi.com> wrote in message
>news:Fh738.9128$Qs4.25401@rwcrnsc53...
>>
>> I was wondering if anyone out there knows if I can damage the matching box
>> on an R-5 Vertical by forcing 160Meters on the antenna? I've tried it,
>after
>> getting a 1:1 SWR through an antenna tuner and I kept the power low
>(10Watts
>> AM). Who knows where or how the signal radiates, but it actually worked.
>> Made some AM contacts, albeit weak. This is strictly a temporary
>situation,
>> with a long story behind it. My only concern is, In the meantime will I
>> toast the Matching box on the antenna, or no worries? Till now I've heard
>> varying opinions. Thanks, Rick.
>> N1SQJ
>>
>> ------------
>>
>>
>>
>>
>
>

--
Ken Ashcroft

1825. Re: ft1000

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 13:53:12 UTC
From: richardharrison@webtv.net
Message-ID: <2334-3C540648-306@storefull-114.iap.bryant.webtv.net>
Source record: 150015

What is a ft 1000 for which Ghistain Maquet would like a user`s manual
in French?

Best regards, Richard Harrison, KB5WZI

1826. Re: Mobile antenna installations - question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 14:06:15 UTC
From: richardharrison@webtv.net
Message-ID: <2335-3C540957-121@storefull-114.iap.bryant.webtv.net>
Source record: 150014

Reg wrote:
"Don`t you mean "coffin nail"?"

The lifeless object in the US is referred to as a doornail. The "coffin nail" is a synonym for a cigarette in the US.

Best regards, Richard Harrison, KB5WZI

1827. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 14:07:37 UTC
From: L <oberlin1@oberlin.net>
Message-ID: <3C5409A9.13A2811C@oberlin.net>
Source record: 150013
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

When I was at Ohio State in the middle of my Master of Science elec. eng. curriculum Professor Curt Levis (a real character) asked, in the middle of a propagation class, if anyone was a ham. At the time I was not and can't remember if anyone raised their hand.

That was the only time in 5 years there (Bachelors and Masters) that the question ever came up.

K8PF

Dave D wrote:

> " .Your Friend Bill" <none@coqui.net> wrote in message
> news:3C537A9F.EFB5EE9F@coqui.net...
> > Dave D wrote:
> > >
> > > "Jim Weir" <jim@rst-engr.com> wrote in message
> > > news:u54fn8mll84696@corp.supernews.com...
> > > > Depends. If they are like that idiot DaveD that responded that he
> only
> > > did
> > > > it for the fun of passing the exam, the license has all the worth of
> > > breasts
> > > > on a bull.
> > > >
> > > > If they are like most of us who earned the damned thing in high school
> and
> > > > experimented (and got zapped a few times) all the way through graduate
> > > > school...I'd hire one of those persons in a second over a PhD that
> never
> > > > smelled hot solder in their life.
> > > >
> > > > Jim
> > > >
> > > Who the f*ck are you calling an idiot, you dickhead. you pr1ck. I knew
> the
> > > theory before I sat the exam, and had close friends who are radio
> amateurs.
> > > I guess that makes me an idiot
> > >
> > > Dave
> >
> > No, but your manner of response does.
> > -Bill

> >
>
> Yeah OK I was *really* angry when I wrote that, but I responded to an
> insult, I didn't start anything. I guess I don't like people insulting me in
> public and I blew a fuse, but I guess I'm not the first and I won't be the
> last. Have you never lost it? I guess you are a special breed. The whole
> point is that Jim Weir seems to think those of us who served our time and
> been hobbyists all our lives aren't worth as much as someone with a piece of
> paper, and he insulted all radio amateurs who do it for fun, rather than
> personal gain. Despite what he wrote, I studied for my RAE, but by teaching
> myself electronics from a very early age, rather going to college, and I
> felt he directed a slur at me and others like me. He implied I did nothing
> to earn my passes, and that was unacceptable to me. I made it perfectly
> clear in my post that I was a long-time hobbyist and professional, a point
> Mr Weir seems to have ignored. I did find the RAE easy, so what? Mr Weir
> seems to resent that, but I must have learned is somehow, you can't guess
> your way to a distinction.
>
> Dave

1828. Re: ft1000

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 14:30:32 UTC
From: mike.luther@ziplog.com
Message-ID: <u583o8hmjagoac@corp.supernews.com>
Source record: 150016

In <2334-3C540648-306@storefull-114.iap.bryant.webtv.net>, richardharrison@webtv.net (Richard Harrison) writes:

Richard ..

>What is a ft 1000 for which Ghistain Maquet would like a user`s manual
>in French?
>
>Best regards, Richard Harrison, KB5WZI

It's likely the Yaesu FT1000 big 200W transceiver. I have the manual in English for mine. In English it is a pretty good sized book!

--> Sleep well; OS/2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

1829. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 14:36:37 UTC
From: k1bqt@aol.com
Message-ID: <20020127093637.26642.00001046@mb-cp.aol.com>
Source record: 150017

>So I'm convinced that there is something we learn in grinding through that process. Whatever it is, though, it doesn't seem
to have much to do with GPA.>

Could the real value acquired from graduate training be the ability to start at the beginning of any problem and doggedly step through it--piece by piece--without being especially focused on the outcome?
Only when one is unclear about the process does the outcome loom ominously large.

Rick K1BQT

1830. Re: Balun question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 14:44:08 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <a313jiobv1@news5.svr.pol.co.uk>
Source record: 150018

"Dale Parfitt" <parinc@gte.net> wrote in message
news:3C53F69D.CC7669DF@gte.net...
>
> John Mortlock wrote:
>
> > The makeup of the balun is:
> >
> > Inner of feeder coax to one side of folded dipole and also to the inner
of
> > balun loop coax. Inner of the other end of the balun loop coax to the
other
> > side of the folded dipole. Outer of feeder coax and outer of both ends
of
> > balun loop coax joined together.
> >
> > The balun loop coax is 26" long.

> The balun must take into account the velocity factor of the coax. solid
poly
> is around 0.66 and this equates with your length.
> It is not unusal for V/U yagis to use a balanced Tee match- where the feed
> then is 200 Ohms balanced and the 4:1 brings this back to 50 Ohms. Every
2M
> EME yagi I have seen uses this technique.
> Dale W4OP

Many thanks for that info Dale.
Looks like the balun length is spot on.

73'
John G3UGY

1831. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 14:45:46 UTC
From: k1bqt@aol.com
Message-ID: <20020127094546.26642.00001047@mb-cp.aol.com>
Source record: 149819

>Do you know if Barrie Gilbert is or was a ham?<

I recall asking Barrie that question while he was working at Analog Devices. As
I recall, he was not a licensed ham.

Rick K1BQT

1832. Re: Balun question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 15:00:07 UTC
From: k1bqt@aol.com
Message-ID: <20020127100007.26642.00001049@mb-cp.aol.com>
Source record: 149820

Figure in velocity factor, which appears to be .66 for the line length you quoted.

Rick K1BQT

1833. Re: Mobile antenna installations - question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 15:15:06 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <UPU48.919$DE3.113882@news20.bellglobal.com>
Source record: 149821

"Reg Edwards"
> Don't you mean 'coffin nail' ?

Excuse the OT:

Re. "deader than a door nail"

The early settlers in North America used to burn down their unwanted structures with the intent of fishing through the ashes to retrieve the valuable nails. Wood was (obviously) readily available, whereas nails had to be brought from Europe.

Apparently, the "door nails" were installed in a manner (bent?) that rendered them useless and so they could only be used once.

Thus the expression.

1834. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 15:26:44 UTC
From: joseph.buch@dol.net
Message-ID: <3c532e29.5285404@news.dol.net>
Source record: 149822

Bill Aycock <baycock@hiwaay.net> wrote:

>Lets turn the subject around. Of the more well known Hams, which do you
>think (or know) have EE bakgrounds?

When I was a kid I would ride over to Joe Reisert's house on my bicycle. He was a year older than me. I drooled as I saw his breadboard 813 amplifier with the purple glow blinking as he keyed his rig. The fact that we were just inches from thousands of unguarded volts did not phase us. After all we were kids and invincible. As W2HQL and a 6 land call I don't remember and later W1JR, Joe was a regular columnist for Ham Radio magazine. When I last exchanged e-mails with Joe, a couple years ago he had swung from being an RF design engineer to running his own company making antennas for the wireless telephone industry. While he was collecting nearly every DX and VHF/UHF award available in ham radio, he managed a very successful career in RF engineering. But he did it with a EE degree, You needed the paper to get you in the door, Once you were there, nobody cared as long as you produced.

N2JB ex-W6FRW, W2LGG, WN2LGG

Joe Buch
joseph.buch at dol.net

1835. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 15:30:02 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C541CFA.AC26BCCE@IEEE.org>
Source record: 149823

Reg Edwards wrote:
> Capacitance is not, as might be expected, proportional to hat area.

Of course, one gets into diminishing returns but going from two
spokes to four spokes to eight spokes has considerable effect.
And of course, installing a circle of wire at the tips of the
spokes has additional effect.
--
cheers, CAM http://www.qsl.net/w5dxp

1836. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 15:34:52 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C541E1C.F9D711CE@IEEE.org>
Source record: 149824

Mark Keith wrote:
> I haven't had any trouble on 80m without one (top hat).

We know shorting out turns on a bugcatcher coil lowers
the Q thus increasing losses. If the installation of a
top hat requires shorting out turns on the coil, it
won't do as much good as it will with an unshorted
bugcatcher coil.
--
cheers, CAM http://www.qsl.net/w5dxp

1837. Re: Non-Inductive Resistors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 16:06:25 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3C542581.AB2F78C5@one.net>
Source record: 149825
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

Check out
http://www.rfcafe.com/vendors/components/attenuator_links.htm and
KDI/Triangle (they're one of the links).

... Rich

zzz wrote:
>
> Fellow Hams:
> Does anyone know of good sources/prices for non-inductive
> ceramic/carborendum power resistors (25-300 ohms) suitable for making rf
> loads or swamping attenuators (@hf) ???
>
> I'm aware of the manufacturer Kanthal/Globar (Cesiwid) in NY and Surplus
> Sales of Nebraska.
>
> Thanks,
> Ed. B.(W3DLZ)

1838. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 16:29:08 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C542B5D.AF641AB@bellatlantic.net>
Source record: 149826
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Jason Hsu wrote:

> Have any study been done on this? I'm surprised that the ARRL hasn't
> researched this. (Or have they?)
>
> I am willing to bet that electrical engineering majors who operate ham
> radio (or who participate in other EE-related hobbies) tend to do
> better than their nonham counterparts.

That's the key. Hobbies = interest.

All other things being equal, someone who is interested in
something will most likely do better at it than someone who
is not.

But the fact that someone has a ham license, these days, is
not nearly the indicator of EE related interest that it was in
the past. Sad, but true, many hams are nothing more than
appliance operators. I have talked with many on the air and
in person whose knowledge of electronics is less than stellar.
I'm talking about licensed hams who do not even know Ohm's
law.

That in no way diminishes some of the exemplary achievements
of numerous hams - but it does indicate that, taken by itself, a
ham license is not an indicator of technical/scientific interest or
accomplishment. Some people just like to talk on the air. To
them, electronics is not the "magic" that it is to those of us who
are truly interested.

1839. Re: FED EX so much BETTER!! NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 16:33:18 UTC
From: AB7RS <ab7rs@arrl.net>
Message-ID: <u58av4mkdd4c85@corp.supernews.com>
Source record: 149827
Cross-posted to: rec.radio.swap,rec.radio.shortwave,rec.radio.amateur.antenna

>
> I understood that back in early September the USPS had started using
> Fedex facilities for moving some Priority and Express mail>

That is true but has nothing to do with FedX remailing via the PO to save a trip.They also demand signature confirmation even when the original sender did not.This can be a great inconvenience for the recipient.TG

1840. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 16:39:10 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u58b9gb421l1de@corp.supernews.com>
Source record: 149828
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Nemo dabit quid non habit.

Jim

> You really are trying your best to get on my nerves aren't you?

1841. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 17:10:00 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <DvW48.2498$yi5.213619@news20.bellglobal.com>
Source record: 149829
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Jim Weir" dazzled us with Latin:
> Nemo dabit quid non habit.

Translates to (??): "Nobody gives a damn - now go away"

1842. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 17:14:26 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a31chg$406$1@nntp9.atl.mindspring.net>
Source record: 149830

Roy:

[snip]
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C53F5DF.27EA297A@eznec.com...
> I see that I sold Marconi short. A web bio of him indicates that he was
> quite an experimenter, and got a patent for "the world's first wireless
> telegraph" and several others. He also did considerable experimenting
> with propagation, and was awarded numerous honorary doctorate degrees.
> The Nobel prize was for physics. A short biography that should be
> credible can be found at
> http://www.nobel.se/physics/laureates/1909/marconi-bio.html. It looks
> like he could justifiably be considered to be an EE as well as a
> physicist. My apology for minimizing his contributions.
>
> Roy Lewallen, W7EL
[snip]

Thanks for digging out that background on Marconi.

My point was/is that clearly he was also a ham!

How many modern hobby's have Nobel Prize winners as prestigious early
participants? Heh, heh...

Myself I'm proud to be part of a hobby that emanates from such a long line
of emminent Engineers and Scientists, even tho they were hams!

--Peter K1PO

1843. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 17:16:55 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a31cm6$6hd$1@slb7.atl.mindspring.net>
Source record: 149831

Rick et al:

I have never met Barrie, but I have read everything he ever wrote.

I'm a great fan of "translinearity". He is truly one of the great EE's of modern times.

The reason I brought his name up is that AFAIK... Barrie does not have an EE degree.

--Peter K1PO

"Rick Littlefield" <k1bqt@aol.com> wrote in message news:20020127094546.26642.00001047@mb-cp.aol.com...
> >Do you know if Barrie Gilbert is or was a ham?<
>
> I recall asking Barrie that question while he was working at Analog Devices. As
> I recall, he was not a licensed ham.
>
> Rick K1BQT

1844. Re: ft1000

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 17:40:17 UTC
From: richardharrison@webtv.net
Message-ID: <12240-3C543B81-208@storefull-113.iap.bryant.webtv.net>
Source record: 149832

Mike Luther wrote:
"It`s likely the Yaesu FT1000 big 200W tranceiver."

Thank you for the answer. It`s likely there are manuals in many languages including French for that rig.

Best regards, Richard Harrison, KB5WZI

1845. FS: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 18:17:02 UTC
From: Stephen Gale <stephengale@sympatico.ca>
Message-ID: <LuX48.1382$9y2.249997@news20.bellglobal.com>
Source record: 149833
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

a few things here.....just getting started.....check out the accessories link

http://members.kingston.net/sgale/gold2/radio.html

1846. FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 18:22:49 UTC
From: Lou <tech@dp.net>
Message-ID: <a31gm6$2agf$1@news.dp.net>
Source record: 149834

For Sale

2 - CB/10 Meter verticals. Antron made. $50 each shipped. They are NEW in box, but being sold as is.... clearance..... Can get parts (if needed) from Antron.

--
Lou
Owner of: C.L. FURLONG ENTERPRISES

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1847. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 18:57:14 UTC
From: Dave D <Dave_d@default.com>
Message-ID: <a31iiase1@knossos.btinternet.com>
Source record: 149835
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Jim Weir" <jim@rst-engr.com> wrote in message
news:u58b9gb421l1de@corp.supernews.com...
> Nemo dabit quid non habit.
>
> Jim
>
>
> > You really are trying your best to get on my nerves aren't you?
>
>
>
>
>
You won't let this go, will you? To anyone who cares, I apologise unreservedly for my outburst in an earlier post, at my age I should know better than to rise to unprovoked name-calling.. I still await an explanation from Jim Weir as to why he called me an idiot. Also, JW, if you think you are above the rest of us because you think you can speak Latin, think again. I asked you nicely to leave me alone but it seems you won't let it rest. The ball's in your court.

Dave

1848. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 18:59:20 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <c6Y48.196$pZ.424737@paloalto-snr2.gtei.net>
Source record: 149836

HMMMm - one post, question, and answer(s) just keeps leading to moe... :-)

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0201262328.307d6ee5@posting.google.com...
>
> They do pretty well if you connect the ends. If I were to add a hat on
> mine, it would have to be about 2 ft above the coil. Being mine is so
> flexible, I'm afraid if I put a hat on it, the wind will really cause
> it to flop around. Also I'd be likely to whack it on trees quite
> often. So I take the loss of not using one.

Which is ONE reason I suggest dropping the hat lower on the mast - *IF* overall
gains/benefits of
the hat can still be realized.

But I may need one on 160
> to get decent results. I haven't had any trouble on 80m without one.
> Using a bugcatcher at 40m with 6 ft mast, 3 inch coil, 5 ft stinger
> and 4 ohms ground loss will give about 56% efficiency using about 33
> turns of 3 inch coil. Adding enough hat to electrically add 2 more ft
> to the stinger would raise to 62% and you would need about 29 turns of
> coil. It's an increase, but not huge.

You have nearly perfectly described what *I* have come up with as my "perfect" 40 meter
mobile
antenna!

But being as you want to get
> every last drop, you want to use one. I'd also pay real close
> attention to the grounding. That will make more of a difference in
> performance. I have a car and a truck. You would think the truck would
> be better, but the car is so far. The reason is on the car, I have the
> antenna mounted on a hole mount on the trunk with lots of metal under
> it. On the truck, I have it mounted on the front of the bed behind the
> back window. It doesn't have much metal under the base in comparison.

HMMMmm - interesting - I have much the same configuration, tho' MY antenna mount is a bit
further
back, even with the front edge/corner of my tool/fuel box in the bed of my truck - all well
grounded
with broad strapping to both the box and bed of the truck, as well as a couple of 25 foot
or so
lengths of additional strapping braid run around and across the bed area of the truck.
Perhaps a
well grounded metal bed cover would provide better ground-plane, but wonder if the hassle
would

really provide enough additional performance to justify the effort over and above what I already
have?

> MK

Gary - KJ6Q

1849. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 19:47:10 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <gLY48.106517$Ee7.7146837@e3500-atl1.usenetserver.com>
Source record: 149837

Back in the days when I owned one I learned to spell FORD backwards--DROF.

Which meant......Driver Returning On Foot! GRRRRRRRRRRR! To this day,
my cars MUST dress for dinner! IOW, it must wear a blue or gold bow tie!
LOL!
(y'all have heard of the "bowtie" boys, now haven't you?)

73
Jerry
K4KWH

Richard Harrison <richardharrison@webtv.net> wrote in message
news:19515-3C5356F8-27@storefull-117.iap.bryant.webtv.net...
> Roy Lewallen wrote:
> "Marconi wasn`t an RF engineer, but rather an entrepreneur and
> businessman. Calling Marconi an RF engineer is like calling Henry Ford a
> mechanical engineer."
>
> That is probably an apt analogy. Both men had a genius instinct for
> knowing what was practical. Both were hands-on operators.
>
> Ford was an automotive innovator before becoming a mass manufacturer. He
> hand-built his first racing engine on his wife`s kitchen table.
>
> When Ford took his race cars to the track, people thought FORD was an
> acronym for First On Race Day.
>
> Best regards, Richard Harrison, KB5WZI
>

1850. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 20:03:00 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <ktk85u4pn1p1piafifar7kc0dn2n9qga1o@4ax.com>
Source record: 149838

On 27 Jan 2002 14:36:37 GMT, k1bqt@aol.com (Rick Littlefield) wrote:

>>So I'm convinced that there is something we learn in grinding through that
>process. Whatever it is, though, it doesn't seem
>to have much to do with GPA.>
>
>Could the real value acquired from graduate training be the ability to start at
>the beginning of any problem and doggedly step through it--piece by
>piece--without being especially focused on the outcome?
>Only when one is unclear about the process does the outcome loom ominously
>large.
>
>Rick K1BQT

Hi Rick,

Going from undergrad directly to graduate school is no more useful
than getting a ticket punched as a resume line item. What you
describe as the ability to start at the beginning to continue to the
conclusion just doesn't often happen in real life and as such
represents both an illusion and the maintenance of an haphazard
approach to "education." That is, it is a grazing mentality of
specialization when no basis in experience has led one there. This
works fine for schools-as-business, but does little for the student
except take their money and occupy their time with scrambling for T/A
positions (which is their principle form of learning).

It is only by virtue of this side-effect of becoming part of the
dialog of education does anyone truly learn, and being responsible for
the right answer motivates the "instructor" for greater achievement
than the sophistries of writing up a study and columnating numbers
(all of which goes immediately into the academic obituaries, DOA).
This comes of my experience of facing a class room of 25 - 30 tech
students 40 hours a week for 3 years, many of these students from all
over the globe. Every one of them was sharp as a tack and just
looking for a crack in a technical issue to open up with the wedge of
a devastating question. I would point out that both sides of the
podium was motivated to perform, lest they found early service aboard
a destroyer as a snipe in the Gulf of Tonkin. One of the Chiefs I
worked for had a direct line to BuPers and could have a kid's orders
cut in four hours (the C-average acid test from another perspective).

The only greater motivation to learning is to break something
important. I've had plenty of experience, early on, of that too ;-)
...and I still enjoy getting into trouble.

73's
Richard Clark, KB7QHC, ET1, BAï¿½

1851. Re: Mobile antenna installations - question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 20:15:22 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <ifn85ugqitr971381lkf0uu4qrgj4ndlns@4ax.com>
Source record: 149839

On Sun, 27 Jan 2002 10:15:06 -0500, "J. Harvey"
<JM001.Harvey@sympatico.ca> wrote:

>"Reg Edwards"
>> Don't you mean 'coffin nail' ?
>
>Excuse the OT:
>
>Re. "deader than a door nail"
>
>The early settlers in North America used to burn down their unwanted
>structures with the intent of fishing through the ashes to retrieve the
>valuable nails. Wood was (obviously) readily available, whereas nails had
>to be brought from Europe.
>
>Apparently, the "door nails" were installed in a manner (bent?) that
>rendered them useless and so they could only be used once.
>
>Thus the expression.
>
>

Hi OM,

Actually the expression door nail was drawn from the hasp closure for
the door and the nail was the wedge in staple of the hasp.

The "dead" in that expression is used in the same sense as "fast"
means tied securely. Consider the implication of "dead-bolt" (which
the etymology would suggest is another, seeming, contradiction).

Language is no more easier than RF to understand at times, and the two
combined bring the lifeblood to the newsgroups.

73's
Richard Clark, KB7QHC

1852. Dielectric constant of dielectric material used for capacitors in B&W filter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 20:31:17 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201271231.1ee058ed@posting.google.com>
Source record: 149840

I have a B&W low pass filter for HF.

No, I'm not interested in tinkering with it. I'm just trying to analyze it while I review my electrical engineering theory.

I'm trying to figure out the value of the capacitors, and the dielectric constant is the one thing I don't know. I can see that there is a thin material that seems to be plastic used between the round metal plates and the chassis.

Does anyone here know what this material is (or might be) and what the dielectric constant of it is?

Jason Hsu, AG4DG
jason_hsu_802701@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

1853. Re: FS: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 20:35:26 UTC
From: Tom <tom@dewitt.com>
Message-ID: <3C54648E.81108FDD@dewitt.com>
Source record: 149841
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

But there are no prices or descriptions...

Nice web site tho..

1854. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 20:44:22 UTC
From: Train <cbmods@optonlineNOSPAM.com>
Message-ID: <GEZ48.89763$6L5.14523908@news02.optonline.net>
Source record: 149842
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

$120 for a Palomar 225?

"Stephen Gale" <stephengale@sympatico.ca> wrote in message
news:LuX48.1382$9y2.249997@news20.bellglobal.com...
> a few things here.....just getting started.....check out the
accessories
> link
>
> http://members.kingston.net/sgale/gold2/radio.html
>
>

1855. What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 21:28:37 UTC
From: kc8fwd@hotmail.com
Message-ID: <2cc48b2a.0201271328.5334bbbc@posting.google.com>
Source record: 149843

Hello,
What is the best antenna for HF.
A)Hustler
B)Comet
C)Alpha Delta
D)Hamstick
E)Other please specify.
What I am Looking for is best performance on 10 thru 80
whether they have to be put up each time I change bands
or what they dont have to be Multiband.ButI want best performance
and or bandwidth.Thanks Mike

1856. Re: Dielectric constant of dielectric material used for capacitors in B&W filter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 23:10:49 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C548828.C83A5216@gte.net>
Source record: 149845

Jason Hsu wrote:

> I have a B&W low pass filter for HF.
>
> No, I'm not interested in tinkering with it. I'm just trying to
> analyze it while I review my electrical engineering theory.
>
> I'm trying to figure out the value of the capacitors, and the
> dielectric constant is the one thing I don't know. I can see that
> there is a thin material that seems to be plastic used between the
> round metal plates and the chassis.
>
> Does anyone here know what this material is (or might be) and what the
> dielectric constant of it is?
>

Why not simply measure the capacitance and work backwards??
Dale W4OP

1857. Re: G5RV - Extending one side - Will it help - HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 23:38:59 UTC
From: vtail@hotmail.com
Message-ID: <3c548eef.166734538@news.netis.com>
Source record: 149856

On Sat, 26 Jan 2002 17:59:29 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>If you have any coax in the feeder consign it to the junk box. Bring the
>feedline right into the shack if you can manage it. Fit a choke balun
>between feedline and tuner. There may be any length of coax between tuner
>and transmitter but the shorter the better of course. It's convenient for
>tuning-up purposes if the SWR meter is at the tuner end of this coax to the
>transmitter.
>
>You will then have the most efficient, all-band 160 to 10m antenna possible
>at your QTH.

Good evening, Reg.

Any particular reason for the choke balun, if you have a tuner that
takes balanced feeders?

I have a 160-meter inverted V, up 60 feet at the center, and fed with
450-ohm line that connects directly into the back of a Nye Viking
tuner. It works beautifully on all bands 160-10 as well as MARS
frequencies outside the ham bands.

1858. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-27 23:42:02 UTC
From: n7ws@yahoo.com
Message-ID: <3c548d3b.5060017@news.triconet.org>
Source record: 149844
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna

On 24 Jan 2002 19:24:37 -0800, k3vr@hotmail.com (Brian) wrote:

|Get this: I send a package to Colorado via UPS.

[snip]

No self-respecting ham (sorry Roy <g>) should use UPS. They are behind an effort to encroach on one of our ham bands on a "non-interference" basis. Of course this will be spread spectrum so proving interference will be nearly impossible for the suffering ham.

I too have had valuable packages left unattended on my doorstep by UPS; some of them were even mine!

Also, I live on a private (dirt) road that is on an easement across my property. Under Arizona law, I get to be the traffic cop, and for dust control, I have posted a 10 mph speed limit. The &@!Y#&* UPS trucks do about 35 when heading to my neighbor's place. I have stopped them and asked them to keep the speed down. One the guy said, "Sure thing" and then took off leaving me in a cloud of dust.

I called UPS to complain and was told that a supervisor would call back in within an hour. That was about two months ago and I'm still waiting.

So.... the next time, I'm going out and locking my gate across the road after the truck has entered. I'll unlock it after I get that call from the supervisor.

1859. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 00:01:28 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <f3595uokks9vlskerl3ubdjlsd3drtp8db@4ax.com>
Source record: 149846

A Texas Bugcatcher or screwdriver. The Bugcatcher has to be changed outside. The screwdriver is changed from inside. They have similar performance, but of course the screwdriver has no bandwidth limitations.

Dick - W6CCD

On 27 Jan 2002 13:28:37 -0800, kc8fwd@hotmail.com (Michael J Talkington) wrote:

>Hello,
>What is the best antenna for HF.
>A)Hustler
>B)Comet
>C)Alpha Delta
>D)Hamstick
>E)Other please specify.
>What I am Looking for is best performance on 10 thru 80
>whether they have to be put up each time I change bands
>or what they dont have to be Multiband.ButI want best performance
>and or bandwidth.Thanks Mike

1860. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 00:04:46 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <u595a491ng0801@corp.supernews.com>
Source record: 149847
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna

Dear Jim: Well that is a bit extreme! However, you would have
learned. The first edition of his book, purchased for me by my father,
was a pivotal point in my life. He is one of the great teachers. 73
Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net
Office: JCM@McLMcL.Com
"Jim Weir" <jim@rst-engr.com> wrote in message
news:u5634uohoos6a3@corp.supernews.com...
> Oh, dear God. I'da sold my firstborn into slavery to have taken a
class
> from that man.
>
> Jim
>
>
>
> > Separated by years, N8EE and I both had W8JK as a mentor and
exemplar.
>
>
>

1861. Re: Dielectric constant of dielectric material used for capacitors in B&W filter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 00:06:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5495F5.6CBD182@eznec.com>
Source record: 149848

A good guess for the material would be PTFE (one of the Teflons). Its dielectric constant is 2.1. Another possibility is polyimide (Kapton), with dielectric constant of 2.8 - 3.0. Teflon is soft and stretches easily. Kapton isn't and doesn't.

Roy Lewallen, W7EL

Jason Hsu wrote:
>
> I have a B&W low pass filter for HF.
>
> No, I'm not interested in tinkering with it. I'm just trying to
> analyze it while I review my electrical engineering theory.
>
> I'm trying to figure out the value of the capacitors, and the
> dielectric constant is the one thing I don't know. I can see that
> there is a thin material that seems to be plastic used between the
> round metal plates and the chassis.
>
> Does anyone here know what this material is (or might be) and what the
> dielectric constant of it is?
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

1862. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 00:14:48 UTC
From: Zoran Brlecic <WA7AA@attbi.com>
Message-ID: <3C5497F8.3CAE59E9@attbi.com>
Source record: 149849

Unclaimed Mysteries wrote:

> > "I am both an EE and ham. (Notice my callsign...) Jim N8EE."
> >
> > A frind of mine is both an engineer and a ham. His callsign: N5CPA
> >
> > Best regards, Richard Harrison, KB5WZI
> >
>
> I make web sites and watch cartoons. Corry K4D'OH!

Does this make me an alcoholic?

WA7AA

1863. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 00:48:44 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u597vrgcofuo1f@corp.supernews.com>
Source record: 149850

> When Ford took his race cars to the track, people thought FORD was an
> acronym for First On Race Day.
>
> Best regards, Richard Harrison, KB5WZI

Now they think it means

Found On Road Dead
or
Fix Or Repair Daily

1864. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 01:02:26 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C54A322.85458402@IEEE.org>
Source record: 149851

Michael J Talkington wrote:
>
> Hello,
> What is the best antenna for HF.
> A)Hustler
> B)Comet
> C)Alpha Delta
> D)Hamstick
> E)Other please specify.
> What I am Looking for is best performance on 10 thru 80
> whether they have to be put up each time I change bands
> or what they dont have to be Multiband.ButI want best performance
> and or bandwidth.Thanks Mike

Bugcatchers with a top hat are tops. Well designed screwdrivers
with top hats are a very close second.
--
cheers, CAM http://www.qsl.net/w5dxp

1865. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 01:13:37 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a329pg$1582ah$1@ID-124126.news.dfncis.de>
Source record: 149853

I have no practical experience of any of the antennas in your list but, off the cuff, I suggest the following guidelines.

If there's a fixed value loading coil somewhere in a short mobile antenna then its good for only 1 or 2 bands. It may be excellent on those 1 or 2 bands but is likely to be useless on all the others.

The tallest antenna will ALWAYS have the highest radiating efficiency, everything else being equal.

An antenna which has a long, continuously variable loading coil, such as a 'screwdriver motor' type will maximise efficiency on all bands it is specified to cover.

Everything else being equal, the antenna with the fattest diameter loading coil and the thickest diameter wire will have the highest efficiency.

For good efficiency on all bands, consider an antenna which has one loading coil which has to be changed for different bands. Inconvenient of course but they do work.

Concentrate on efficiency of the lower frequency bands. The highest frequency bands, 15 and 10m, will look after themselves.

But where an antenna is located on the vehicle has a greater effect than any other consideration. Far and away the best location is in the middle of a tall vehicle roof.

An antenna's mechanical robustness and long-term reliability can be judged only from a visual examination. But the long-term may not be very important. Most amateurs start thinking about trying something else after the first 100 miles.

Considering the cost of system as a whole, don't skimp on the tuner. Tuners on the lower frequencies should have fat coils of thick wire just like those in the antenna.

Happy motoring !

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Michael J Talkington <kc8fwd@hotmail.com> wrote in message
news:2cc48b2a.0201271328.5334bbbc@posting.google.com...
> Hello,

> What is the best antenna for HF.
> A)Hustler
> B)Comet
> C)Alpha Delta
> D)Hamstick
> E)Other please specify.
> What I am Looking for is best performance on 10 thru 80
> whether they have to be put up each time I change bands
> or what they dont have to be Multiband.ButI want best performance
> and or bandwidth.Thanks Mike

1866. Re: NO MORE UPS FOR ME / Rant / Long

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 01:19:11 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a328nu$1us$1@bob.news.rcn.net>
Source record: 149852
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna

"Wes Stewart" <n7ws@yahoo.com> wrote:

> No self-respecting ham (sorry Roy <g>) should use UPS.
> They are behind an effort to encroach on one of our ham
> bands on a "non-interference" basis.

And I am surprised that nobody has mentioned that they were
behind the effort that saw the amateurs lose 220-222 MHz.

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

1867. WTB: Nokia 7/8" Female Connectors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 01:33:49 UTC
From: David Ornee <daveornee@mindspring.com>
Message-ID: <a32a5ehe1@slb3.atl.mindspring.net>
Source record: 149854

I need a N Female and Female 7/16 DIN connector for Nokia Heliax type 7/8" cable. The cable is similar to Andrew LDF5-50 but Andrew connectors won't work.
David Ornee, KQ9W, Western Springs, IL

1868. South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 01:45:54 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c54ad50$1@news.bnb-lp.com>
Source record: 149855
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

VP8GEO (South Georgia Island) came up on 20m CW around 00:02 UTC
28-Jan-2002

QSL via VE3GCO

VE3GCO
THE MAPLE LEAF RADIO SOCIETY
5 MCLAREN AVENUE
LISTOWEL, ON N4W 3K1
CANADA
--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

1869. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 01:54:09 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C54AF41.9070609@europa.com>
Source record: 149857

hmbdude-no-spam@cotse.net wrote:

> I want to put up "something" to hold a fringe TV antenna, a scanner
> antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
> 18 - 20 feet off the ground. I have a single storey house, no useable
> chimney, don't want to mount on the roof, and can't use wall brackets
> because there is a 3 foot eave overhang all around. So, I'm looking for
> ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
> fortune.

A tree is cheap, but the installation time is about 15 years.
<grin>

I had basically the same problem a number of years ago, Steve.
What I did was build a wooden platform as part of my daughters
playground set I built and bolted my 25' mast to it. I had a 4
element 10 meter beam on top of it and had no problems. The
platform was built from 10' 4x4 posts in concrete and the platform
was at the 6' level and was made of 2x8. So the whole structure was
pretty solid.

What I have done more recently was take a corner 4x4 fence post
(in concrete) and bolted a 22' mast to it. I had a 2 meter vertical
on there for awhile but moved that to a chimney mount on top of our
second floor roof, which gave me a little more height. The mast is
now the center of a 80' meter dipole. I've been wanting to put up a
another mast, but like you, I can't guy it. I can guy it on two
sides but not the third. So I've been thinking of putting a 6x6
into about 3 feet of concrete and 8 feet above ground and bolt a
mast to that. On this mast I'd like to put a small tri-bander at
about 20'. I'd like to put up a tower but we might move in the
near future and it will be easier to get a post out of the ground
than it would to take down a tower.

Anyway, you might look into using a post for support. It might
work for you.

Mike

--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1870. Re: G5RV - Extending one side - Will it help - HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 03:32:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a32h3u$153tul$1@ID-124126.news.dfncis.de>
Source record: 149858

> Reg Edwards" wrote:
>
> >If you have any coax in the feeder consign it to the junk box. Bring the
> >feedline right into the shack if you can manage it. Fit a choke balun
> >between feedline and tuner. There may be any length of coax between tuner
> >and transmitter but the shorter the better of course. It's convenient for
> >tuning-up purposes if the SWR meter is at the tuner end of this coax to
the
> >transmitter.
> >
> >You will then have the most efficient, all-band 160 to 10m antenna
possible
> >at your QTH.
>
> Good evening, Reg.
>
> Any particular reason for the choke balun, if you have a tuner that
> takes balanced feeders?
>
> I have a 160-meter inverted V, up 60 feet at the center, and fed with
> 450-ohm line that connects directly into the back of a Nye Viking
> tuner. It works beautifully on all bands 160-10 as well as MARS
> frequencies outside the ham bands.
> ============================
Hello old man,

I'm not familiar with your Nye Viking tuner. But if it is designed to accept a balanced feedline then an external balun of any sort is not needed of course. There must be one inside the tuner already even if it is in the form of a link coupling.

I mentioned it because most tuners are unbalanced at both ends and the most simple, economic and efficient means of connecting the balanced line is via a choke balun. Neither of the pair of line wires is then grounded at the tuner terminals.

Construction can be just 8 to 16 turns of a pair of 18 or 20 gauge wires, like twin speaker cable or similar, wound round a ferrite ring.

A choke balun is not an imedance transformer. It is just a bifiar-wound choke. Its input impedance is practically the same as the impedance it is terminated with. Its purpose is to force the currents in the pair of line wires to be equal and oposite to each other. ie., there is little or no longitudial current in the line when the two wires are considered to be a single wire. Radiation from or pick-up on the feeder is then minimised.

Because it is not an impedance transformer, a choke balun may result in inconvenient L and C settings in the tuner. In your case, the internal balun is probably a true impedance step-down transformer from 450/4 = 113 ohms. Or 450/9 = 50 ohms. This is nearer to 50 than 450 and so the tuner's L and C values may be more reasonable.

Bear in mind the impedance looking into the 450-ohm line is 450 ohms only when SWR on the line is 1-to-1 which it never is. A choke balun is much more accommodating to wide swings in line input impedance than 4:1 or 9:1 true transformers.

As I suggested earlier, you have found a high centre-fed dipole, fed over a balanced high-impedance line all the way to a good tuner in the shack, is the best possible all-round, multiband antenna in the book. Few people fully appreciate this until they have tried all the many other wierd contraptions. Should novices be restricted to short lengths and low heights alongside their radiated power limitations ? ;o)

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****

1871. Re: Dielectric constant of dielectric material used for capacitors in B&W filter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 04:08:05 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c54d2c3_1@news1.prserv.net>
Source record: 149859

Jason (and Roy):
It's Teflon, but I forget the thickness. I've repaired enough of them where hams tried to run an AM KW through them with a VSWR of 3 or 4 to 1. Blows a hole in the output cap as I recall.

--
Crazy George
Remove NO and SPAM from return address
Roy Lewallen <w7el@eznec.com> wrote in message
news:3C5495F5.6CBD182@eznec.com...
> A good guess for the material would be PTFE (one of the Teflons). Its
> dielectric constant is 2.1. Another possibility is polyimide (Kapton),
> with dielectric constant of 2.8 - 3.0. Teflon is soft and stretches
> easily. Kapton isn't and doesn't.
>
> Roy Lewallen, W7EL
>
> Jason Hsu wrote:
> >
> > I have a B&W low pass filter for HF.
> >
> > No, I'm not interested in tinkering with it. I'm just trying to
> > analyze it while I review my electrical engineering theory.
> >
> > I'm trying to figure out the value of the capacitors, and the
> > dielectric constant is the one thing I don't know. I can see that
> > there is a thin material that seems to be plastic used between the
> > round metal plates and the chassis.
> >
> > Does anyone here know what this material is (or might be) and what the
> > dielectric constant of it is?
> >
> > Jason Hsu, AG4DG
> > jason_hsu_802701@@@yahoo.com
> > http://www.jasonhsu.com/ham_radio-technical.html

1872. Re: How Good Is the "Lattin" Dipole Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 04:33:47 UTC
From: carkenord@juno.com
Message-ID: <4346b55e.0201272033.28957f7a@posting.google.com>
Source record: 149860
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

>> Has anyone tried the "Lattin" dipole antenna described at this URL?
How
> >does it perform? Are the measurements correct? How much pruning did you
> >have to do? How does its efficiancy compare to that of commercial trap
> >dipoles?

The following is some of the info I gathered in my attempts to understand and build a Lattin. As I said in my previous post, I was never able to get it to work as Mr. Lattin described.

It has been patented, filed Feb 13, 1948. Patent # 2,535,298 My local library had the patent on microfiche, and I was able to get it copied. I have a copy of his patent, with illustrations/drawings, on file here.

Lattin described this antenna in QST in December of 1960.

July 1960 issue of "CQ" mag has a related antenna project, by Richmond, W1CEJ, called "A Portable Dipole"

Vincent Lear, G3TKN has also worked with the Lattin design, and was published in RSGB.

July 1992 issue of "73" mag has another article "Six-band linear trap antenna" by Brumbaugh KB4ZGC.....using approx the same idea.

September 1986 issue of "73" mag has Lattin type antenna project described...."The Texas Tango Antenna" by Garrett K5BTV.

Maybe the above info will stimulate some more experimentation with the Lattin. I sure hope so.

Lee Carkenord KA0FPJ

1873. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 04:59:47 UTC
From: Cliff Holloway <cholloway14@attbi.com>
Message-ID: <7V458.5599$4t4.16568@rwcrnsc54>
Source record: 149861

Very Strong masts can be found at "Windsurfing swaps", they range from 15 to
19 feet and are either aluminum or fiberglass (some are carbon fiber). The
used ones can go as cheap as $20 but $40 tp $100 is more common.
73 Cliff N0HC
US Windsurfing Association # CH01
<hmbdude-no-spam@cotse.net> wrote in message
news:aG1iZHVkZQ==.a335178f8a4d11f1529bb65310ab0ec2@1012180737.cotse.net...
> I want to put up "something" to hold a fringe TV antenna, a scanner
> antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
> 18 - 20 feet off the ground. I have a single storey house, no useable
> chimney, don't want to mount on the roof, and can't use wall brackets
> because there is a 3 foot eave overhang all around. So, I'm looking for
> ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
> fortune.
>
> Steve
>
>

1874. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 05:33:54 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a32ns2sah3@quark.scn.rain.com>
Source record: 149862

AstroMan <AstroMan@dont.bug.me.with.spam.nyet> wrote:

>> When Ford took his race cars to the track, people thought FORD was an
>> acronym for First On Race Day.
>>
>> Best regards, Richard Harrison, KB5WZI

> Now they think it means

> Found On Road Dead
> or
> Fix Or Repair Daily

Which is really scary - as Ford Motor products are more reliable than
General Motors products, these days.

--
Bill Nelson (billn@peak.org)

1875. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 05:47:48 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201272147.5de93b35@posting.google.com>
Source record: 149863

"Gary - KJ6Q" <davison7@gte.net> wrote in message news:<c6Y48.196Perhaps a
> well grounded metal bed cover would provide better ground-plane, but wonder if the hassle would
> really provide enough additional performance to justify the effort over and above what I already
> have?
>
>

It's hard to say. You may be fairly well grounded. I have done just that on my truck, except I haven't really had a chance to test it yet. I got some sheet metal to make a plate to cover from the bed lip back about 2 ft or so. I'm hoping it will help a bit. I still think I need to move the antenna though. I mainly noticed it on 75m. I've never had the performance on that band so far, that my car does. But strange enough, 40m up seems about the same as the car. Or at least good enough to not notice much difference. 40m does quite well in the truck, although I think it could be improved if 75m is suffering. I want to put a camper on the truck eventually. That will further complicate things unless I get an all glass top. MK

1876. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 05:51:16 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201272151.61715b15@posting.google.com>
Source record: 149864

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C537D05.B1FDB044@IEEE.org>...
> Mark Keith wrote:
> > Thats why I think unconnected hats are a bit of a waste compared to
> > ease of use vs performance gains. If you had the hat at the top with
> > unconnected ends, you can have 8 spokes 2 ft long, or 2 spokes 2 ft
> > long , and the performance is not going to be much different either
> > way I don't think. The total length added is still going to be about 2
> > ft either way electrically.
>
> Nope, that's not true. Every spoke that is added reduces the number
> of turns required on the loading coil.

They do, but I think the performance increase per spoke drops off
fairly fast as you add more. But I may be wrong on that. I hardly use
hats, so don't get much practice messing with them. All my "hats" go
straight up. :) MK

1877. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 06:03:44 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a32pk0sah4@quark.scn.rain.com>
Source record: 149865

hmbdude-no-spam@cotse.net wrote:
> I want to put up "something" to hold a fringe TV antenna, a scanner
> antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
> 18 - 20 feet off the ground. I have a single storey house, no useable
> chimney, don't want to mount on the roof, and can't use wall brackets
> because there is a 3 foot eave overhang all around. So, I'm looking for
> ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
> fortune.

You can buy/make/have-made wall mount brackets that will hold the mast
3 feet away from the wall.

A 20 foot mast that will support a fringe antenna plus an HF vertical
is going to have to be rather robust - seeing that you want it to be
self supporting. It would also require a fair amount of concrete in
the ground.

--
Bill Nelson (billn@peak.org)

1878. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 06:06:37 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C54EB0A.4416811F@home.com>
Source record: 149866

Was there such thing as an EE in 1920?
Les, AA4F

Roy Lewallen wrote:
>
> I see that I sold Marconi short. A web bio of him indicates that he was
> quite an experimenter, and got a patent for "the world's first wireless
> telegraph" and several others. He also did considerable experimenting
> with propagation, and was awarded numerous honorary doctorate degrees.
> The Nobel prize was for physics. A short biography that should be
> credible can be found at
> http://www.nobel.se/physics/laureates/1909/marconi-bio.html. It looks
> like he could justifiably be considered to be an EE as well as a
> physicist. My apology for minimizing his contributions.
>
> Roy Lewallen, W7EL
>
> "Peter O. Brackett" wrote:
> >
> > Roy:
> >
> > About Marconi... Agreed!
> >
> > But how do you explain the Nobel Prize awarded to Marconi? Nothing against
> > Marconi, but I always wondered what justified that particular award.
> > . . .

1879. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 06:07:22 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C54DE8F.9B8F590@worldnet.att.net>
Source record: 149867

googlyelmo@earthlink.net wrote:

>I'd like to hear any suggestions and comments, and especially

> like to hear from anyone who has successfully used ladderline in a wet
> and rainy climate. Gratefully,

I haven't tried it, but plan to. Since authorities here say that the area between the
conductors is what causes the problem when wet it seems that running the ladder
line through a plastic tubing or pipe should solve most of it. Any version that the
ladderline will fit inside should do it.

Dick

1880. Re: Mixing 160 Dipole and 80-10 Dipole on same mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 06:18:01 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C54E10F.CD413AB6@worldnet.att.net>
Source record: 149868

They don't have to be separated by any certain degrees, just
make sure they don't lie together. Separate them by as much as you reasonably
can, hang them where you can, like most
everyone else does, and have at it.

Dick

Mike Jordan wrote:

> W4WNT wrote:
>
> > Keep the two antennas at 90 deg. from each other and you should be able to
> > feed them with the same piece of coax.
> >
> > 73, Bill, W4WNT
>
> Hmmm, I guess I go to plan B then. I've got to install both
> antennas in a L shape with one half going South from the center and
> the other half going West from the center. I can put one a bit
> higher than the other or slope the ends of one down a bit and use
> separate feed lines. I was just hoping to be able to eliminate one
> of the feed lines I have coming into my house now.
>
> Thanks Bill.
>
> Mike
>
> >
> > Mike Jordan <mjordan@europa.com> wrote in message
> > news:3C4A4204.6010100@europa.com...
> >
> >>
> >>I'm looking at getting a 80-10 82 foot dipole (the Alpha Delta
> >>DX-CC) and a 160 meter 125' inverted V (although it will be run more
> >>as a flat top than a inverted V). I have one corner of my yard that
> >> is good to put up a 25' mast and then run two legs of a dipole at
> >>90 degrees to each other. What I would like to do is use the mast
> >>for both antennas and run them the same direction. What kind of
> >>interaction can I expect from a configuration like this? And what
> >>is the closest the two legs can come to each other (as long as they
> >>don't touch)? I have built multi-band dipoles before that used the
> >>same feed line and plastic spacers that seem to work just fine, so
> >>I'm thinking that this will be like those except I'll have two feed
> >>lines, one to each antenna center insulator.
> >>

> >>As a second part of this question, the inside of the L will be
> >>pointing at my two story house that is about 35 to 40' away. That
> >>will put the antennas about level with the upper story and my wife's
> >>office in the spare bedroom on that side of the house. Is the
> >>signal going to be directed in that direction and possibly have a
> >>better chance of causing RFI?
> >>
> >>Thanks for any help.
> >>
> >>Mike
> >>
> >>--
> >>Hillsboro, Oregon
> >>Bouvier des Flandres - Herding & Working Dogs
> >>http://www.europa.com/~mjordan - Pictures & Info on Bouviers
> >>
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> >
> >
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> --
> Hillsboro, Oregon
> Bouvier des Flandres - Herding & Working Dogs
> http://www.europa.com/~mjordan - Pictures & Info on Bouviers

1881. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 07:19:16 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C54EF69.77DDD7F5@worldnet.att.net>
Source record: 149919
Cross-posted to: rec.radio.amateur.antenna,sci.electronics

Reg Edwards wrote:

>The next hardest thing is to learn to think quantitatively, precisely, in

> terms of numbers. If you cannot quantify or measure what you are speaking
> about then you know next to nothing about it.

That seems to mean that without advanced math and engineering training and
skills
one can't understand concepts and relationships, and successfully work with
them.
I find that to be not the case at all, as one who has worked and played in
radio and electronics for the past 45 years without either.

Dick

1882. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 08:32:09 UTC
From: voobner@yahoo.com
Message-ID: <fbc7a2.0201280032.4d23e26b@posting.google.com>
Source record: 149920
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

"Train" <cbmods@optonlineNOSPAM.com> wrote in message
news:<GEZ48.89763$6L5.14523908@news02.optonline.net>...
> $120 for a Palomar 225?
>
> "Stephen Gale" <stephengale@sympatico.ca> wrote in message
> news:LuX48.1382$9y2.249997@news20.bellglobal.com...
> > a few things here........just getting started......check out the
> accessories
> > link
> >
> > http://members.kingston.net/sgale/gold2/radio.html
> >
> >

"Train", CB amps are illegal.

-Aaron-

1883. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 09:47:36 UTC
From: Dave D <Dave_d@default.com>
Message-ID: <a336no$3vp$1@knossos.btinternet.com>
Source record: 149921
Cross-posted to: rec.radio.amateur.antenna,sci.electronics

"Dick Carroll" <dickc58@worldnet.att.net> wrote in message
news:3C54EF69.77DDD7F5@worldnet.att.net...
>
>
> Reg Edwards wrote:
>
> >The next hardest thing is to learn to think quantitatively, precisely, in
>
> > terms of numbers. If you cannot quantify or measure what you are
speaking
> > about then you know next to nothing about it.
>
> That seems to mean that without advanced math and engineering training
and
> skills
> one can't understand concepts and relationships, and successfully work
with
> them.
> I find that to be not the case at all, as one who has worked and played
in
> radio and electronics for the past 45 years without either.
>
> Dick
>

I always found that only a basic grounding in mathematics necessary to design or repair circuits. I am by no means good at maths and luckily for me I have never found it necessary to use phasor diagrams, simultaneous equations etc but it would certainly have been nice to have been comfortable with them. I think people who come into the trade as they leave school do very well to learn the trade and forge a career out of electronics. I was lucky enough to have been curious since I could crawl, and I don't think I would have stood the course if I'd had to learn it all at school. I guess I'm like a lot of other people who love electronics and hate maths, and it certainly discouraged me from studying the subject at college.

Dave

1884. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 11:55:42 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a33e7u$be6$1@serra.unipi.it>
Source record: 149922

Richard Clark <kb7qhc@attbi.com> wrote:

> Hi Francesco, Stefano,

hello Richard,

> This indeed marks progress. A good source of such methods is found in
> the antennex's critic and noted authority, Jack Belrose. You would do
> well to examine the photographs which clearly show the care of
> removing the measuring equipment well away from the antenna, and
> performing the tests in the most non-reflective environment short of
> lab.

Could you please tell me where to find this text?
I've started to collect information from local experts (electronic and telecommunications engineers and physics other than hams) to set up a very well organized test.
Here's how we intend to proceed:
We already have located the place for the test, you can have a quick glance at: http://www.virgo.infn.it/
We selected this site since it's a very large flat site and one of us has access to this site without problems.
We intend to test the EH antenna (brought by Stefano himself) against a vertical half wave radiator (in the 14 MHz band) and against a commercial dummy load. The receiving station will be located at about 4 Km from the transmitting station. The receiving station will have a short vertical antenna (0.5 to 1 meter long) to approximate an isotropic antenna. The receiver S-meter is calibrated with HP instruments and however we have the possibility to use well calibrated attenuators with 1 dB step.
There will be no obstacle between the receiver and the transmitter and in the near 6 Km radius.
We of course will place an RF choke in any transmitting or receiving antenna.
Other details are still under discussion and will be "broadcasted" here once we define them. We hope to be ready for the test in few weeks (mid to end of february we hope) as we would like to have the support from a certain number of hams and researchers that come from different places in Italy (anybody is welcome, please contact me privately if want to join).

> Please keep us informed of all development.

I will for sure.

best regards.

Francesco IZ5DWF

1885. Re: How Good Is the "Lattin" Dipole Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 12:45:15 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <oJb58.4104$DE3.737086@news20.bellglobal.com>
Source record: 149923
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Lee Carkenord"
> It has been patented, filed Feb 13, 1948.
> Patent # 2,535,298
> My local library had the patent on microfiche,
> and I was able to get it copied.
> I have a copy of his patent, with illustrations/drawings,
> on file here.

You don't need to rise from your chair to review a patent. US patents (text and/or images) are available on-line at: www.uspto.gov .

The patent images are TIFF files - a virgin browser may not be able to view the images. The QuickTime plug-in (very common and readily available) seems to allow viewing of TIFF images. There are other options. I just had a quick peek at that patent - took 30 seconds.

1886. Antenna Ground installation questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 12:50:12 UTC
From: Tim <sixfingers.removespam@texoma.net>
Message-ID: <a33h6r0ncd@enews3.newsguy.com>
Source record: 149924

I have just installed a Kenwood D700 in my truck and have also purchased a home base antenna so I can bring the radio inside as a base unit from time to time. My antenna is a dual band cushcraft (used). I will be able to mount the antenna to a tripod on my roof which is currently used to mount my weather station gear. My question is mainly about grounding. The tripod is grounded to a ground rod already. What further grounding is needed? Do I need to ground the coax at some point before entry into the house? Or perhaps put a lightning arrester in the line at the entry point? Any suggestions here are welcome. I have searched the internet and this NG but I am still not clear on proper grounding techniques.

--
Tim
KD5OMC
sixfingers@texoma.net

1887. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 13:13:33 UTC
From: paul harris <paul@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC80C388BD5@www.premiersi.com>
Source record: 149929

Keep any eye out for any good-sized hamfest near you. Usually there will be
at least one person selling "surplus" telescoping masts in the 30-40' range.
Often these can be had for $50 or less.

<hmbdude-no-spam@cotse.net> wrote in message
news:aG1iZHVkZQ==.a335178f8a4d11f1529bb65310ab0ec2@1012180737.cotse.net...
> I want to put up "something" to hold a fringe TV antenna, a scanner
> antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
> 18 - 20 feet off the ground. I have a single storey house, no useable
> chimney, don't want to mount on the roof, and can't use wall brackets
> because there is a 3 foot eave overhang all around. So, I'm looking for
> ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
> fortune.
>
> Steve
>

1888. Re: Antenna Ground installation questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 13:26:15 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C555158.CB80B79E@tampabay.rr.com>
Source record: 149925

hey tim
if the tripod and mast are grounded the antenna will be grounded as well when you stick it on the mast
you will get a lot of people telling you to put all sorts of lightening protection inline but i can tell you that if the lightening wants your gear its going to get it anyways
what i do down here in florida is make sure the antenna is grounded and disconnect the rig when there is a storm brewing up or when the radio isnt in use and i have never had a hit
good luck

Tim wrote:

> I have just installed a Kenwood D700 in my truck and have also purchased a
> home base antenna so I can bring the radio inside as a base unit from time
> to time. My antenna is a dual band cushcraft (used). I will be able to
> mount the antenna to a tripod on my roof which is currently used to mount my
> weather station gear. My question is mainly about grounding. The tripod
> is grounded to a ground rod already. What further grounding is needed?
> Do I need to ground the coax at some point before entry into the house? Or
> perhaps put a lightning arrester in the line at the entry point? Any
> suggestions here are welcome. I have searched the internet and this NG but
> I am still not clear on proper grounding techniques.
>
> --
> Tim
> KD5OMC
> sixfingers@texoma.net

1889. Re: Antenna Ground installation questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 13:37:43 UTC
From: Kent K9EZ <kwinrich@wi.rr.com>
Message-ID: <Yuc58.47041$bv.6176854@twister.kc.rr.com>
Source record: 149926

Some people run a static discharge unit on the coax to bleed off any static
that is building up on the antenna. This protects the radio and "lessens"
the chance of a direct hit. This unit will NOT however protect the radio if
there is a direct hit.

Kent, K9EZ

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:3C555158.CB80B79E@tampabay.rr.com...
> hey tim
> if the tripod and mast are grounded the antenna will be grounded as well
when
> you stick it on the mast
> you will get a lot of people telling you to put all sorts of lightening
> protection inline but i can tell you that if the lightening wants your
gear its
> going to get it anyways
> what i do down here in florida is make sure the antenna is grounded and
> disconnect the rig when there is a storm brewing up or when the radio isnt
in
> use and i have never had a hit
> good luck
>
> Tim wrote:
>
> > I have just installed a Kenwood D700 in my truck and have also purchased
a
> > home base antenna so I can bring the radio inside as a base unit from
time
> > to time. My antenna is a dual band cushcraft (used). I will be able
to
> > mount the antenna to a tripod on my roof which is currently used to
mount my
> > weather station gear. My question is mainly about grounding. The
tripod
> > is grounded to a ground rod already. What further grounding is needed?
> > Do I need to ground the coax at some point before entry into the house?
Or
> > perhaps put a lightning arrester in the line at the entry point? Any
> > suggestions here are welcome. I have searched the internet and this NG
but
> > I am still not clear on proper grounding techniques.
> >
> > --
> > Tim

> > KD5OMC
> > sixfingers@texoma.net
>

1890. Re: Antenna Ground installation questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 13:45:31 UTC
From: Pete Ritter <SeeSig@Below.com>
Message-ID: <_Bc58.7004$W04.21961@rwcrnsc52.ops.asp.att.net>
Source record: 149927

Dennis Kaylor wrote:

> hey tim
> if the tripod and mast are grounded the antenna will be grounded as well
> when you stick it on the mast
> you will get a lot of people telling you to put all sorts of lightening
> protection inline but i can tell you that if the lightening wants your
> gear its going to get it anyways
> what i do down here in florida is make sure the antenna is grounded and
> disconnect the rig when there is a storm brewing up or when the radio isnt
> in use and i have never had a hit
> good luck

While it's true that there's little we can do against *direct* lightning strikes, there is a lot we can do against voltages induced by nearby strikes and against static buildup. That's what "lightning arrestors" are for. Read the ARRL handbook on the subject of grounding. Basically it tells you to use a lightning arrestor on each line coming into your house, to ground them *outside* the house at the entrance and to bind that ground to the electrical service ground. They also suggest using some sort of interruptor *outside* the house to disconnect everything when the radios are not in use.

--
**
** You know what to do to fix this email address: CPRitter-attbi-com
**

1891. Antennas and aluminum siding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 13:47:25 UTC
From: w3bug@arrl.net
Message-ID: <8ecba042.0201280547.45b03793@posting.google.com>
Source record: 149928

I would like to put up an inverted L with the vertical section attached to my house (standoff insulator with insulated wire) and the horizontal section going from the house to a tree in the back yard. My question is whether the siding on the house will screw-up the tuning of this antenna. I will only run low power, 10 watts or less, thru it. Any suggestions on comments.
Thanks - Scott W3BUG

1892. Re: Antennas and aluminum siding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 14:03:54 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a33q90$14ui5f$1@ID-124126.news.dfncis.de>
Source record: 149938

Scot, go right ahead. The only effect of the aluminium siding of the building will be to screen the antenna a little more than if it was a timber or brick building.

It will not increase antenna loss when transmitting. Aluminium is a low-loss conductor. It may even reduce the small loss which would occur in a brick building.

If you can, connect the siding to ground.

--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Scott <w3bug@arrl.net> wrote in message
news:8ecba042.0201280547.45b03793@posting.google.com...
> I would like to put up an inverted L with the vertical section
> attached to my house (standoff insulator with insulated wire) and the
> horizontal section going from the house to a tree in the back yard.
> My question is whether the siding on the house will screw-up the
> tuning of this antenna. I will only run low power, 10 watts or less,
> thru it. Any suggestions on comments.
> Thanks - Scott W3BUG

1893. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 14:09:27 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a33q92$14ui5f$2@ID-124126.news.dfncis.de>
Source record: 149939
Cross-posted to: rec.radio.amateur.antenna,sci.electronics

> That seems to mean that without advanced math and engineering training
and
> skills
> one can't understand concepts and relationships, and successfully work
with
> them.
==========
It means nothing of the kind. Simple numbers, quantities and arithmetic are
vastly different from what you refer to as 'advanced math'.

1894. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 14:15:39 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C555D0B.AEB72062@IEEE.org>
Source record: 149930

Mark Keith wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote:
> > Every spoke that is added reduces the number of turns required on the loading coil.
>
> They do, but I think the performance increase per spoke drops off
> fairly fast as you add more. But I may be wrong on that. I hardly use
> hats, so don't get much practice messing with them. All my "hats" go
> straight up. :) MK

The effect of adding spokes on field strength is somewhat similar to
the effect of adding elevated radials to a vertical. IMO, the effect
of doubling the spokes from 4 to 8 is worth the effort and 8 to 16 is
probably not worth the effort.
--
cheers, CAM http://www.qsl.net/w5dxp

1895. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 14:20:06 UTC
From: k3bu@aol.com
Message-ID: <20020128092006.24765.00001105@mb-cu.aol.com>
Source record: 149931

>
>Which is really scary - as Ford Motor products are more reliable than
>General Motors products, these days.
>
>--
>Bill Nelson (billn@peak.org)
>
>
>
>
>

Hmmm,
except maybe Explorers? Editor of Machine Design magazine related his experiences with Explorer - Firestone tires problem: Ford messed up suspension design and mandated that tires be underinflated to around 26 psi, that combined with Firestone glue problem, extra overheating due to flexing appears to be the cause of many fatal crashes. When he inflated tires to 32 psi and tolerated "hard" ride, no problems at all. I haven't seen this mentioned in the media.

Back to:
Do EE majors make better Hams?
I think Hams make better EEs or anything. Being serious and curious Ham is indication of person having much more than complacancy of just doing its job. I haven't seen any EE majors mastering contesting or beating this ME :-) But I would not be happy to combine my professional work and hobby. I have seen many hams go QRT after getting into professional side of EE (ham radio business). I need the change or switchover to something else when I quit working, I can't picture myself working and hobbying at the samething.

American car and ham radio loving mechanical MSc.E.

Yuri

1896. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 14:20:39 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a33q93$14ui5f$3@ID-124126.news.dfncis.de>
Source record: 149940

Electrical Engineering Institutions began in the Victorian age. In the UK it
began mid 19th century with Professional Telegraph Engineers.

But in those days it needed an EE to change an electric light bulb !
--
****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Leland Cox <lcox107@home.com> wrote in message
news:3C54EB0A.4416811F@home.com...
> Was there such thing as an EE in 1920?
> Les, AA4F
>
> Roy Lewallen wrote:
> >
> > I see that I sold Marconi short. A web bio of him indicates that he was
> > quite an experimenter, and got a patent for "the world's first wireless
> > telegraph" and several others. He also did considerable experimenting
> > with propagation, and was awarded numerous honorary doctorate degrees.
> > The Nobel prize was for physics. A short biography that should be
> > credible can be found at
> > http://www.nobel.se/physics/laureates/1909/marconi-bio.html. It looks
> > like he could justifiably be considered to be an EE as well as a
> > physicist. My apology for minimizing his contributions.
> >
> > Roy Lewallen, W7EL
> >
> > "Peter O. Brackett" wrote:
> > >
> > > Roy:
> > >
> > > About Marconi... Agreed!
> > >
> > > But how do you explain the Nobel Prize awarded to Marconi? Nothing
against
> > > Marconi, but I always wondered what justified that particular award.
> > > . . .

1897. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 14:24:19 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <o9la5uknmojbmp415pprtp1ko0b1vat0kj@4ax.com>
Source record: 149932
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

On 25 Jan 2002 19:37:50 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>Have any study been done on this? I'm surprised that the ARRL hasn't
>researched this. (Or have they?)

I gotta hand it to you Jason, you really know how to pick interesting
subjects for a thread...

I've done exactly what you wrote about. I held an Extra Class License
before I went to college and I later got my EE degree.

Ham radio helps, but it also gets in the way.

If a person is generally curious enough to experiment with circuits in
ham radio, then they learn something as an engineer. If they're
mostly in to *operating* the radio instead of building one, it really
doesn't add or subtract a single thing from their education.

I tinkered with circuits. I learned all about decoupling the supply
lines to an amplifier. I knew what parasitics and motorboating were.
On the other hand, though I knew what a filter was, I had no idea how
to design one.

Then I went to school. Most of the students in my class had no idea
how to solder, how to use a 'scope, how to use a volt meter. I had my
doubts after graduation how many really understood what they did in
their labs... Schools are good at laying the theoretical foundation,
but they will always stink at practical applications.

This is where ham radio gets in the way. There are classes when you
really have to park your brain away from past experience and just sit
down and pay attention. There is often a lot of formality of approach
to some silly subjects. For example, I've never seen a more
convoluted and obtuse description of positive feedback though a poorly
decoupled power supply as I've seen in my circuits class. And the
mathematical treatment was something I felt at the time was nearly
pointless (I've learned better since then). My experience as a ham
was "just stick a cap across the supply line and see if that fixes the
problem." This makes it awfully hard to sit still and pay
attention...

I have to add that I also had substantial work experience as an RF
technician. Having a background that connects and intersects with
your subject matter usually helps.

The bottom line is this: Chance favors the prepared mind. If you're curious, if you're interested, if you're looking for the opportunities to connect your ham radio experience with what you're studying, then you will become a better engineer and a better ham for having done so.

That can be said, no matter what your interests are.

Incidentally, while I've noticed that although many hams are good electrical engineers, that's no guarantee. I've known some particularly useless engineers who coincidentally were hams as well. It's a positive indicator in most cases; but it's only one potential indicator of interest out of many, not a proof of performance.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

1898. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 14:25:30 UTC
From: OldBiker <vito@crosslink.net>
Message-ID: <3C555F5A.BCDB7AA3@crosslink.net>
Source record: 149934

Jerry wrote:
>
> Thanks fellas. It's not too shabby of an antenna, especially for the $50
> price I paid for it (used). With the help of my MFJ 969 I chatted with a
> ham from the Czek Republic this morning on 17 meter on 100 watts.(No 17
> meter kit.)....

Good observation. I'm beginning to wonder if all the efforts we put into resonating antennae are worth the bother. I installed a used ($80) HF6 on our roof for easy access to the shack, driving it with the proscribed 75 ohm section cut per the manual and another 10 feet of 50 ohm coax. I started out using 4 TV twinlead radials also cut per the book and have since added many more wires cur to length, trying to lower the SWR to no avail. OTOH, the XYL has worked everything from the Urals, Antarctica and Oz on 100 watts using an antenna tuner. I keep thinking I can "improve" the SWR but she's began threatening to kick the ladder over if I try on the theory "Don't fix what t'aint broke".
73 KA3DWW

1899. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 14:26:56 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <rqna5usp2vrtipn150sfe0vghrckrhcln7@4ax.com>
Source record: 149933
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

On Sun, 27 Jan 2002 03:44:51 +0000 (UTC), "Dave D"
<Dave_d@default.com> wrote:

>Who the f*ck are you calling an idiot, you dickhead. I'm not so much of an
>idiot that I sailed through the RAE without a struggle. I *did* the legwork,
>you cheeky F*ckwit, by having a passion for electronics, building cicuits
>since I was in primary school and working in the trade, without schematics,
>for several years. Who the hell are you to judge me? If you didn't sit the
>RAE for fun, then why the hell *did* you sit it? Read the title *Radio
>Amateur Examination*. It's for hobbyists who want to participate in the
>*hobby* of Ham Radio, not just for professional gain as a certificate to
>wave in an employers face. I went into the exam to see if I could pass,
>simple, and gave it a year before I decided to jack it in. If I don't meet
>your criteria for sitting the exam then tough sh1t, the examiners didn't
>seem to mind. I guess all the other people who sat it for fun are idiots
>too, just don't mention that at the next RSGB meeting, you pr1ck. I knew the
>theory before I sat the exam, and had close friends who are radio amateurs.

Have you noticed that being an engineer doesn't necessarily make you a
better person?

>I guess that makes me an idiot

Gee, with such self awareness, why haven't you done something about
it?

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

1900. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 14:38:17 UTC
From: k3bu@aol.com
Message-ID: <20020128093817.24765.00001106@mb-cu.aol.com>
Source record: 149935

>We intend to test the EH antenna (brought by Stefano himself) against
>a vertical half wave radiator (in the 14 MHz band) and against a
>commercial dummy load. The receiving station will be located at about
>4 Km from the transmitting station. The receiving station will have
>a short vertical antenna (0.5 to 1 meter long) to approximate an
>isotropic antenna.
>
>Francesco IZ5DWF
>

You should find out/verify what is the radiation pattern of "miracle" antenna and try to select comparison antenna with similar pattern, so the lobes are approximately, or as close as possible. I.e. comparing the same dipole antenna vertically and horizontally polarized would give you completely different results (depending on height) if measured with RX setup at the ground level.

For example, two element vertical array at the beach would beat high 6 el. horizontal beam at low angles, at the beginning and closing of the band openings. Vertical like that produces more signal at the horizon and low angle than just about any horizontal antenna.

Make sure you test and compare apples and apples. If the antenna is vertically polarized, then the best way is to test it against good ground system of radials or counterpoise and switch the antennas under test. Otherwise widely separated two of the same "ground" sites would do and allow live comparisons. Live tests on the band with various angles of propagation would be also good indication of antenna RX and TX performance.

GL Yuri

1901. Dummy Load Decision

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 14:54:54 UTC
From: rons533@dejazzd.com
Message-ID: <3C5565C6.1977@dejazzd.com>
Source record: 149936

Just wanted to get opinions on what KW dummy load to purchase. I am from the old school and have used the old Heathkit oil filled dummy load many years ago. After being off the air for many years I need to purchase a new one. I see that MFJ sells an oil filled one but are there others or other types that I should consider? It must be able to handle a KW on HF. Of course low cost is a consideration.

Thanks

1902. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 15:13:59 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a33prn$m5j$1@serra.unipi.it>
Source record: 149937

Yuri Blanarovich <k3bu@aol.com> wrote:

> You should find out/verify what is the radiation pattern of "miracle" antenna
> and try to select comparison antenna with similar pattern, so the lobes are
> approximately, or as close as possible. I.e. comparing the same dipole antenna
> vertically and horizontally polarized would give you completely different
> results (depending on height) if measured with RX setup at the ground level.

Yes, I'm aware about this. However, how would you find out the
radiation patter of the "miracle" antenna if nobody has a clear idea about
it? Anyway, it should be vertical polarized in my (and others) opinion,
that's why we're going to use a vertical end-fed half wave as reference.

> For example, two element vertical array at the beach would beat high 6 el.
> horizontal beam at low angles, at the beginning and closing of the band
> openings. Vertical like that produces more signal at the horizon and low angle
> than just about any horizontal antenna.

I agree, as I said I believe that EH radiates a vertical polarized field.

> Make sure you test and compare apples and apples. If the antenna is vertically
> polarized, then the best way is to test it against good ground system of
> radials or counterpoise and switch the antennas under test. Otherwise widely
> separated two of the same "ground" sites would do and allow live comparisons.

Yes, sure. I selected an end fed half wave antenna because it is largely
independent from the ground.

> Live tests on the band with various angles of propagation would be also good
> indication of antenna RX and TX performance.

Well, I believe that we'll try also these kind of tests, but the main test
will be focused on TX performance against an half wave antenna with the
same polarization.

Thanks and 73.

Francesco IZ5DWF

1903. Re: Dielectric constant of dielectric material used for capacitors in B&W filter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 15:57:07 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <c1ta5u0h722heapkvr5p062th56pib30dl@4ax.com>
Source record: 149941

Roy Lewallen <w7el@eznec.com> wrote in message

>Teflon is soft and stretches easily.

Teflon has a property known as "cold flow". Under pressure, such as
from a screw, teflon gradually flows like a super-slow kind of molasses.
It's not a problem as long as you are aware of it and design
accordingly.

73, Bill W7TI

1904. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 16:05:17 UTC
From: n7ws@yahoo.com
Message-ID: <3c5572a9.63806527@news.triconet.org>
Source record: 149942

On Mon, 28 Jan 2002 06:07:22 GMT, Dick Carroll <dickc58@worldnet.att.net> wrote:

|
|
|googlyelmo@earthlink.net wrote:
|
|>I'd like to hear any suggestions and comments, and especially
|
|> like to hear from anyone who has successfully used ladderline in a wet
|> and rainy climate. Gratefully,
|
| I haven't tried it, but plan to. Since authorities here say that the area
|between the
|conductors is what causes the problem when wet it seems that running the
|ladder
|line through a plastic tubing or pipe should solve most of it. Any version
|that the
|ladderline will fit inside should do it.

This seems like a heroic effort for little payback. It seems to me that some of the advantages of window line (lower cost and weight) are defeated by going this route.

Furthermore, I believe that it is the presence of water in the electric field that exists between the conductors that causes the increased loss. The fields are not totally confined to the space directly between the conductors; if they were, we could bury the line or strap it to the side of the tower. Consequently, water on the surface of the PVC tubing (unless it is very large) will have a similar, albeit reduced, affect on the line attenuation.

Furthermore, I believe that those of you living in swamps will have a problem with condensation inside the pipe anyway. This will give you the balanced line equivalent of the "water-in-the-coax" syndrome.

Wes Stewart, N7WS
(In sunny, dry Arizona)

1905. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 16:05:55 UTC
From: n7ws@yahoo.com
Message-ID: <3c5576db.64880648@news.triconet.org>
Source record: 149943

On Tue, 22 Jan 2002 14:01:23 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

|KB9TMP wrote:
|> And no I'm not anti-black either. When it comes down to it we all are/were
|> immigrants here (forced or otherwise) with the exception of the native Americans
|> who had the whole country stolen from them.
|
|The latest archaeological evidence is that the Caucasians were here first.
|The oldest known American skull is clearly Caucasian and looked like Patrick
|Stewart according to The Discovery Channel.

Yep. My ancestors were here first and I want reparations for everything. I'm
not greedy. One percent of the GNP per year should do it.

Pay up everybody!

Wes Stewart N7WS

1906. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 16:08:23 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <qmta5uogupktc4osqli8idtaet1fs93c13@4ax.com>
Source record: 149944
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

On Mon, 28 Jan 2002 09:24:19 -0500, Jake Brodsky <frussle@erols.com>
wrote:

>I've known some
>particularly useless engineers who coincidentally were hams as well.

An engineer friend of mine who was also a ham and shall remain nameless,
called me over to help find out why his swr went high all at once.
Turned out he had slammed a metal window down on his coax. Totally
baffled him.

But he was a good engineer.

73, Bill W7TI

1907. Re: MOBILE helical help...?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 16:16:38 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <GPe58.151$ru5.245724@paloalto-snr2.gtei.net>
Source record: 149945

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message news:3C555D0B.AEB72062@IEEE.org...
> The effect of adding spokes on field strength is somewhat similar to
> the effect of adding elevated radials to a vertical. IMO, the effect
> of doubling the spokes from 4 to 8 is worth the effort and 8 to 16 is
> probably not worth the effort.
> --
> cheers, CAM http://www.qsl.net/w5dxp

Pretty much agrees with my findings - above a half-dozen or so hat radials, increasing the LENGTH
provides more benefit than additional SHORTER radials...

Gary - KJ6Q

1908. Re: Dielectric constant of dielectric material used for capacitors in B&W filter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 16:20:32 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c5582f6_2@news1.prserv.net>
Source record: 149947

Bill:
I think Roy was trying to give Jason a mechanical property which would
easily differentiate between the two choices he gave, Teflon and Kapton.
There is enough of the Teflon disc sticking out from under the aluminum
capacitor plate to feel that it is limp.
--
Crazy George
Remove NO and SPAM from return address

Bill Turner <w7ti@dslextreme.com> wrote in message
news:c1ta5u0h722heapkvr5p062th56pib30dl@4ax.com...
> Roy Lewallen <w7el@eznec.com> wrote in message
>
> >Teflon is soft and stretches easily.
>
> _____
>
> Teflon has a property known as "cold flow". Under pressure, such as
> from a screw, teflon gradually flows like a super-slow kind of molasses.
> It's not a problem as long as you are aware of it and design
> accordingly.
>
> 73, Bill W7TI

1909. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 16:24:17 UTC
From: richardharrison@webtv.net
Message-ID: <247-3C557B31-379@storefull-111.iap.bryant.webtv.net>
Source record: 149949

Leland Cox wrote:
"Was there such a thing as an EE in 1920?"

Electrification began in the 1800`s.

To get the most for electrification effort, a hundred or more years ago, required some knowledge of electricity, practices used to exploit electricity, materials used in electrical practice, and how to calculate the quantities, sizes, etc. of everything needed, just as it does now.

By 1920, electrification was well underway thanks to engineers who could make the necessary calculations and knew how to apply them.

Radio was well developed. Ed Laport has a nice bibliography in "Radio Antenna Engineering" on antennas and radiation theory. It has entries at least as old as: S. Ballantine, "On the Optimum Transmitting Wave Length for a Vertical Antenna over Perfect Earth", Proc. IRE, 12:833, December, 1924.

The ARRL was formed in 1914.

In the year 2000, "The Institute", from the IEEE, reprinted Neil Armstrong`s opinion of the 20 most significant engineering achievements of the 20th century:
1. Electrification
2. Automobile
3. Airplane
4. Safe and Abundant Water
5. Electronics
6. Radio and Television
7. Agricultural Mechanization
8. Computers
9. Telephones
10. Air Conditioning and Refrigeration
11. Interstate Highways
12. Space Exploration
13. Internet
14. Imaging Technologies
15. Household Appliances
16. Health Technoligies
17. Petroleum and Gas Technologies
18. Laser an Fiber Optics
19. Nuclear Technologies
20. High Performance Materials

For sure, the priorities won`t be the same in the 21st century, and many will disagree with the first man to walk on the moon as to the order and importance of developments in the 20th century.

Best regards, Richard Harrison, KB5WZI

1910. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 16:27:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a33udm$15g0v1$1@ID-124126.news.dfncis.de>
Source record: 149946

With the high dielectric constant (80) of water it is likely the decrease in line Zo has as great an effect on tuner settings in heavy rain as does an increase in line dB. It may even be the dominant factor.

Things may not be so bad as is generally thought. When it rains I just readjust the tuner a little to return to 1-to-1 SWR.

Only when steam can be seen rising from 300-ohm ribbon line should anyone start worrying about loss in signal strength.

****
Regards, Reg G4FGQ
Free Radio Modelling Programs
Http://www.g4fgq.com
****
Wes Stewart <n7ws@yahoo.com> wrote in message
news:3c5572a9.63806527@news.triconet.org...
> On Mon, 28 Jan 2002 06:07:22 GMT, Dick Carroll <dickc58@worldnet.att.net>
wrote:
>
> |
> |
> |googlyelmo@earthlink.net wrote:
> |
> |>I'd like to hear any suggestions and comments, and especially
> |
> |> like to hear from anyone who has successfully used ladderline in a wet
> |> and rainy climate. Gratefully,
> |
> | I haven't tried it, but plan to. Since authorities here say that the
area
> |between the
> |conductors is what causes the problem when wet it seems that running the
> |ladder
> |line through a plastic tubing or pipe should solve most of it. Any
version
> |that the
> |ladderline will fit inside should do it.
>
> This seems like a heroic effort for little payback. It seems to me that
some of
> the advantages of window line (lower cost and weight) are defeated by
going this
> route.
>

> Furthermore, I believe that it is the presence of water in the electric
field
> that exists between the conductors that causes the increased loss. The
fields
> are not totally confined to the space directly between the conductors; if
they
> were, we could bury the line or strap it to the side of the tower.
> Consequently, water on the surface of the PVC tubing (unless it is very
large)
> will have a similar, albeit reduced, affect on the line attenuation.
>
> Furthermore, I believe that those of you living in swamps will have a
problem
> with condensation inside the pipe anyway. This will give you the balanced
line
> equivalent of the "water-in-the-coax" syndrome.
>
> Wes Stewart, N7WS
> (In sunny, dry Arizona)

1911. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 16:30:12 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c5582f7_2@news1.prserv.net>
Source record: 149948

Steve:

I had not read your inquiry carefully until this morning. Here is how I once did it in the same situation (3 foot eaves). You need 4 items, a 4 or 6 foot piece of treated 2X4, a 20 foot joint of 2" or larger chain link fence post, and 2 lag bolts. Lag bolt the 2X4 under the soffit to a rafter extension with it sticking out past the eave, cut it off at the length you want, and U bolt (whoops, that's 5 items) the post to the 2X4. Put a good base under it which will support it and keep it from shifting. I usually used a brick with holes in it, and a piece of 1/2" or larger rebar driven in the ground.

--
Crazy George
Remove NO and SPAM from return address
<hmbdude-no-spam@cotse.net> wrote in message
news:aG1iZHVkZQ==.a335178f8a4d11f1529bb65310ab0ec2@1012180737.cotse.net...
> I want to put up "something" to hold a fringe TV antenna, a scanner
> antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
> 18 - 20 feet off the ground. I have a single storey house, no useable
> chimney, don't want to mount on the roof, and can't use wall brackets
> because there is a 3 foot eave overhang all around. So, I'm looking for
> ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
> fortune.
>
> Steve
>
>

1912. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 16:43:31 UTC
From: richardharrison@webtv.net
Message-ID: <248-3C557FB3-173@storefull-111.iap.bryant.webtv.net>
Source record: 149950

Bill, W7TI wrote:
"An engineer friend of mine who was also a ham and shall remain nameless, called me over to help find out why his swr went high all at once. Turned out he had slammed a metal window down on his coax."

"Experience" is what men call mistakes. Technologists may be more experienced than engineers.

Best regards, Richard Harrison, KB5WZI

1913. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 17:07:09 UTC
From: Dave D <Dave_d@default.com>
Message-ID: <a340fsjdp1@knossos.btinternet.com>
Source record: 149954
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Jake Brodsky" <frussle@erols.com> wrote in message
news:rqna5usp2vrtipn150sfe0vghrckrhcln7@4ax.com...
> On Sun, 27 Jan 2002 03:44:51 +0000 (UTC), "Dave D"
> <Dave_d@default.com> wrote:
>
> >Who the f*ck are you calling an idiot, you dickhead. I'm not so much of
an
> >idiot that I sailed through the RAE without a struggle. I *did* the
legwork,
> >you cheeky F*ckwit, by having a passion for electronics, building cicuits
> >since I was in primary school and working in the trade, without
schematics,
> >for several years. Who the hell are you to judge me? If you didn't sit
the
> >RAE for fun, then why the hell *did* you sit it? Read the title *Radio
> >Amateur Examination*. It's for hobbyists who want to participate in the
> >*hobby* of Ham Radio, not just for professional gain as a certificate to
> >wave in an employers face. I went into the exam to see if I could pass,
> >simple, and gave it a year before I decided to jack it in. If I don't
meet
> >your criteria for sitting the exam then tough sh1t, the examiners didn't
> >seem to mind. I guess all the other people who sat it for fun are idiots
> >too, just don't mention that at the next RSGB meeting, you pr1ck. I knew
the
> >theory before I sat the exam, and had close friends who are radio
amateurs.
>
> Have you noticed that being an engineer doesn't necessarily make you a
> better person?
>
> >I guess that makes me an idiot
>
> Gee, with such self awareness, why haven't you done something about
> it?
>
>
First, did I direct it at you? No, so butt out.
Second, I responded to abuse, there was provocation, for heavens sake. I
over reacted, I APOLOGISED!! You are not helping anyone by dragging the
matter up again. My apology should have put an end to it, but I can see
there are some unreasonable people out there.
Thirdly, JW can fight his own battles. Are you his keeper or his nanny? I
wait with bated breath to see how people on this NG respond when baited

which regrettably caused me to lose it. I guess I'm the only person who should tolerate unprovoked abuse? It isn't going to be like that. Now I have already apologised and because you are trying to stir things up, you don't look so good yourself. Get out of my face please.

Dave

1914. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 17:27:33 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <9Sf58.7131$mU4.450971@bgtnsc06-news.ops.worldnet.att.net>
Source record: 149951
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

The thing that amuses me most about this thread is how people like to judge others based on the aspects of themselves where they consider themselves to be particularly experienced, knowledgeable or an expert.

In general, most motivated people excel in areas that interest them. I would expect that whether or not a ham is a better EE student probably has more to do with his/her character, level of interest, level of motivation, desire to learn and intelligence; than whether or not they have a call sign or can solder better than their fellow students.

As for the "practical" nature of an EE degree, how many people really believe that they can judge a person's skill, knowledge or intelligence based on a specific four year period of that person's life? Is there anyone on this NG that stopped learning when they were 22 years old? My EE degree provided me with a very solid theoretical and practical background (we learned to solder, use scopes, build antennas, test antennas, etc where I went to school) that was just the beginning of my learning experience. I have and continue learn more each day (I hope).

In all fields of endeavor, there will be all levels of competence and incompetence on an individual basis. The factors that affect this aspect of one's person are generally more deeply rooted than whether or not that individual has a four year degree.

The quality of education at our higher institutions of learning is another subject on its own.

Steve VE9SRB

1915. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 17:50:08 UTC
From: n7ws@yahoo.com
Message-ID: <3c558c27.70333729@news.triconet.org>
Source record: 149952

On Mon, 28 Jan 2002 16:27:26 -0000, "Reg Edwards" <g4fgq.regp@btinternet.com>
wrote:

|With the high dielectric constant (80) of water it is likely the decrease in
|line Zo has as great an effect on tuner settings in heavy rain as does an
|increase in line dB. It may even be the dominant factor.

I don't think so. I have measured, albiet as an afterthought, the parameters of
wet window line. There is a small effect on the Zo and Vp and a much larger
effect on the attenuation.

(See: http://users.triconet.org/wesandlinda/ladder.htm
and look for the link to "Balanced Transmission Lines in Current Amateur
Practice")
|
|Things may not be so bad as is generally thought. When it rains I just
|readjust the tuner a little to return to 1-to-1 SWR.

Wait a minute! I thought you didn't believe in SWR <g>.
|
|Only when steam can be seen rising from 300-ohm ribbon line should anyone
|start worrying about loss in signal strength.

I'm sure your tongue is firmly planted in cheek, however, this is akin to the
idea that the losses in tuners can't be too great because they don't burn up.
Unfortunately those proposing this idea completely neglect the low duty cycle of
amateur transmissions.

The same page above has some correspondence ("a letter to Dean") where I
addressed this issue quite sometime before ARRL started publishing papers on the
measurement of tuner losses. Coincidence?

Wes Stewart, N7WS

|---
|**************************
|Regards, Reg G4FGQ
|Free Radio Modelling Programs
|Http://www.g4fgq.com
|**************************
|Wes Stewart <n7ws@yahoo.com> wrote in message
|news:3c5572a9.63806527@news.triconet.org...
|> On Mon, 28 Jan 2002 06:07:22 GMT, Dick Carroll <dickc58@worldnet.att.net>
|wrote:
|>
|> |
|> |

|> |googlyelmo@earthlink.net wrote:
|> |
|> |>I'd like to hear any suggestions and comments, and especially
|> |
|> |> like to hear from anyone who has successfully used ladderline in a wet
|> |> and rainy climate. Gratefully,
|> |
|> | I haven't tried it, but plan to. Since authorities here say that the
|area
|> |between the
|> |conductors is what causes the problem when wet it seems that running the
|> |ladder
|> |line through a plastic tubing or pipe should solve most of it. Any
|version
|> |that the
|> |ladderline will fit inside should do it.
|>
|> This seems like a heroic effort for little payback. It seems to me that
|some of
|> the advantages of window line (lower cost and weight) are defeated by
|going this
|> route.
|>
|> Furthermore, I believe that it is the presence of water in the electric
|field
|> that exists between the conductors that causes the increased loss. The
|fields
|> are not totally confined to the space directly between the conductors; if
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|> were, we could bury the line or strap it to the side of the tower.
|> Consequently, water on the surface of the PVC tubing (unless it is very
|large)
|> will have a similar, albeit reduced, affect on the line attenuation.
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|> Furthermore, I believe that those of you living in swamps will have a
|problem
|> with condensation inside the pipe anyway. This will give you the balanced
|line
|> equivalent of the "water-in-the-coax" syndrome.
|>
|> Wes Stewart, N7WS
|> (In sunny, dry Arizona)
|
|

1916. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 17:52:27 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a343m8$14qrlm$1@ID-124126.news.dfncis.de>
Source record: 149953
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

VE9SRB wrote -
> The thing that amuses me most about this thread is how people like to
judge
> others based on the aspects of themselves where they consider themselves
to
> be particularly experienced, knowledgeable or an expert.
==========
True, there has to be SOME foundation on which judgements of others can be
based.

But : "If you MUST set yourself up as an object lesson then do so as a
warning rather than as an example".

- George Bernard Shaw.

1917. Stacking Tri-Banders

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 18:42:01 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C559A63.57754695@bellatlantic.net>
Source record: 149955

How about comments on stacking inexpensive, used, possibly non matched
tri-banders for a Big - Gun Signal on the cheap? Worth it?

'73 KI4Z

1918. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 18:45:33 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C559C4D.B86915FD@IEEE.org>
Source record: 149956

Wes Stewart wrote:
> This seems like a heroic effort for little payback. It seems to me that some of
> the advantages of window line (lower cost and weight) are defeated by going this
> route.

Some people do indeed live in a swamp, even if it is Roy's cold swamp.
We sometimes get plenty of rain here in East Texas and I haven't had
any moisture problems. The way I tune my antenna system is to vary the
length of the ladder-line. On 40m, there is only one foot difference
in the resonant length when it is raining and when it is not. That
tells me that the rain has little effect on my feedline system. The
probable reason for that is that my ladder-line comes directly
vertically down from the dipole to the eave of my house. The remainder
of the run to the shack is under the eave out of the rain. Thus I
don't have any horizontal runs of ladder-line that can get wet. I
only have about 30 feet of vertical ladder-line that can get wet.
So I don't think short vertical runs of ladder-line are a problem
in wet weather. Long horizontal runs of ladder-line are obviously
a problem. Trimming away the excess insulation between the wires
might help.

I've just ordered 150 ft of the 600 ohm open-wire line from W7FG. That
should minimize any moisture problem. Roy, have you tried your
balanced line experiments with open-wire line?

Anyone have a balun design with 50:100, 50:50, 50:25 ohm taps?
--
cheers, CAM http://www.qsl.net/w5dxp

1919. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 18:48:41 UTC
From: richardharrison@webtv.net
Message-ID: <15410-3C559D09-210@storefull-116.iap.bryant.webtv.net>
Source record: 149961

Steve, VE9SRB wrote:
"The thing that amuses me most about this thread is how people like to judge others based on the aspects of themselves where they consider themselves particularly experienced, knowledgeable or an expert."

Best foot forward (no pun intended)?

It is funny because being good with numbers or a soldering iron doesn`t make anyone the best person. Life is much more complicated.

The funniest thing about this thread to me has been the denial of conventional wisdom. The market for the incredible among those who want to be gullible is big. Sales of pulp magazines, with stories of alien abductions etc. are good.

In this thread there has been a receptive audience for:
1. Amateur is better than professional.
2. Trial and error are better than calculation.
3. A technician is better than an engineer.
4. Engineers can`t solder.
5. A low grade point average is better than a high grade point average.

Continuing a list of alleged paradoxes is unnecessary. An exception does not disprove a general rule.

Pretenses should not be necessary to feel valuable. Everyone has worth. Pretenses lead to disappointment.

There is an expression: "Everyone is ignorant, it`s sometimes just on different subjects."

Best regards, Richard Harrison, KB5WZI

1920. Re: Dummy Load Decision

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 18:49:55 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C559C3C.FB9D4076@bellatlantic.net>
Source record: 149957

Just about any Dummy Load will take a KW. Question is for how long, and at what duty cycle? I'd stick with the Oil Filled types for low cost. The Heath one can still be found for $25. A couple minutes of Key down should be plenty for any dummy load application. I suppose you could make the Heath Cantenna into a heat exchanger, hook it up to the garden hose, or pack it with ice for longer Key Down testing.

'73 KI4Z.

rons533@dejazzd.com wrote:

> Just wanted to get opinions on what KW dummy load to purchase. I am from
> the old school and have used the old Heathkit oil filled dummy load many
> years ago. After being off the air for many years I need to purchase a
> new one. I see that MFJ sells an oil filled one but are there others or
> other types that I should consider? It must be able to handle a KW on
> HF. Of course low cost is a consideration.
>
> Thanks

1921. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 18:51:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C559DB7.FF7A9FE@IEEE.org>
Source record: 149958
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

VE9SRB wrote:
> Is there anyone
> on this NG that stopped learning when they were 22 years old?

There is one person who says it is OK to rest on one's laurels
after having achieved an extra class license. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

1922. If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 19:01:46 UTC
From: rasw <atdot.dotat@at.sorry>
Message-ID: <a34775$3q0vn$1@rn.area.com>
Source record: 149959

...that my Hustler 4BTV has a 1.5:1 SWR on 146 MHZ, would there be anything wrong with using it there?

Would, at least, my radio be happy?

1923. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 19:12:06 UTC
From: mrhandUPSIDEYURHEAD@yahoo.com
Message-ID: <46cdc863.0201281112.55ecbf86@posting.google.com>
Source record: 149960
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

what a crock of shit1 how long is this iodiot going to keep up
this sherade of im not voobner. just look at the times that this
morons posting
From: ToolTime (middlefinger4@home.comspam)
Subject: Re: Kenwood TS520SE
Newsgroups: rec.radio.cb
View: Complete Thread (29 articles) | Original Format
Date: 2002-01-26 15:26:42 PST

Message 24 in thread
From: Aaron H. Voobner (voobner@yahoo.com)
Subject: Re: Kenwood TS520SE
Newsgroups: rec.radio.cb
View this article only
Date: 2002-01-26 15:28:39 PST
just look 2 minites later after middlefuck post he posts from his
aol account. yes virginia voobner is middlefinger/steelgangsta and
god knows how many other peeple he is.
voobner@yahoo.com (Aaron H. Voobner) wrote in message
news:<fbc7a2.0201280032.4d23e26b@posting.google.com>...
> "Train" <cbmods@optonlineNOSPAM.com> wrote in message
news:<GEZ48.89763$6L5.14523908@news02.optonline.net>...
> > $120 for a Palomar 225?
> >
> > "Stephen Gale" <stephengale@sympatico.ca> wrote in message
> > news:LuX48.1382$9y2.249997@news20.bellglobal.com...
> > > a few things here........just getting started......check out the
> accessories
> > > link
> > >
> > > http://members.kingston.net/sgale/gold2/radio.html
> > >
> > >
>
> "Train", CB amps are illegal.
>
> -Aaron-

1924. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 19:16:26 UTC
From: Sylvan Butler <Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna5b8tq.vho.Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 149962

On Sat, 26 Jan 2002 09:12:44 -0600, Crazy George <munschNO@attglobal.net.SPAM> wrote:
> yet provide almost no soil contact. And, disturbing the soil by water jet,
> even though a lot of it settles back in the hole, always leaves it a lot
> less dense than it started, even when it is sand.

Not always. Perhaps "especially when it is sand" would be more
true. Saturated silt will be a lot MORE dense when it settles. You
can easily see this in a glass. The issue is particle size. Larger
particles will leave more air gaps. Fines will not. Larger
particles will settle to the bottom, fines will settle on top and
gradually sink down over time (water your ground rods regularly).

> else commented on. There have been measurements made of contact resistance
> of driven rods vs. other methods, and the driven rod always has the lowest
> resistance, sometimes by a lot, sometimes by a little. Unfortunately, I
> don't remember where that reference is, but I'll bet either NFPA or UL can

I would sure like to see that testing proceedure and results.

> come up with it, as it forms a portion of the basis for present NEC codes.

The NEC does not always require a driven rod. The NEC is not
concerned with ground quality (e.g. drive one rod, if it doesn't
test well, drive another, no second test required).

> I would love to put a current probe around the ground wire of the original
> poster's installation, to see if it is AC or DC which is eating up his
> ground rods. And, more importantly, has his service entrance ground also
> been eroded away, so that he has no electrical system protection either?

Yup. That should be checked ASAP.

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

1925. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 19:36:25 UTC
From: richardharrison@webtv.net
Message-ID: <12241-3C55A839-130@storefull-113.iap.bryant.webtv.net>
Source record: 149963

Leland Cox wrote:
"Was there such a thing as an EE in 1920?"

According to the January 1968 Lenkurt "Demodulator", "The first transatlantic cable, laid in 1858, was a telegraph link between the Old and New Worlds. It lasted approximately 20 days, carried 732 messages and allegedly saved the British government 50,000 pounds. It also took sixteen and a half hours to pass a 99 word message from Queen Victoria to President Buchanan-"

Best regards, Richard Harrison, KB5WZI

1926. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 19:50:02 UTC
From: me <me@nowwhere.com>
Message-ID: <3C55AB6A.8DF4C1D4@nowwhere.com>
Source record: 149965

rasw wrote:

> ...that my Hustler 4BTV has a 1.5:1 SWR on 146 MHZ, would there be anything
> wrong with using it there?
>
> Would, at least, my radio be happy?

i think that the radio will be happy, altho whether the antenna radiates
efficently is another
question.

kd5foy

1927. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 19:51:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C55ABC1.96565B2E@eznec.com>
Source record: 149964

CAM wrote:

> . . .
> I've just ordered 150 ft of the 600 ohm open-wire line from W7FG. That
> should minimize any moisture problem. Roy, have you tried your
> balanced line experiments with open-wire line?
>. . .

No, but Wes Stewart did. You can see his results at http://users.triconet.org/wesandlinda/ladder_line.pdf. At 50 MHz, the loss went from about 0.4 dB/100' dry to about 6 dB/100' wet. I've gotten as far as purchasing 100' of ladder line, but haven't run any tests yet. I'd like to run tests with a setup similar to the one I did with twinlead many years ago and see how my results correlate with Wes's.

Late last year we tied our local record of 32 successive days with measurable rain. In the wintertime, though, most things never really dry out between showers, so nearly everything outdoors stays at least damp from about October through June or later.

Roy Lewallen, W7EL

1928. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 19:57:36 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <t14b5ukls2fngh0m72kb1rf2ucrf8lengi@4ax.com>
Source record: 149966

On Mon, 28 Jan 2002 11:55:42 +0000 (UTC), Francesco Messineo
<frank@ares.ccii.unipi.it> wrote:

>Richard Clark <kb7qhc@attbi.com> wrote:
>
>> Hi Francesco, Stefano,
>
>hello Richard,
>
>
>> This indeed marks progress. A good source of such methods is found in
>> the antennex's critic and noted authority, Jack Belrose. You would do
>> well to examine the photographs which clearly show the care of
>> removing the measuring equipment well away from the antenna, and
>> performing the tests in the most non-reflective environment short of
>> lab.
>
>Could you please tell me where to find this text?

Start at:
http://www.antennex.com/shack/
and select the line item:
45 Jack Belrose's CFA Experiments By Jack L. Stone, Publisher
which should lead you to:
http://www.antennex.com/shack/Jun00/jb_cfa.htm
a frame of the main page.
using the second link above will keep you from observing other CFA
articles, also grist for the mill.

>I've started to collect information from local experts (electronic and
>telecommunications engineers and physics other than hams) to set up
>a very well organized test.
>Here's how we intend to proceed:
>We already have located the place for the test, you can have a quick
>glance at: http://www.virgo.infn.it/
>We selected this site since it's a very large flat site and one of us
>has access to this site without problems.

When I caught glimpse of the studies performed there, Gravity waves,
it was like deja-vu all over again (I've researched this topic for a
super-conductor manufacturer). However, it does give every appearance
of the terrain Jack Belrose chose. You might want to do an RF
background noise test just to confirm the local scientists won't cause
confusing signals. It seems unlikely given the nature of the
instrumentation and their claims of quiet environment. In that

regard, you need to seriously consider how much your experiments may intrude on the operation of their system.

>We intend to test the EH antenna (brought by Stefano himself) against
>a vertical half wave radiator (in the 14 MHz band) and against a
>commercial dummy load. The receiving station will be located at about
>4 Km from the transmitting station. The receiving station will have
>a short vertical antenna (0.5 to 1 meter long) to approximate an
>isotropic antenna.

Look into the Inverted F at:
http://www.qsl.net/kb7qhc/antenna/Inverted%20F/index.htm
(not that I think it would offer any advantage)

You might want to try a vertical monopole the same elevation (above ground) as the EH with the monopole as tall (same height) as the EH. After-all, the proponents suggest the EH should be better in performance; otherwise there is no commercial advantage for the EH given the complexity of construction and difficulty of tuning the EH over this simple alternative.

I say this because you will be measuring the ground wave (line of sight too) of a 20M source. I would suspect that comparison to a standard vertical at this high frequency changes the mechanics of propagation sufficiently to make this a new ball game. Commercial claims are at 200M, Jack tested at 80M and you guys have cut that by a fourth to a tenth with 20M.

>The receiver S-meter is calibrated with HP instruments
>and however we have the possibility to use well calibrated attenuators
>with 1 dB step.

Using only the S-meter has very little value for serious work. Roy has often suggested one of the more accurate means for using an S-Meter for comparisons. That is to place a calibrated step attenuator in the receive antenna path, but only in that portion of the line that is matched to 50 Ohms. This means you MUST match the receiver input to the sense antenna, and both MUST present a non-reactive 50 Ohm system to the inserted attenuator.

Set the attenuator to a value that is NOT 0dB insertion loss. Run a test signal between the antenna under test and the sense antenna to find an S-Meter reading that is both repeatable and presents the greatest variation in meter needle swing for, say, a 1dB change at the step attenuator. The problem with this method is found in the sensitivity of the meter. It varies along the scale which should be entirely ignored beyond the s9 = 50ï¿½V specification.

The technique here is akin to the balance of a bridge, but this simplistic analogy hides the fact that balance meters are extremely sensitive and this method that attempts to mimic it is generally suitable only to the first pass test. The test I describe in the paragraph above seeks to find the most sensitive relation between the

meter and the variation of 1dB somewhere in a continuum of power
levels (this is why you start with a non-zero dB insertion loss as
this may have to change widely too).

When you find this "sweat spot" where the meter is most sensitive,
mark it so that the setting (your reference) can be recovered through
the manipulation of the step attenuator. At this point you have
reduced all the variables of the measurement to the minimum of those
introduced by the step attenuator, and the operator's ability to
return to that reference mark. The degree of resolution in the
measure is a function of the meter sensitivity. With luck, you might
get 0.5dB resolution (not to be confused with accuracy).

>There will be no obstacle between the receiver and the transmitter
>and in the near 6 Km radius.
>We of course will place an RF choke in any transmitting or receiving
>antenna.
>Other details are still under discussion and will be "broadcasted" here
>once we define them. We hope to be ready for the test in few weeks (mid
>to end of february we hope) as we would like to have the support from
>a certain number of hams and researchers that come from different places
>in Italy (anybody is welcome, please contact me privately if want to join).
>
>> Please keep us informed of all development.
>
>I will for sure.
>
>best regards.
>
>Francesco IZ5DWF

Hi Francesco,

More considerations to observe:
One measurement is meaningless;
Two measurements is confusion;
Three measurements will give you an approximation;
Five measurements begin to give you accuracy.

Discarding the high and low readings is generally acceptable for more
than five measurements, but only if they are obvious outliers.

Once you have performed at least five measures (this means a complete
break-down and reassembly of the test configuration each time),
reverse the two (sense and EH) antenna's positions and repeat the test
suite again. Hopefully this will balance the site's bias toward one
configuration over the other, if indeed there is a bias. However,
this is not sure, and you should also attempt to rotate the path by 60
to 120 degrees and repeat the two test suites of five measurements
once again. This path rotation should reduce local perturbations to
the results.

Repeat for the sense and Standard antenna.

You should note that the number of measurements is now up to 40. Given the growing number, I would suggest DO NOT repeat measures in place, but rather swap sites, and/or rotate sites between EVERY measurement to fill in the test grid of 40 measures. This may seem excessive, and for the purposes of amateur activity I would offer that you could get by with 20 or so. Any less comprehensive test scenario will not be very compelling even when the numbers are obviously separable between the two (the EH and its substitute).

If this still seems overwhelming (Metrology is NOT for the anxious), you might get away with boxing the compass (forgive my language play; that is: rotating the path described above) and taking as little as 8 measurements WITH NO REJECTED DATA. I must caution that those 8 numbers will have to be clearly separable to justify this small survey. The advantage to the rotation is that you can quit with 8 when it becomes obvious 40 would only provide redundant results.

So much for method. Now to accuracy.

You MUST exhibit at least 10dB S+N/N under all circumstances; and only for highly separable data. 20dB is preferred. As this style of measurement is generally known as the substitution method, once you drive out the controllable sources of error (like front end overload, poor meter sensitivity, local field perturbation, lack of symmetries) your step attenuator is the determinant of accuracy. This device is easily calibrated and verifiable - even if it is a homebrew! The substitution method is one of the most powerful ways to obtain precision and accuracy (and in fact is the basis of the test at the larger level between the EH and the Standard antennas).

Now for an alternative for more precision.

There are far more sensitive methods for measuring than the one described above (which is probably adequate). This variant I will offer allows you to skip the requirement for matching the receiver (an absolute necessity above). There are many instruments that are based around 1000 Hz tuned detectors and bridges. The variation would have you modulate the transmit signal with 1000 Hz and use the step attenuator at the audio output where you can use some of this tuned instrumentation. The tuning allows you to reject interference (razor sharp in comparison to the original method) and gives you access to meters of far more sensitivity (often orders of magnitude more sensitive). The methods described above differ only in that the step attenuator has moved. As such ALL considerations MUST be met. For this variant, you might want to use a step attenuator with 0.1dB resolution. With some instrumentation, this step attenuator function may be found in the instrument's own range switch. Further, such instrumentation may allow you to make a direct difference measurement instead of performing the substitution to re-achieve the reference mark; however I would still use the substitution method as there are a lot of variables that could muddy the water for direct measure.

Now. as to terms employed (they DO NOT all mean the same thing):

Resolution:
The number of places you can make a measurement to. For example, most meters have major and minor gradations. Resolution in this sense is to one-half minor gradation. Some examples are obvious like the reading of a frequency counter 1.000000 MHz (resolution is 1 Hz). Same for a DVM. In this sense it is more correct to say parts per million or to describe it as a 2000 count meter (the display will read 0.001 to 1.999)

Precision:
This relates to resolution in most people's minds only because resolution reveals precision. Precision is the ability to make a repeated measurement without too much variation between readings of the same value. To be precise means to be able to repeat to within minor variation of the resolution (hence more precision demands more resolution).

Accuracy:
This is always with regard to a "known" value. There is no such thing as accuracy without an attending statement of variation from "known." ALL accurate measurements contain a statement of the bounds of error. For a 1.000000 MHz source measured to 1.000000 MHz ï¿½0.100000 MHz, this is highly resolved, but of no remarkable accuracy and obviously all over the map with regard to precision. If I were to observe 1.000000 MHz +0.100000 MHz consistently, it is highly resolved, very precise, and highly accurate even though in apparent error of 10%.

You who are about to measure - we salute you.

73's
Richard Clark, KB7QHC

1929. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 20:19:46 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C56F5E5.E139D7E7@worldnet.att.net>
Source record: 149968
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Bill Turner wrote:

> On Mon, 28 Jan 2002 09:24:19 -0500, Jake Brodsky <frussle@erols.com>
> wrote:
>
> >I've known some
> >particularly useless engineers who coincidentally were hams as well.
>
> ----------
>
> An engineer friend of mine who was also a ham and shall remain nameless,
> called me over to help find out why his swr went high all at once.
> Turned out he had slammed a metal window down on his coax. Totally
> baffled him.
>
> But he was a good engineer.
>

There are engineers who are only engineers, then there are technicians who are only technicians, there are also engineering technicians, and finally engineers who are are also experienced technicians. Some overlap is inevitable. Some of each are also hams.

Dick

1930. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 20:20:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C55B2A2.7BDB4B4C@eznec.com>
Source record: 149967

I really wish I could join you -- the experiment is bound to be very interesting and educational. May I make a few suggestions:

1. Provide a way to measure the current on the outside of the feedline. It's easy to do -- put a high-permeability ferrite toroid (such as type 43 or 70-series) over the coax. Wind a ten turn secondary, connect the secondary to a piece of coax to run to a scope or meter, and terminate it with 50 ohms. The current on the coax in amperes will be 2 * the voltage across the 50 ohm resistor. You can check the calibration if you want by putting it on one leg of the reference dipole, near the feedpoint, where the current will be known, given the impedance and applied power.

2. Besides the comparison with the half wavelength vertical dipole, compare the EH antenna to a short vertical antenna placed in exactly the same position and fed with exactly the same feedline. A fat vertical would be appropriate.

3. Disconnect the "D plate" or whatever the equivalent is in an EH antenna, like Trainotti did, and see what happens to the signal strength.

4. Take lots of notes, describing everything you can. Take lots of pictures, too, if you can.

5. Make lots of measurements. The more, the better.

6. Try to anticipate what criticisms could be made of the measurements, and devise your tests to minimize these.

Some criticisms of previous measurements of the CFA are:

1. Assumptions are made about the ground conductivity to determine what the field strength from a quarter wave radiator would be. The way to avoid this criticism is to make measurements of a quarter or half wave antenna at exactly the same position as the EH antenna, within a short period of time, so the ground conductivity is the same for both.

2. Feedline radiation. You'll be using baluns, and should measure the current all along the feedline to make sure it's negligible.

3. Poor knowledge of the actual power being supplied to the antenna. A directional wattmeter should prevent this problem.

4. Measurements at only a few field strength points. It's well known in the AM broadcast industry that measured field strength can vary considerably from point to point, and not follow theoretical curves, often due to reradiation from such things as power poles. Consequently,

broadcasters make many measurements at many points. You should do this if possible. If not possible, then it's even more important that the test antenna and reference antenna be positioned at exactly the same place for the measurements. If it's not possible or practical to position the antennas at the same place, then what you should do is make the measurements, exchange the antenna positions, then repeat the measurements. Don't be satisfied until you get very close to the same results with the antenna positions reversed.

We're all looking forward to seeing the results of the tests. Thanks to all for making them possible.

When the tests show that the EH antenna works as claims, you shouldn't have any trouble finding an investor to put up the money for some more elaborate tests at a certified test range. And after those results come back and are published, it won't be any time at all before the EH inventor and supporters are rich beyond imagination.

Roy Lewallen, W7EL

Francesco Messineo wrote:
>
> Richard Clark <kb7qhc@attbi.com> wrote:
>
> > Hi Francesco, Stefano,
>
> hello Richard,
>
> > This indeed marks progress. A good source of such methods is found in
> > the antennex's critic and noted authority, Jack Belrose. You would do
> > well to examine the photographs which clearly show the care of
> > removing the measuring equipment well away from the antenna, and
> > performing the tests in the most non-reflective environment short of
> > lab.
>
> Could you please tell me where to find this text?
> I've started to collect information from local experts (electronic and
> telecommunications engineers and physics other than hams) to set up
> a very well organized test.
> Here's how we intend to proceed:
> We already have located the place for the test, you can have a quick
> glance at: http://www.virgo.infn.it/
> We selected this site since it's a very large flat site and one of us
> has access to this site without problems.
> We intend to test the EH antenna (brought by Stefano himself) against
> a vertical half wave radiator (in the 14 MHz band) and against a
> commercial dummy load. The receiving station will be located at about
> 4 Km from the transmitting station. The receiving station will have
> a short vertical antenna (0.5 to 1 meter long) to approximate an
> isotropic antenna. The receiver S-meter is calibrated with HP instruments
> and however we have the possibility to use well calibrated attenuators

> with 1 dB step.
> There will be no obstacle between the receiver and the transmitter
> and in the near 6 Km radius.
> We of course will place an RF choke in any transmitting or receiving
> antenna.
> Other details are still under discussion and will be "broadcasted" here
> once we define them. We hope to be ready for the test in few weeks (mid
> to end of february we hope) as we would like to have the support from
> a certain number of hams and researchers that come from different places
> in Italy (anybody is welcome, please contact me privately if want to join).
>
> > Please keep us informed of all development.
>
> I will for sure.
>
> best regards.
>
> Francesco IZ5DWF

1931. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 20:26:11 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C56F764.D4F47C3E@worldnet.att.net>
Source record: 149869
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

CAM wrote:

> VE9SRB wrote:
> > Is there anyone
> > on this NG that stopped learning when they were 22 years old?
>
> There is one person who says it is OK to rest on one's laurels
> after having achieved an extra class license. :-)

With regard to amateur radio licensing what else is there for him to
do? The same fellow also said if FCC started up a new Super Extra class
he'd get that one, too. Sorry to spoil your fun, but your Class Envy
still continues past your
finally acheiving the Extra class yourself. Pity.
Dick

1932. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 21:18:36 UTC
From: eustiscornhauser@yahoo.com
Message-ID: <e9af79fa.0201281318.28339b5f@posting.google.com>
Source record: 149871

If his family did come over on the slave ship, they probably owned it.

> >My family came to the USA from Scotland in the mid 1800's,
> >that makes me part of a minority group so when do I get the
> >FREE HAND OUT ?
>
> I don't suppose your family came over from Scotland in chains, on a
> slave-trader's ship, to be sold like cattle once they arrived on these shores?
>
> Bob
> k5qwg

1933. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 21:25:52 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a34gkc$1590pf$1@ID-124126.news.dfncis.de>
Source record: 149872

Wes, do you think the increase is loss when wet is due to increased dielectric loss, or due to increased conductor loss because the water is attempting to carry some of the line current ?

I note your measurements were made at 50 MHz. How much smaller would be the effects at frequencies where such lines are actually used - say 3.5 or 7 MHz.

Reg.

1934. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 22:03:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C55CABC.B722F1CE@eznec.com>
Source record: 149873

Correction:

Roy Lewallen wrote:
> . . .
> 1. Provide a way to measure the current on the outside of the feedline.
> It's easy to do -- put a high-permeability ferrite toroid (such as type
> 43 or 70-series) over the coax. Wind a ten turn secondary, connect the
> secondary to a piece of coax to run to a scope or meter, and terminate
> it with 50 ohms. The current on the coax in amperes will be 2 * the
> voltage across the 50 ohm resistor. . .

That should be 0.2 * the voltage across the 50 ohm resistor.

Roy Lewallen, W7EL

1935. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 22:04:57 UTC
From: Alan White <alannc44@ix.netcom.com>
Message-ID: <dWj58.17357$A51.6478523@typhoon.southeast.rr.com>
Source record: 149886

I have a follow-up question: How do you tune them without transmitting? I guess you can get in the ballpark by listening, but the final tweaking?

Alan
WN4HOG
--
Windsurfing Club: http://www.ibscc.org
Homepage: http://pw1.netcom.com/~alannc44/qsl.htm

"Bill" <n8xv@yahoo.com> wrote in message news:3C55E7DD.A99FA7CA@yahoo.com...
> Are you using a screwdriver antenna for your mobile ?? What brand?? How
> do you like it?? Any problems?? I'm looking to get one to install on a
> travel trailer, interested in your experiences.
>
> Thanks, Bill
>

1936. fs: 13B2 an a 440meter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 22:31:52 UTC
From: Tom <ddirose@stny.rr.com>
Message-ID: <sjk58.31524$Ki1.4437321@typhoon.nyroc.rr.com>
Source record: 149874

hi,
i have a cushcraft 13B2 2 meter broadband boomer for sale 60.00 or best
offer

and i have a Telex hy-gain model 70-30 sat 70 cm 435 MHz antenna boom lenght
lenght 134 in. 30 elements 75.00 or best offer .

n2hug n2hug@altavista.com or ddirose1@stny.rr.com

1937. fs: tower 30 ft.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 22:34:43 UTC
From: Tom <ddirose@stny.rr.com>
Message-ID: <7mk58.31533$Ki1.4442321@typhoon.nyroc.rr.com>
Source record: 149875

hi i have a 30 feet tower 3 secition in the Binghamtoin Ny area looking to
get
60.00 .
n2hug ddirose1@stny.rr.com or n2hug@altavista.com

1938. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 22:36:48 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <4ok58.3680$yz4.450162@paloalto-snr1.gtei.net>
Source record: 149877

I have one, and on a balance of efficiency, ease of frequency/band change, and general power
handling capability, it's probably my BEST overall antenna... But on the OTHER hand, for pure
efficiency on any SINGLE band/frequency, something like the "bugcatcher" antennas are the best out
there - all other issues being equal...

For benefit of credibility, I have used Hustler, SGC autotuner, Hamsticks, Master mobile, and a
whole PILE of custom-made homebrew stuff...

OH, by the way, screwdriver type antennas ALSO top the field in UGLY and difficult to properly mount
as well... :-)

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"Bill" <n8xv@yahoo.com> wrote in message news:3C55E7DD.A99FA7CA@yahoo.com...
> Are you using a screwdriver antenna for your mobile ?? What brand?? How
> do you like it?? Any problems?? I'm looking to get one to install on a
> travel trailer, interested in your experiences.
>
> Thanks, Bill
>

1939. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 22:43:01 UTC
From: Mark Tetrault <tetrault@mv.mv.com>
Message-ID: <1tkb5u42pp1js0i15r25pht5j0fv7tpjth@4ax.com>
Source record: 149876

Bill <n8xv@yahoo.com> wrote:

>Are you using a screwdriver antenna for your mobile ?? What brand?? How
>do you like it?? Any problems?? I'm looking to get one to install on a
>travel trailer, interested in your experiences.
>
>Thanks, Bill

I have used BB3, the old TJ antenna, on my 5th wheel. I used it only
when stopped of course.

It tunes well, and does a good job.

email me if you have further questions.
tetrault@mv.mv.com
Mark

1940. TITAN DX feedback problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 22:48:47 UTC
From: N7GVV <jraisler@kconline.com>
Message-ID: <a34kk3$1ifo$1@nix2.kconline.com>
Source record: 149878

I have experienced RF feedback on 40 meters and 3.6 MHz. If I add Coax to feedline 40 meter problem goes away but not so on 3.6. Suggestions?

--
Living coram Deo,
Jim

THE REFORMATION WALL
(After Darkness, Light)
{take a peek at reformed theology at}
http://members.kconline.com/jraisler

1941. Arrow Antenna & AOL Problems

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 23:04:00 UTC
From: arrow146@aol.com
Message-ID: <20020128180400.02340.00000134@mb-ct.aol.com>
Source record: 149879

AOL seems to be having problems.
So I have had to duplicate the web site on another server.
And get another Domain Name.
<A HREF="http://members.aol.com/_ht_a/Arrow146/index.html">ArrowAntenna.com</A>
on AOL
<A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A> New Sister Site.

Thank You 73 Al Lowe N0IMW

1942. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 23:13:37 UTC
From: k1bqt@aol.com
Message-ID: <20020128181337.28235.00000486@mb-mc.aol.com>
Source record: 149880

Do EE Majors make better hams? I asked my good friend Andy Rooney, and here's what he said:

Well, to begin with, the terminology in the question is both silly and unclear:

By "make", does the question mean to "construct", "manufacture", "identify", or "have sex with"?

By "EE majors", does the question identify persons currently or formerly in engineering school? Did they graduate, take to drink and flunk out, or escape to the English Department in order to indulge a fetish for filling blue books?

Exactly what would a "better ham" do to alert us to his or her superior "hamliness"? How would we know "better ham" if we saw it?

As one contributor suggested, perhaps engineering requires a level of rigor some might not enjoy. For example, a more rigorous question might read:

Are there clearly definable markers or traits held in common that might predispose persons engaged in the study of Electrical Engineering at a college or university to also exhibit and perseverate at behaviors identified and widely accepted as indicators of superior knowledge and skill when participating in the hobby of amateur radio?

If you're comfortable with that line of rigor, you'll get to study the rats. If you're not, you'll get to clean up after them.

Rick K1BQT

1943. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 23:19:14 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C571FF4.3949EABC@worldnet.att.net>
Source record: 149881

Michael J Talkington wrote:

> Hello,
> What is the best antenna for HF.
> A)Hustler
> B)Comet
> C)Alpha Delta
> D)Hamstick
> E)Other please specify.
> What I am Looking for is best performance on 10 thru 80
> whether they have to be put up each time I change bands
> or what they dont have to be Multiband.ButI want best performance
> and or bandwidth.Thanks Mike

On 40 meters and up you can get good results with either the
Hustler setup or Pro-Am brand hamsticks (they are more
rugged that others I've seen). Bugcatchers and screwdrivers work better
but not enough better to warrant the extra expense and trouble unless
you want to change bands from the driver's seat badly enough.
Nothing (conventional) works well on 75 or 160..

Dick

1944. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 23:34:07 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C55DEDB.2BF779C3@bellatlantic.net>
Source record: 149882

Sounds like a dummy load to me.. you know a 50 ohm resistor will give you
great VSWR, but radiate like a dummy load..

'73 KI4Z

rasw wrote:

> ...that my Hustler 4BTV has a 1.5:1 SWR on 146 MHZ, would there be anything
> wrong with using it there?
>
> Would, at least, my radio be happy?

1945. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 23:35:28 UTC
From: n7ws@yahoo.com
Message-ID: <3c55d80a.89763759@news.triconet.org>
Source record: 149883

On Mon, 28 Jan 2002 21:25:52 -0000, "Reg Edwards" <g4fgq.regp@btinternet.com>
wrote:

|Wes, do you think the increase is loss when wet is due to increased
|dielectric loss, or due to increased conductor loss because the water is
|attempting to carry some of the line current ?

I believe it is dielectric loss. The "open-wire" control sample I measured was
not affected at all by wetting the wires. Of course very little water actually
"stuck" to the enameled wire.
|
|I note your measurements were made at 50 MHz. How much smaller would be the
|effects at frequencies where such lines are actually used - say 3.5 or 7
|MHz.

Well, if you go back to my page and read the "Update" part, you will see that
Dan Maguire, AC6LA, and I did some additional work (using the original raw
measurement data) and came up with loss coefficients that can extrapolate the
results to any (reasonable) frequency.

If you believe that the data I presented in the original paper for the wet line
condition are accurate then you can assume that the conductor loss coefficient
is fixed regardless of whether the line is wet or dry and solve for the
dielectric coefficient. Dan's Excel solver will do this for you. With both
numbers at hand, the attenuation at a new frequency can be estimated.

If, like me as I suggest in the "Update", you are somewhat suspect of the
accuracy of the original (wet) data, then "estimate" is a better word than
calculate.

Once again I would like to state that these "wet" data are probably close to the
worst possible case and not something likely to be encountered in the real
world. They do however backup anecdotal evidence of degraded performance of
open-wire (particularly the "window" type) lines.

Cheers,

Wes N7WS

1946. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 23:39:56 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C55E130.BEB4D45@shaw.ca>
Source record: 149884

rasw wrote:
>
> ...that my Hustler 4BTV has a 1.5:1 SWR on 146 MHZ, would there be anything
> wrong with using it there?
>
> Would, at least, my radio be happy?

My MFJ-259B says 1.5:1 at 3.56 Mhz -- the rig would load,
but the antenna
might not like it -- and I doubt if it would radiate well.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1947. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 23:44:17 UTC
From: ToolTime <middlefinger4@home.comspam>
Message-ID: <lnl58.7286$X64.3327583@news1.rdc2.pa.home.com>
Source record: 149885
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

I didn't even post to this thread you idiotic Moron who
crys like a little baby. Lets see how many other people posted at that time
on the internet? you sorry excuse for a human being.

"Mr. Hand" <mrhandUPSIDEYURHEAD@yahoo.com> wrote in message
news:46cdc863.0201281112.55ecbf86@posting.google.com...
> what a crock of shit1 how long is this iodiot going to keep up
> this sherade of im not voobner. just look at the times that this
> morons posting
> From: ToolTime (middlefinger4@home.comspam)
> Subject: Re: Kenwood TS520SE
> Newsgroups: rec.radio.cb
> View: Complete Thread (29 articles) | Original Format
> Date: 2002-01-26 15:26:42 PST
>
> Message 24 in thread
> From: Aaron H. Voobner (voobner@yahoo.com)
> Subject: Re: Kenwood TS520SE
> Newsgroups: rec.radio.cb
> View this article only
> Date: 2002-01-26 15:28:39 PST
> just look 2 minites later after middlefuck post he posts from his
> aol account. yes virginia voobner is middlefinger/steelgangsta and
> god knows how many other peeple he is.
> voobner@yahoo.com (Aaron H. Voobner) wrote in message
news:<fbc7a2.0201280032.4d23e26b@posting.google.com>...
> > "Train" <cbmods@optonlineNOSPAM.com> wrote in message
news:<GEZ48.89763$6L5.14523908@news02.optonline.net>...
> > > $120 for a Palomar 225?
> > >
> > > "Stephen Gale" <stephengale@sympatico.ca> wrote in message
> > > news:LuX48.1382$9y2.249997@news20.bellglobal.com...
> > > > a few things here........just getting started......check out the
> > accessories
> > > > link
> > > >
> > > > http://members.kingston.net/sgale/gold2/radio.html
> > > >
> > > >
> > >
> > "Train", CB amps are illegal.
> >
> > -Aaron-

1948. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-28 23:50:01 UTC
From: n7ws@yahoo.com
Message-ID: <3c55e060.91898063@news.triconet.org>
Source record: 149887

On 28 Jan 2002 13:18:36 -0800, eustiscornhauser@yahoo.com (Eustis Cornhauser) wrote:

|If his family did come over on the slave ship, they probably owned it.

A couple of years ago my wife and I did some traveling through Iowa and Nebraska, where her grandparents grew up. We did a lot of visiting of small town libraries and historic centers where she did some research.

I was killing time waiting on her in some library when I casually picked up a volume titled (if I remember exactly) "Bonded Passengers to America."

This book documented the shipment of people (primarily from the British Isles) to America. The "cargo" consisted of either common criminals or other unwanted types who were usually sentenced to seven years of servitude. THE VERY SAME SHIPS that transported these people were also used to transport negro slaves from Africa. The only difference was that the survival rate for the Africans WAS HIGHER that the rate for the British.

In one case a "repeat offender" (a woman) who had done one seven-year trip and was again convicted in England, asked to be hanged rather than suffer another journey.

So, yes, a lot of Scots, Irish and English came here in chains and under worse conditions than did the African slaves.

Wes Stewart, N7WS

|
|> >My family came to the USA from Scotland in the mid 1800's,
|> >that makes me part of a minority group so when do I get the
|> >FREE HAND OUT ?
|>
|> I don't suppose your family came over from Scotland in chains, on a
|> slave-trader's ship, to be sold like cattle once they arrived on these shores?
|>
|> Bob
|> k5qwg

1949. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 00:06:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C55E78B.1D683D12@IEEE.org>
Source record: 149888
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

```
Dick Carroll wrote:
>
> CAM wrote:
>
> > VE9SRB wrote:
> > > Is there anyone
> > > on this NG that stopped learning when they were 22 years old?
> > >
> > There is one person who says it is OK to rest on one's laurels
> > after having achieved an extra class license. :-)
>
> With regard to amateur radio licensing what else is there for him to
> do?

Contribute something of value to the Amateur Radio Service?
--
cheers, CAM http://www.qsl.net/w5dxp
```

1950. Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 00:07:57 UTC
From: Bill <n8xv@yahoo.com>
Message-ID: <3C55E7DD.A99FA7CA@yahoo.com>
Source record: 149870

Are you using a screwdriver antenna for your mobile ?? What brand?? How do you like it?? Any problems?? I'm looking to get one to install on a travel trailer, interested in your experiences.

Thanks, Bill

1951. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 00:12:26 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C55E8EA.B87F674F@IEEE.org>
Source record: 149889

rasw wrote:
> ...that my Hustler 4BTV has a 1.5:1 SWR on 146 MHZ, would there be anything
> wrong with using it there?

There is more to radiation than SWR. When a vertical monopole is more than
5/8 wavelengths long, it develops end-fire characteristics which sends the
RF mostly straight up. Since very little 146 MHz radiation is reflected
back down, virtually all the RF will be lost when using an HF monopole
on VHF. But I don't know anything about a Hustler 4BTV.
--
cheers, CAM http://www.qsl.net/w5dxp

1952. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 00:17:04 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C55EA00.CDBE6329@IEEE.org>
Source record: 149890

Alan White wrote:
> I have a follow-up question: How do you tune them without transmitting? I
> guess you can get in the ballpark by listening, but the final tweaking?

Well, while driving down the road, you tune the screwdriver using an
MFJ-259. Then disconnect the MFJ and connect your transceiver.
Just kidding. I choose an empty frequency, hit the antenna tune button,
and watch the SWR meter for a dip in reflected power.
--
cheers, CAM http://www.qsl.net/w5dxp

1953. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 00:50:51 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <Llm58.208$r55.32194@news2.east.cox.net>
Source record: 149891

There was a great show on the first Transoceanic cables on the History Channel
a few evenings ago. The first attempts used 2,000 volts and that apparently destroyed out the cable very early on. I think it was one of their
"Modern Marvels" series, should be on again.

Pete

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:12241-3C55A839-130@storefull-113.iap.bryant.webtv.net...
> Leland Cox wrote:
> "Was there such a thing as an EE in 1920?"
>
> According to the January 1968 Lenkurt "Demodulator", "The first
> transatlantic cable, laid in 1858, was a telegraph link between the Old
> and New Worlds. It lasted approximately 20 days, carried 732 messages
> and allegedly saved the British government 50,000 pounds. It also took
> sixteen and a half hours to pass a 99 word message from Queen Victoria
> to President Buchanan-"
>
> Best regards, Richard Harrison, KB5WZI
>

1954. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 01:10:42 UTC
From: rasw <atdot.dotat@at.sorry>
Message-ID: <a34sqt$3q9m4$1@rn.area.com>
Source record: 149895

I beleive it's getting the 5th harmonic of 29.2 MHz. My guess is the 10 meter trap also traps off very effectively anything above its desiged frequency.

So it's a vertical 5 half-wavelenghts long at 146 MHz. Why would it be no better than a "dummy load?" I'd think it would work about as well as a 1/4 wave groundplane....

I've run antennas on their third harmonic and they work OK (like a 40 meter dipole on 15). The ARRL Antenna book explains this in chapter 2, that antennas present low reactance at their resonant freq and odd multiples.

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message news:3C55DEDB.2BF779C3@bellatlantic.net...
> Sounds like a dummy load to me.. you know a 50 ohm resistor will give you
> great VSWR, but radiate like a dummy load..
>
> '73 KI4Z
>
> rasw wrote:
>
> > ...that my Hustler 4BTV has a 1.5:1 SWR on 146 MHZ, would there be anything
> > wrong with using it there?
> >
> > Would, at least, my radio be happy?
>

1955. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 01:11:05 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <Aym58.71702$h31.4282404@e420r-atl1.usenetserver.com>
Source record: 149892

Hi CAM,
What kind of rig are you running mobile again? Must be nice to just push
the button and it's tuned. But, then again, I like twisting the knobs
wildly as I wait for the lightning bolt to crack overhead:)
C 73,
Drink, WP3JQ
"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C55EA00.CDBE6329@IEEE.org...
> Alan White wrote:
> > I have a follow-up question: How do you tune them without transmitting?
I
> > guess you can get in the ballpark by listening, but the final tweaking?
>
> Well, while driving down the road, you tune the screwdriver using an
> MFJ-259. Then disconnect the MFJ and connect your transceiver.
> Just kidding. I choose an empty frequency, hit the antenna tune button,
> and watch the SWR meter for a dip in reflected power.
> --
> cheers, CAM http://www.qsl.net/w5dxp

1956. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 01:15:07 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C55F792.1D83F051@icok.net>
Source record: 149893

rasw,
Why don't you try it and see? It may or may not
be worth doing, but there's no harm in trying...
'Doc

1957. Re: Dummy Load Decision

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 01:17:44 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C55F815.2FF10350@icok.net>
Source record: 149894

rons533,
Nothing wrong with a 'cantenna', cheap, works as well
as any other dummy load and why not...
'Doc
PS - Not a hell of'a lot has changed with dummy loads, just
the price...

1958. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 01:27:19 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a34u2u$1570qt$1@ID-124126.news.dfncis.de>
Source record: 149896

Thanks, Wes, for your thoughts.

I assume your samples were of a type which had a largish proportion of their lengths, perhaps 50%, with the pair of wires spanned by a plastic web. Perhaps more spacing material than the common-or-garden 450-ohm 'ladder line'. This would account for the large increase in loss relative to your control sample. It would also account for a reduction in velocity when wet.

I'm inclined to agree with you that water causes an increase in dielectric loss with a negligible effect on conductor loss. Although it should be remembered that a decrease in Zo (which actually occurs) does itself result in an increase in conductor loss even if the conductor resistance remains unchanged.

Conductor loss = 4.343 * (Conductor Resistance) / Zo decibels per unit length.

But what I really came back to say is - Dielectric loss is directly proportional to frequency. So if the additional loss due to rain occurs only in the dielectric then, from your measured values at 50 MHz, the losses at 1.9, 3.7 and 7 MHz, where such lines are mostly used, if not negligible are still small compared with the sum of other losses in the system.

From my own observations, in a torrential downpour (we do get them occasionally in the UK), with horizontal 300-ohm ribbon line (I have used spaced speaker cable), at 1.9 and 3.7 MHz, the first time it occurs it may be a little alarming to observe the SWR has crept up to 1.5:1. But since it can be corrected by a 5 or 10 percent change in L and C tuner settings there's nothing to worry about. After a time it can be ignored. Before the sun comes from behind the clouds the SWR returns to normal of its own volition.

I've never attached enough importance to the effects to attempt to quantify them. Nevertheless, it seems wet transmission lines can be an intriguing source of problems yet to be solved. ;o)

My main complaint about rain is rain-static noise. I once attempted to estimate the S-meter reading due to rain static for a precipitation rate of 1" per hour on an 80 dipole. But it would have been easier to read the S-meter and use instantaneous rain-gauges - if such things exist.

Regards, Reg G4FGQ

==========
Wes wrote -
>
> |Wes, do you think the increase in loss when wet is due to increased

> |dielectric loss, or due to increased conductor loss because the water is
> |attempting to carry some of the line current ?
>
> I believe it is dielectric loss. The "open-wire" control sample I
measured was
> not affected at all by wetting the wires. Of course very little water
actually
> "stuck" to the enameled wire.
> |
> |I note your measurements were made at 50 MHz. How much smaller would be
the
> |effects at frequencies where such lines are actually used - say 3.5 or
7
> |MHz.
>
> Well, if you go back to my page and read the "Update" part, you will see
that
> Dan Maguire, AC6LA, and I did some additional work (using the original raw
> measurement data) and came up with loss coefficients that can extrapolate
the
> results to any (reasonable) frequency.
>
> If you believe that the data I presented in the original paper for the wet
line
> condition are accurate then you can assume that the conductor loss
coefficient
> is fixed regardless of whether the line is wet or dry and solve for the
> dielectric coefficient. Dan's Excel solver will do this for you. With
both
> numbers at hand, the attenuation at a new frequency can be estimated.
>
> If, like me as I suggest in the "Update", you are somewhat suspect of the
> accuracy of the original (wet) data, then "estimate" is a better word than
> calculate.
>
> Once again I would like to state that these "wet" data are probably close
to the
> worst possible case and not something likely to be encountered in the real
> world. They do however backup anecdotal evidence of degraded performance
of
> open-wire (particularly the "window" type) lines.
>
> Cheers,
>
> Wes N7WS

1959. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 01:38:31 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <q2n58.1381$ru5.902134@paloalto-snr2.gtei.net>
Source record: 149897

There are a couple of tuning mechanisms marketed for the screwdriver type antennas - one for about
$150 is a programable turns-counting device that requires a magnet and inductive pickup be installed
inside the antenna mast - it can then be set (after initially adjusting the screwdriver for best
match manually) to return to the previous setting at the push of a button and selection of the
appropriate memory setting on the memory-position knob.

A *far* more elegant approach, for about $50 more, is a TOTALLY automatic gadget, that requires NO
intrusion to the innards of the antenna itself, and automatically activates when the "tune" button
common to rigs like the IC-706 is pushed. It then senses the RF output frequency and current setting
of the antenna coil, and proceeds to tune the antenna to the best match TOTALLY AUTOMATICALLY!

THAT'S the one for MY money, when my mutual fund starts looking lots better than it does at present...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"Drink" <REMOVE_THISdrink@coqui.net> wrote in message
news:Aym58.71702$h31.4282404@e420r-atl1.usenetserver.com...
> Hi CAM,
> What kind of rig are you running mobile again? Must be nice to just push
> the button and it's tuned. But, then again, I like twisting the knobs
> wildly as I wait for the lightning bolt to crack overhead:)
> C 73,
> Drink, WP3JQ
> "CAM" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3C55EA00.CDBE6329@IEEE.org...
> > Alan White wrote:
> > > I have a follow-up question: How do you tune them without transmitting?
> I
> > > guess you can get in the ballpark by listening, but the final tweaking?
> >
> > Well, while driving down the road, you tune the screwdriver using an

> > MFJ-259. Then disconnect the MFJ and connect your transceiver.
> > Just kidding. I choose an empty frequency, hit the antenna tune button,
> > and watch the SWR meter for a dip in reflected power.
> > --
> > cheers, CAM http://www.qsl.net/w5dxp
>
>
>

1960. Re: fs: 13B2 an a 440meter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 02:22:43 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C560772.8DBFECAE@tampabay.rr.com>
Source record: 149899

hey tom
is the satellite 432mhz yagi shippable?

Tom wrote:

> hi,
> i have a cushcraft 13B2 2 meter broadband boomer for sale 60.00 or best
> offer
>
> and i have a Telex hy-gain model 70-30 sat 70 cm 435 MHz antenna boom lenght
> lenght 134 in. 30 elements 75.00 or best offer .
>
> n2hug n2hug@altavista.com or ddirose1@stny.rr.com

1961. Re: Stacking Tri-Banders

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 02:28:31 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C5608CE.DF666AAE@tampabay.rr.com>
Source record: 149898

hey mark
the hard part about stacking a tri band beam is the spacing between the two yagis i suspect you would have to stack it with 20 meters in mind but as for the dissimilar yagis it would be sorta a problem with a good clean pattern but you should be able to find a couple of mosley ta33 or a pair of cushcraft A3's for somewhere under two hundred bucks but keep in mind the two antennas will need to be roughly a waveleght apart and on 20 meters thats a lot of mast to use
let me know what you find out and how it works

Mark Hall wrote:

> How about comments on stacking inexpensive, used, possibly non matched
> tri-banders for a Big - Gun Signal on the cheap? Worth it?
>
> '73 KI4Z

1962. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 02:33:59 UTC
From: fractenna@aol.com
Message-ID: <20020128213359.26417.00000097@mb-cv.aol.com>
Source record: 149900

The histories of the first use of the terms 'electrical engineer', 'electronics engineer', and 'radio engineer' are interesting ones. Does anyone know the details?

I presume that the 'RE' designation was retired in the 50's, as it got confused with what we now refer to as the commercial enginers who run radio stations. I'd be interested in the details(or correction to my limited knowledge) though.

When did the IRE merge with the IEE(E)?

73
Chip N1IR

1963. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 02:37:28 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <AVn58.4665$9y2.1294041@news20.bellglobal.com>
Source record: 149901

"Richard Clark" provided much detailed advice:

"Roy Lewallen" provide some more:

Are those guys 'over there' planning to gather a sufficient number of measurements of the EH Antenna's gain (for example) in both dimensions (azimuth and elevation) such that someone will be able to plug the numbers into MS-Excel and do some simple numerical "integration over the sphere" ?

I mean, if the average gain over the entire sphere integrates to about +2.709 dBi (to choose a random number), that would be a cause for celebration as the EH Antenna would certainly solve the world's energy 'problem' as well as being a half-decent antenna.

1964. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 02:44:23 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.16bfac5fb405c1bb9896a1@news.onlynews.com>
Source record: 149902

George

Sounds like a good idea. I was about to have a bracket made to bolt to 2
rafter ends, but when I got up there to measure it looks like they are
just separate 3' lengths of 2X6, toe nailed at the house end so I didn't
think they were strong enough to support anything. Do you think I missed
something about how my roof is constructed?

Steve

In article <3c5582f7_2@news1.prserv.net>, munschNO@attglobal.net.SPAM
says...
> Steve:
>
> I had not read your inquiry carefully until this morning. Here is how I
> once did it in the same situation (3 foot eaves). You need 4 items, a 4 or
> 6 foot piece of treated 2X4, a 20 foot joint of 2" or larger chain link
> fence post, and 2 lag bolts. Lag bolt the 2X4 under the soffit to a rafter
> extension with it sticking out past the eave, cut it off at the length you
> want, and U bolt (whoops, that's 5 items) the post to the 2X4. Put a good
> base under it which will support it and keep it from shifting. I usually
> used a brick with holes in it, and a piece of 1/2" or larger rebar driven in
> the ground.
>
> --
> Crazy George
> Remove NO and SPAM from return address
> <hmbdude-no-spam@cotse.net> wrote in message
> news:aG1iZHVkZQ==.a335178f8a4d11f1529bb65310ab0ec2@1012180737.cotse.net...
> > I want to put up "something" to hold a fringe TV antenna, a scanner
> > antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
> > 18 - 20 feet off the ground. I have a single storey house, no useable
> > chimney, don't want to mount on the roof, and can't use wall brackets
> > because there is a 3 foot eave overhang all around. So, I'm looking for
> > ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
> > fortune.
> >
> > Steve
> >
> >
>
>
>

1965. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 02:46:17 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.16bfacd6840a67489896a2@news.onlynews.com>
Source record: 149903

Can you reference someone selling 3' brackets?

In article <a32pk0sah4@quark.scn.rain.com>, billn@spock.peak.org
says...
> hmbdude-no-spam@cotse.net wrote:
> > I want to put up "something" to hold a fringe TV antenna, a scanner
> > antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
> > 18 - 20 feet off the ground. I have a single storey house, no useable
> > chimney, don't want to mount on the roof, and can't use wall brackets
> > because there is a 3 foot eave overhang all around. So, I'm looking for
> > ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
> > fortune.
>
> You can buy/make/have-made wall mount brackets that will hold the mast
> 3 feet away from the wall.
>
> A 20 foot mast that will support a fringe antenna plus an HF vertical
> is going to have to be rather robust - seeing that you want it to be
> self supporting. It would also require a fair amount of concrete in
> the ground.
>
>

1966. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 02:47:15 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.16bfad0990487ee79896a3@news.onlynews.com>
Source record: 149904

This sounds like fun, thanks!

In article <7V458.5599$4t4.16568@rwcrnsc54>, cholloway14@attbi.com
says...
> Very Strong masts can be found at "Windsurfing swaps", they range from 15 to
> 19 feet and are either aluminum or fiberglass (some are carbon fiber). The
> used ones can go as cheap as $20 but $40 tp $100 is more common.
> 73 Cliff N0HC
> US Windsurfing Association # CH01
> <hmbdude-no-spam@cotse.net> wrote in message
> news:aG1iZHVkZQ==.a335178f8a4d11f1529bb65310ab0ec2@1012180737.cotse.net...
> > I want to put up "something" to hold a fringe TV antenna, a scanner
> > antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
> > 18 - 20 feet off the ground. I have a single storey house, no useable
> > chimney, don't want to mount on the roof, and can't use wall brackets
> > because there is a 3 foot eave overhang all around. So, I'm looking for
> > ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
> > fortune.
> >
> > Steve
> >
> >
>
>
>

1967. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 02:48:33 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c5611cf_3@news1.prserv.net>
Source record: 149905

Steve:
Houses are built in all different kinds of configurations. If that is a hip roof, then that is certainly a possibility. If I could look at the house, I could tell all kinds of things, but without being there and able to tap on panels, etc., it is difficult to give any specific advice. If indeed those are rafter tails, and not full rafters, then you are correct that they are not very strong. And, from your comment, I gather that the ends of the rafter tails are open also, and there is no fascia board across the ends. Bummer. You need to get back to a structurally sound part of the house frame to be safe, and loose ends is a real problem. Not sure what else to suggest.

--
Crazy George
Remove NO and SPAM from return address
Beach Bum <hmbdude@nospamcotse.com> wrote in message
news:MPG.16bfac5fb405c1bb9896a1@news.onlynews.com...
>
> George
>
> Sounds like a good idea. I was about to have a bracket made to bolt to 2
> rafter ends, but when I got up there to measure it looks like they are
> just separate 3' lengths of 2X6, toe nailed at the house end so I didn't
> think they were strong enough to support anything. Do you think I missed
> something about how my roof is constructed?
>
> Steve
>
> In article <3c5582f7_2@news1.prserv.net>, munschNO@attglobal.net.SPAM
> says...
> > Steve:
> >
> > I had not read your inquiry carefully until this morning. Here is how I
> > once did it in the same situation (3 foot eaves). You need 4 items, a 4
or
> > 6 foot piece of treated 2X4, a 20 foot joint of 2" or larger chain link
> > fence post, and 2 lag bolts. Lag bolt the 2X4 under the soffit to a
rafter
> > extension with it sticking out past the eave, cut it off at the length
you
> > want, and U bolt (whoops, that's 5 items) the post to the 2X4. Put a
good
> > base under it which will support it and keep it from shifting. I
usually

> > used a brick with holes in it, and a piece of 1/2" or larger rebar
driven in
> > the ground.
> >
> > --
> > Crazy George
> > Remove NO and SPAM from return address
> > <hmbdude-no-spam@cotse.net> wrote in message
> >
news:aG1iZHVkZQ==.a335178f8a4d11f1529bb65310ab0ec2@1012180737.cotse.net...
> > > I want to put up "something" to hold a fringe TV antenna, a scanner
> > > antenna, and an (as yet undefined) HF vertical. The TV antenna needs
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> > > 18 - 20 feet off the ground. I have a single storey house, no useable
> > > chimney, don't want to mount on the roof, and can't use wall brackets
> > > because there is a 3 foot eave overhang all around. So, I'm looking
for
> > > ideas for a self supporting (no guys) 20 foot mast, that doesn't cost
a
> > > fortune.
> > >
> > > Steve
> > >
> > >
> >
> >
> >

1968. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 02:56:39 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a353d5$15s00u$1@ID-124126.news.dfncis.de>
Source record: 149906

> There is more to radiation than SWR. When a vertical monopole is more than
> 5/8 wavelengths long, it develops end-fire characteristics which sends the
> RF mostly straight up.
==========
Cecil, just a minor correction.

For a height of 5/8-waves there are virtually no high angle lobes. At that height they are just about to start. A 5/8 wave vertical is the optimum height for maximum very low angle and groundwave radiation. Just the job for MF broadcasting (no high angle required to minimise fading at night) and real DX on the lower HF bands. The radiation pattern in the vertical plane is very broad as may be expected from from a single radiating element and so the one-hop ionospheric paths are very well catered for in all directions.

Even for a 3/4 wave vertical the higher angle lobes are just a couple of tiny rabbit's ears and nowhere near "straight up". Maximum radiation is still very low angle and along the horizontal.

The following should be in very small print:- Don't allow programs which predict field strengths at infinite distance to mislead you about true radiation patterns.

Vertical antennas don't begin to squirt power at high angles until height is 1 wavelength or more. In fact they never send anything straight up - there's always a null at 90 degrees. (Just like the Beverage always has a null in the direction of the wire).

My Dream of the ideal DX antenna for the lower HF bands is a 100-feet vertical above a ground system of 25 or 35 shallow-buried radials. That would be 3/4-wave on 40 metres, 0.4-waves on 80 metres, and 1/5-wave on 160 metres. It would still do very nicely on 30 and 20 metres for relatively short-haul one-hop QSOs. Sadly I shall have to continue dreaming.

Sweet dreams folks!

Reg G4FGQ.

1969. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 03:02:22 UTC
From: richardharrison@webtv.net
Message-ID: <21759-3C5610BE-16@storefull-112.iap.bryant.webtv.net>
Source record: 149908

Chip, N1IR wrote:
"When did the IRE merge with the IEE(E)?"

The Institute of Radio Engineers merged with The American Institute of Electrical Engineers to form The Institute of Electrical and Electronic Engineers, Inc. in the latter part of the 20th century. I forget the date.

The IEE is a UK organization, I believe.

Best regards, Richard Harrison, KB5WZI

1970. Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 03:09:33 UTC
From: brokebob@aol.com
Message-ID: <20020128220933.11433.00000552@mb-cb.aol.com>
Source record: 149907

What is the biggest utility pole you have experienced setting? I plan on setting a 40 footer using a back hoe to dig a ditch eight foot deep and tapering out to nothing at about 18 feet or so. Plan on rolling the butt end into the 8 foot end then using the back hoe to push or pull the top end up. Of course will have to back fill the thing by hand. Any suggestions?

brokebob@aol.com (broke=not working, retired=not working, retired=broke)

1971. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 03:26:01 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <dDo58.1057$r55.49798@news2.east.cox.net>
Source record: 149910

Unless feedline radiation--which is reputedly responsible
for much of the antenna's gain--is accounted for and eliminated in
the tests they won't have much validity. I think Roy suggested some
methods for measuring the common mode current on the coax.

Peter

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:AVn58.4665$9y2.1294041@news20.bellglobal.com...
> "Richard Clark" provided much detailed advice:
>
> "Roy Lewallen" provide some more:
>
> Are those guys 'over there' planning to gather a sufficient number of
> measurements of the EH Antenna's gain (for example) in both dimensions
> (azimuth and elevation) such that someone will be able to plug the numbers
> into MS-Excel and do some simple numerical "integration over the sphere" ?
>
> I mean, if the average gain over the entire sphere integrates to about
> +2.709 dBi (to choose a random number), that would be a cause for
> celebration as the EH Antenna would certainly solve the world's energy
> 'problem' as well as being a half-decent antenna.
>
>
>
>

1972. Re: TITAN DX feedback problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 03:28:07 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <3c5c5uoi4vtslbe6deo7lmsgbev8sma9jq@4ax.com>
Source record: 149909

On Mon, 28 Jan 2002 22:48:47 -0000, "N7GVV" <jraisler@kconline.com>
wrote:

>I have experienced RF feedback on 40 meters and 3.6 MHz. If I add Coax to
>feedline 40 meter problem goes away but not so on 3.6. Suggestions?

This kind of "RF in the shack" problem is often caused by either
coupling from the antenna to the coax shield or unbalance in the antenna
itself, or both.

Try installing a choke-type balun in the coax somewhere before it comes
into the shack.

You may get advice to "ground" the rig, but running a ground wire may or
may not fix the problem. RF at ham frequencies is nearly impossible to
"ground" because the ground wire is an appreciable part of a wavelength
and has different impedances along it's length. This is not to say a
ground wire can not fix the problem, but it would be more luck than
science.

73, Bill W7TI

1973. Re: TITAN DX feedback problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 03:44:40 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020128224440.01759.00000694@mb-ch.aol.com>
Source record: 149911

Be sure you run the coax straight down as soon as you can and as far as you can. If you run the coax horizontal to the antenna, it will pick up RF. GAP does not recommend a balun at the antenna. Get the coax away from the antenna before you go horizontal. That cured my problem.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

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1974. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:01:52 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.16bfaee21a250db69896a4@news.onlynews.com>
Source record: 149912

Well, Mike, I can tell you the rugrats idea is completely out of the question:-)

I was thinking of a post too, but I'm surprised a 4x4 would be strong enough. There's someone in the area who installs lengths of surplus (wooden) utility poles as lot corner markers and jumbo fence/gate posts. Maybe I'll track them down and see what they can do for me.

What kind/size of mast did you use?

Steve
In article <3C54AF41.9070609@europa.com>, mjordan@europa.com says...
>
>
> hmbdude-no-spam@cotse.net wrote:
>
> > I want to put up "something" to hold a fringe TV antenna, a scanner
> > antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
> > 18 - 20 feet off the ground. I have a single storey house, no useable
> > chimney, don't want to mount on the roof, and can't use wall brackets
> > because there is a 3 foot eave overhang all around. So, I'm looking for
> > ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
> > fortune.
>
>
> A tree is cheap, but the installation time is about 15 years.
> <grin>
>
> I had basically the same problem a number of years ago, Steve.
> What I did was build a wooden platform as part of my daughters
> playground set I built and bolted my 25' mast to it. I had a 4
> element 10 meter beam on top of it and had no problems. The
> platform was built from 10' 4x4 posts in concrete and the platform
> was at the 6' level and was made of 2x8. So the whole structure was
> pretty solid.
>
> What I have done more recently was take a corner 4x4 fence post
> (in concrete) and bolted a 22' mast to it. I had a 2 meter vertical
> on there for awhile but moved that to a chimney mount on top of our
> second floor roof, which gave me a little more height. The mast is
> now the center of a 80' meter dipole. I've been wanting to put up a
> another mast, but like you, I can't guy it. I can guy it on two
> sides but not the third. So I've been thinking of putting a 6x6
> into about 3 feet of concrete and 8 feet above ground and bolt a
> mast to that. On this mast I'd like to put a small tri-bander at

> about 20'. I'd like to put up a tower but we might move in the
> near future and it will be easier to get a post out of the ground
> than it would to take down a tower.
>
> Anyway, you might look into using a post for support. It might
> work for you.
>
> Mike
>
>
>
>
>

1975. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:05:12 UTC
From: richardharrison@webtv.net
Message-ID: <9634-3C561F78-24@storefull-113.iap.bryant.webtv.net>
Source record: 149913

Reg wrote:
"Vertical antennas don`t begin to squirt power at high angles until height is one wavelength or more."

Reg may have forgotten to include a word or two in his statement. Broadcast stations limit their towers to 5/8-wavelength unless a phase-inversion is used beyond 5/8-wave because they "begin to squirt power at high angles". This is clearly shown in Fig. 23-25 (d) on page 887 of the 1955 edition from Terman.

Best regards, Richard Harrison, KB5WZI

1976. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:15:59 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5621FF.FC3F4D8B@IEEE.org>
Source record: 149917

rasw wrote:
> So it's a vertical 5 half-wavelenghts long at 146 MHz. Why would it be no
> better than a "dummy load?"

Because the radiation is straight up. For instance, a 40m vertical monopole
has a take off angle of 62 degrees on 6m according to EZNEC.

> I've run antennas on their third harmonic and they work OK (like a 40 meter
> dipole on 15).

But that's horizontal so clover leaf patterns and end fires are OK.
--
cheers, CAM http://www.qsl.net/w5dxp

1977. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:16:41 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.16bfc208b08431b79896a6@news.onlynews.com>
Source record: 149914

The trusses themselves are manufactured 2X4, and yes, you are right, no fascia board. There's no plywood under the tiles except at the eaves, so it's a good question whether the plywood is holding up the rafter tails, or vice versa. The walls are 2x6 framed, which seems to be unusually robust in California, so I don't know why there's such a flimsy roof on it.

Sorry to digress from ham radio...

In article <3c5611cf_3@news1.prserv.net>, munschNO@attglobal.net.SPAM says...
> Steve:
> Houses are built in all different kinds of configurations. If that is a hip
> roof, then that is certainly a possibility. If I could look at the house, I
> could tell all kinds of things, but without being there and able to tap on
> panels, etc., it is difficult to give any specific advice. If indeed those
> are rafter tails, and not full rafters, then you are correct that they are
> not very strong. And, from your comment, I gather that the ends of the
> rafter tails are open also, and there is no fascia board across the ends.
> Bummer. You need to get back to a structurally sound part of the house
> frame to be safe, and loose ends is a real problem. Not sure what else to
> suggest.
>
> --
> Crazy George
> Remove NO and SPAM from return address
> Beach Bum <hmbdude@nospamcotse.com> wrote in message
> news:MPG.16bfac5fb405c1bb9896a1@news.onlynews.com...
> >
> > George
> >
> > Sounds like a good idea. I was about to have a bracket made to bolt to 2
> > rafter ends, but when I got up there to measure it looks like they are
> > just separate 3' lengths of 2X6, toe nailed at the house end so I didn't
> > think they were strong enough to support anything. Do you think I missed
> > something about how my roof is constructed?
> >
> > Steve
> >
> > In article <3c5582f7_2@news1.prserv.net>, munschNO@attglobal.net.SPAM
> > says...
> > > Steve:
> > >
> > > I had not read your inquiry carefully until this morning. Here is how I
> > > once did it in the same situation (3 foot eaves). You need 4 items, a 4

> or
> > > 6 foot piece of treated 2X4, a 20 foot joint of 2" or larger chain link
> > > fence post, and 2 lag bolts. Lag bolt the 2X4 under the soffit to a
> rafter
> > > extension with it sticking out past the eave, cut it off at the length
> you
> > > want, and U bolt (whoops, that's 5 items) the post to the 2X4. Put a
> good
> > > base under it which will support it and keep it from shifting. I
> usually
> > > used a brick with holes in it, and a piece of 1/2" or larger rebar
> driven in
> > > the ground.
> > >
> > > --
> > > Crazy George

1978. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:18:12 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.16bfc2639ef4546b9896a7@news.onlynews.com>
Source record: 149915

The utility folks have those nice big trucks with corkscrews on the
back...

In article <20020128220933.11433.00000552@mb-cb.aol.com>,
brokebob@aol.com says...
> What is the biggest utility pole you have experienced setting? I plan on
> setting a 40 footer using a back hoe to dig a ditch eight foot deep and
> tapering out to nothing at about 18 feet or so. Plan on rolling the butt end
> into the 8 foot end then using the back hoe to push or pull the top end up.
> Of course will have to back fill the thing by hand. Any suggestions?
>
> brokebob@aol.com (broke=not working, retired=not working, retired=broke)
>

1979. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:19:37 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5622D9.EEC14B22@IEEE.org>
Source record: 149918

Drink wrote:
> Hi CAM,
> What kind of rig are you running mobile again?

I have a High Sierra HS-1600 with a 6 ft diameter top hat
and extended bottom section. It's performance is close to tops.
--
cheers, CAM http://www.qsl.net/w5dxp

1980. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:21:05 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C562331.2D5E7E34@coqui.net>
Source record: 149916

Brokebob wrote:
>
> What is the biggest utility pole you have experienced setting? I plan on
> setting a 40 footer using a back hoe to dig a ditch eight foot deep and
> tapering out to nothing at about 18 feet or so. Plan on rolling the butt end
> into the 8 foot end then using the back hoe to push or pull the top end up.
> Of course will have to back fill the thing by hand. Any suggestions?
>
> brokebob@aol.com (broke=not working, retired=not working, retired=broke)

If you're having to pay for the backhoe it might be cheaper just to find
a pole contractor to do it.
-Bill

1981. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:42:15 UTC
From: richardharrison@webtv.net
Message-ID: <16136-3C562827-19@storefull-115.iap.bryant.webtv.net>
Source record: 149773

Brokebob wrote:
"Any suggestions?"

I used to erect fully assembled 70-foot radio towers with great frequency. These were hoisted at their center. A tower must be stiffened with an attached pole so it doesn`t kink.

The hoist for the tower was atop a pole slightly more than half the height of the tower. The hoisting pole is temporarily guyed.

The hoisting pole was erected using a Mack truck equipped with a power winch and an A-frame. It was snatched near its middle and a tag-line was used to verticalize the pole alongside the tower base.

The tower was then snatched near its middle and a tag-line was used to pull the tower bottom section over the tower base.

A similar method can be used to place the pole in a hole.

Best regards, Richard Harrison, KB5WZI

1982. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:47:52 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C562978.FFABB67A@IEEE.org>
Source record: 149769

Richard Harrison wrote:
>
> Reg wrote:
> "Vertical antennas don`t begin to squirt power at high angles until
> height is one wavelength or more."
>
> Reg may have forgotten to include a word or two in his statement.
> Broadcast stations limit their towers to 5/8-wavelength unless a
> phase-inversion is used beyond 5/8-wave because they "begin to squirt
> power at high angles". This is clearly shown in Fig. 23-25 (d) on page
> 887 of the 1955 edition from Terman.

Yep, a 5/8WL antenna squirts considerable power out at a TOA around
sixty degrees. I hear that high angle radiation can play havoc
with fringe area reception of AM signals.
--
cheers, CAM http://www.qsl.net/w5dxp

1983. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:50:27 UTC
From: R E Heath <re.heath@sympatico.ca>
Message-ID: <3C562A13.4E551145@sympatico.ca>
Source record: 149770

```
" .Your Friend Bill" wrote:
>
> Brokebob wrote:
> >
> > What is the biggest utility pole you have experienced setting? I plan on
> > setting a 40 footer using a back hoe to dig a ditch eight foot deep and
> > tapering out to nothing at about 18 feet or so. Plan on rolling the butt end
> > into the 8 foot end then using the back hoe to push or pull the top end up.
> > Of course will have to back fill the thing by hand. Any suggestions?
> >
> > brokebob@aol.com (broke=not working, retired=not working, retired=broke)
>
> If you're having to pay for the backhoe it might be cheaper just to find
> a pole contractor to do it.
> -Bill

... and if you do use a backhoe to push it up, be VERY, VERY careful.
Lives have been lost with capers just such as that. I know of an
experienced logger that lost his life a few years ago when a tree fell
on him that he was trying to juggle.

73, Bob VA3BZ, W8BZ.
```

1984. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:51:25 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <0Sp58.114568$Ee7.8142291@e3500-atl1.usenetserver.com>
Source record: 149771

I missed the original post, but I would have to go with the
Screwdriver--that is, if you wish to
operate all bands. Assuming that is the case, you can buy some versions of
screwdrivers for
no more than it would cost to buy, either the Hustler mast and resonators,
or the Hamsticks.
The hamsticks, IMO, are the absolutely WORST choice although they work
fairly well up on
20 meters and above. The truth is, you just aren't going to get a "sooper"
signal with a pleasant,
skinny, unobtrusive mobile antenna. Because I know that a mobile antenna is
only about 18%
efficient (if that much) when referenced to a half wave dipole; after all,
you are taking 120+ feet
of antenna and squeezing it down into 9 feet or less--I tend to go for the
Biggest, Ugliest antenna I can get!

For single band work, I'd go for Henry Allen's Texas Bugcatcher. For
multi-band, it's the
screwdriver because it IS flexible and is extremely adaptable. By that, I
mean that, since the
antenna's environment is usually fluid and changing, the antenna can be
resonated to take into
account the changes--often with just a bump of the control switch, whereas,
the HI efficiency
(Q), fixed-tuned antenna cannot be changed. In spite of the higher
efficiency, the fixed tap antenna's performance degrades while the
screwdriver can correct for such. And again, by
the time you buy a Hustler fold-over and 7-8 resonators, you can buy a
screwdriver. Same thing with the hamsticks. They are simply more BANG for
the buck.

73

Jerry
K4KWH
www.qsl.net/k4kwh

Dick Carroll <dickc58@worldnet.att.net> wrote in message
news:3C571FF4.3949EABC@worldnet.att.net...
>
>
> Michael J Talkington wrote:
>
> > Hello,

> > What is the best antenna for HF.
> > A)Hustler
> > B)Comet
> > C)Alpha Delta
> > D)Hamstick
> > E)Other please specify.
> > What I am Looking for is best performance on 10 thru 80
> > whether they have to be put up each time I change bands
> > or what they dont have to be Multiband.ButI want best performance
> > and or bandwidth.Thanks Mike

>

1985. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 04:57:10 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <Z1q58.108571$Y17.6532695@e3500-atl2.usenetserver.com>
Source record: 149772

Cecil,

You may have meant it as a joke, but there are *some* of us who DO use the
MFJ 259 to tune the antenna via a 2-position coax switch. Actually, it
works pretty well as manual tuning
goes. I am saving my pennies for the AmCom controller, tho!

Jerry
K4KWH
CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C55EA00.CDBE6329@IEEE.org...
> Alan White wrote:
> > I have a follow-up question: How do you tune them without transmitting?
I
> > guess you can get in the ballpark by listening, but the final tweaking?
>
> Well, while driving down the road, you tune the screwdriver using an
> MFJ-259. Then disconnect the MFJ and connect your transceiver.
> Just kidding. I choose an empty frequency, hit the antenna tune button,
> and watch the SWR meter for a dip in reflected power.
> --
> cheers, CAM http://www.qsl.net/w5dxp

1986. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 05:23:08 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C577540.841C16DF@worldnet.att.net>
Source record: 149774
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

CAM wrote:

> Dick Carroll wrote:
> >
> > CAM wrote:
> >
> > > VE9SRB wrote:
> > > > Is there anyone
> > > > on this NG that stopped learning when they were 22 years old?
> > >
> > > There is one person who says it is OK to rest on one's laurels
> > > after having achieved an extra class license. :-)
> >
> > With regard to amateur radio licensing what else is there for him to
> > do?
>
> Contribute something of value to the Amateur Radio Service?

???? And that will get an Extra advanced to what? The context was amateur
radio
licensing. Of course your Troll light came on and off you went, as always.

Sure is a shame you still feel inadequate because you never could do 20wpm.

1987. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 05:27:01 UTC
From: mcduffie@xactcom.net
Message-ID: <iicc5ukhm1qhcla9lag01gd1bvtr0fu0ij@4ax.com>
Source record: 149775

On Tue, 29 Jan 2002 00:21:05 -0400, " .Your Friend Bill"
<none@coqui.net> wrote:

> If you're having to pay for the backhoe it might be cheaper just to find
> a pole contractor to do it.

REA charges $40 per pole to punch the hole and set the pole here. YMMV

gm
--
There is no x in my ISPs domain name.

1988. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 05:57:04 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C577D35.8732EC0E@worldnet.att.net>
Source record: 149776

"Peter O. Brackett" wrote:

> Thread:
>
> Marconi was a Nobel Prize winner. Does that count?
>
> I wonder what he did with the prize money?

Bought a better radio???

1989. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 06:10:15 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C563CC6.A20849EC@att.net>
Source record: 149777

It was around the early 50's. At the time I was still in undergrad school
and was a member of both the AIEE and the IRE. They then merged to form the
IEEE. That may have been as early as the spring of 1950 - just can't
remember that far back!

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Richard Harrison wrote:
>
> Chip, N1IR wrote:
> "When did the IRE merge with the IEE(E)?"
>
> The Institute of Radio Engineers merged with The American Institute of
> Electrical Engineers to form The Institute of Electrical and Electronic
> Engineers, Inc. in the latter part of the 20th century. I forget the
> date.
>
> The IEE is a UK organization, I believe.
>
> Best regards, Richard Harrison, KB5WZI

--

1990. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 06:24:32 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a35fjj$15ln98$1@ID-124126.news.dfncis.de>
Source record: 149779

Richard Harrison wrote
> Broadcast stations limit their towers to 5/8-wavelength unless a
> phase-inversion is used beyond 5/8-wave because they "begin to squirt
> power at high angles".
==========

Rich, can you remember what fraction of total radiated power is diverted downwards, towards the horizon, by a phase inversion beyond 5/8-wave? A number please. It is of some importance in the present context.

Reg.

1991. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 06:27:48 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C578468.D1124299@worldnet.att.net>
Source record: 149778

Reg Edwards wrote:

> My Dream of the ideal DX antenna for the lower HF bands is a 100-feet
> vertical above a ground system of 25 or 35 shallow-buried radials.

And how long would those 25 or 30 shallow-buried radials be?
(It's a serious question, I have a 60 ft tower up with 15 ft of mast above it mounting a HF triband and 2mete yagis for toploading that I'm thinking of shunt feeding).
Note that I don't wish to make the radials any longer than needed, even at cost of some small amount of efficiency.

1992. Re: South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 06:46:47 UTC
From: "Massimo Tegner, i3tgw" <i3tgw@libero.it>
Message-ID: <rzr58.84$ia6.3682@twister2.libero.it>
Source record: 149780
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

How many days they will operate from South Georgia ?

--
Massimo Tegner, i3tgw
i3tgw@libero.it
max.tegner@tiscalinet.it

"Charles Johnston" <ctj92@cableone.net> ha scritto nel messaggio
news:3c54ad50$1@news.bnb-lp.com...
> VP8GEO (South Georgia Island) came up on 20m CW around 00:02 UTC
> 28-Jan-2002
>
> QSL via VE3GCO
>
> VE3GCO
> THE MAPLE LEAF RADIO SOCIETY
> 5 MCLAREN AVENUE
> LISTOWEL, ON N4W 3K1
> CANADA
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

1993. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 07:27:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C564ECE.E169B38B@eznec.com>
Source record: 149781

It looks like we need a course in EE school to teach people how to use the Web. It took about two minutes to locate the fact that the IEEE was merged from the IRE and AIEE in 1963. See http://www.ieee.org/organizations/history_center/historical_articles/history_of_ieee.html for example.

Roy Lewallen, W7EL

1994. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 07:31:04 UTC
From: SideBand <ab8lr@csotbs.org>
Message-ID: <3C564FB8.9020904@csotbs.org>
Source record: 149782

Ouch!

-SSB

Roy Lewallen wrote:

> It looks like we need a course in EE school to teach people how to use
> the Web. It took about two minutes to locate the fact that the IEEE was
> merged from the IRE and AIEE in 1963. See
>
http://www.ieee.org/organizations/history_center/historical_articles/history_of_ieee.html
> for example.
>
> Roy Lewallen, W7EL
>

--
73 de AB8LR, Chris

http://csotbs.shopiwon.com/ for great deals on computer products.

1995. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 08:20:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a35mab$15r1uh$1@ID-124126.news.dfncis.de>
Source record: 149783

With a vertical antenna height of 75 feet, assuming an average sort of soil
resistivity of 150 ohm-metres, 16 radials of length 50 feet will result in a
radiating efficiency of -

Effncy. Freq. Height
-------- -------- -------------
96% 10 MHz 0.76-waves

96% 7.1 MHz 0.54-waves

83% 3.75 MHz 0.29-waves

39% 1.9 MHz 0.143-waves

Data obtained using program ENDFEED.
The program also computes L and C values for a tuner at each frequency
located at base of antenna.

For efficiency with different number of radials of different lengths with
other values of soil conductivity use the program.

Regards, Reg, G4FGQ

==========
Dick Carroll wrote
> Reg Edwards wrote:
> > My Dream of the ideal DX antenna for the lower HF bands is a 100-feet
> > vertical above a ground system of 25 or 35 shallow-buried radials.
>
> And how long would those 25 or 30 shallow-buried radials be?
> (It's a serious question, I have a 60 ft tower up with 15 ft of mast above
it
> mounting a HF triband and 2mete yagis for toploading that I'm thinking of
shunt
> feeding).
> Note that I don't wish to make the radials any longer than needed, even
at cost
> of some small amount of efficiency.
>

1996. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 09:00:02 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a35odf$90a$1@newsserver.cilea.it>
Source record: 149784

You can actually minimize the feed line radiation by slipping over the coax a suitable number of ferrite toroids (i.e. by building an efficient common-mode choke); this is standard practice in Antenna works. I trust this will be done during the tests in Italy.

Michele IZ2EAS

" Uncle Peter" <radioconnectionNO@cox.netSPAM> ha scritto nel messaggio news:dDo58.1057$r55.49798@news2.east.cox.net...
> Unless feedline radiation--which is reputedly responsible
> for much of the antenna's gain--is accounted for and eliminated in
> the tests they won't have much validity. I think Roy suggested some
> methods for measuring the common mode current on the coax.
>
> Peter
>
>

1997. WTB HF Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 10:36:38 UTC
From: J Titcomb <kimoloka@hawaii.rr.com>
Message-ID: <WWu58.6412$lb.1416732@typhoon.hawaii.rr.com>
Source record: 149785

Aloha,
Looking for Cushcraft R8 or similar vert ant in good shape.

Tnx,
Jim KH6IX

1998. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 10:49:07 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a35un3pvm1@serra.unipi.it>
Source record: 149786

Richard Clark <kb7qhc@attbi.com> wrote:

> Start at:
> http://www.antennex.com/shack/
> and select the line item:
> 45 Jack Belrose's CFA Experiments By Jack L. Stone, Publisher
> which should lead you to:
> http://www.antennex.com/shack/Jun00/jb_cfa.htm
> a frame of the main page.
> using the second link above will keep you from observing other CFA
> articles, also grist for the mill.

thanks

> When I caught glimpse of the studies performed there, Gravity waves,
> it was like deja-vu all over again (I've researched this topic for a
> super-conductor manufacturer). However, it does give every appearance
> of the terrain Jack Belrose chose. You might want to do an RF
> background noise test just to confirm the local scientists won't cause
> confusing signals. It seems unlikely given the nature of the
> instrumentation and their claims of quiet environment. In that
> regard, you need to seriously consider how much your experiments may
> intrude on the operation of their system.

We are going to perform background noise tests next saturady, also one
of the scientists working there is part of our "group" so he probably
is aware about possible interference we might cause.

>>We intend to test the EH antenna (brought by Stefano himself) against
>>a vertical half wave radiator (in the 14 MHz band) and against a
>>commercial dummy load. The receiving station will be located at about
>>4 Km from the transmitting station. The receiving station will have
>>a short vertical antenna (0.5 to 1 meter long) to approximate an
>>isotropic antenna.

> Look into the Inverted F at:
> http://www.qsl.net/kb7qhc/antenna/Inverted%20F/index.htm
> (not that I think it would offer any advantage)

> You might want to try a vertical monopole the same elevation (above
> ground) as the EH with the monopole as tall (same height) as the EH.
> After-all, the proponents suggest the EH should be better in
> performance; otherwise there is no commercial advantage for the EH
> given the complexity of construction and difficulty of tuning the EH
> over this simple alternative.

well, we might as well try something like this, I hope a standard tuner
can tune such a small antenna.

> I say this because you will be measuring the ground wave (line of
> sight too) of a 20M source. I would suspect that comparison to a
> standard vertical at this high frequency changes the mechanics of
> propagation sufficiently to make this a new ball game. Commercial
> claims are at 200M, Jack tested at 80M and you guys have cut that by a
> fourth to a tenth with 20M.

So are you suggesting us to not use a well know reference antenna?
We are chosing the frequency in order to have the possibility to
use the half wave vertical monopole. We could test the antenna
even at 7 MHz, but in that case all we can erect is a quarter wave
groundplane with 30 to 40 full size radials lawn just over the ground.

> Using only the S-meter has very little value for serious work. Roy
> has often suggested one of the more accurate means for using an
> S-Meter for comparisons. That is to place a calibrated step
> attenuator in the receive antenna path, but only in that portion of
> the line that is matched to 50 Ohms. This means you MUST match the
> receiver input to the sense antenna, and both MUST present a
> non-reactive 50 Ohm system to the inserted attenuator.

yes, that makes sense and we probably end up doing that with a matched
short vertical and step attenuator.

> Set the attenuator to a value that is NOT 0dB insertion loss. Run a
> test signal between the antenna under test and the sense antenna to
> find an S-Meter reading that is both repeatable and presents the
> greatest variation in meter needle swing for, say, a 1dB change at the
> step attenuator. The problem with this method is found in the
> sensitivity of the meter. It varies along the scale which should be
> entirely ignored beyond the s9 = 50ï¿½V specification.

the scale has been calibrated with HP digital spectrum analyzer and
his signal generator (I forget the model number of the instrument),
the owner can tell the difference in dB between
each two S-steps. However the external step attenuator will be used.

> The technique here is akin to the balance of a bridge, but this
> simplistic analogy hides the fact that balance meters are extremely
> sensitive and this method that attempts to mimic it is generally
> suitable only to the first pass test. The test I describe in the
> paragraph above seeks to find the most sensitive relation between the
> meter and the variation of 1dB somewhere in a continuum of power
> levels (this is why you start with a non-zero dB insertion loss as
> this may have to change widely too).

> When you find this "sweat spot" where the meter is most sensitive,
> mark it so that the setting (your reference) can be recovered through
> the manipulation of the step attenuator. At this point you have
> reduced all the variables of the measurement to the minimum of those
> introduced by the step attenuator, and the operator's ability to

> return to that reference mark. The degree of resolution in the
> measure is a function of the meter sensitivity. With luck, you might
> get 0.5dB resolution (not to be confused with accuracy).

> Hi Francesco,

> More considerations to observe:
> One measurement is meaningless;
> Two measurements is confusion;
> Three measurements will give you an approximation;
> Five measurements begin to give you accuracy.

> Discarding the high and low readings is generally acceptable for more
> than five measurements, but only if they are obvious outliers.

> Once you have performed at least five measures (this means a complete
> break-down and reassembly of the test configuration each time),
> reverse the two (sense and EH) antenna's positions and repeat the test
> suite again. Hopefully this will balance the site's bias toward one
> configuration over the other, if indeed there is a bias. However,
> this is not sure, and you should also attempt to rotate the path by 60
> to 120 degrees and repeat the two test suites of five measurements
> once again. This path rotation should reduce local perturbations to
> the results.

this will take some time, but indeed I agree with you.

> Repeat for the sense and Standard antenna.

> You should note that the number of measurements is now up to 40.
> Given the growing number, I would suggest DO NOT repeat measures in
> place, but rather swap sites, and/or rotate sites between EVERY
> measurement to fill in the test grid of 40 measures. This may seem
> excessive, and for the purposes of amateur activity I would offer that
> you could get by with 20 or so. Any less comprehensive test scenario
> will not be very compelling even when the numbers are obviously
> separable between the two (the EH and its substitute).

> If this still seems overwhelming (Metrology is NOT for the anxious),
> you might get away with boxing the compass (forgive my language play;
> that is: rotating the path described above) and taking as little as 8
> measurements WITH NO REJECTED DATA. I must caution that those 8
> numbers will have to be clearly separable to justify this small
> survey. The advantage to the rotation is that you can quit with 8
> when it becomes obvious 40 would only provide redundant results.

I fully understand what you mean. However you must consider that we
are just a group of amateur radio operators, with some professional
skills (everyone is at least engineer or physic researcher) and that
we are doing that on our spare time (read weekends) and also that
nobody will give us a cent for that (which isn't a problem after all,
but yet nobody between us believe this antenna is worth the effort
nonetheless we are going to test it carefully).

After some preliminar test we'll know how many measures we can reasonably take. I suggested Stefano to make some professional researchers and universitary labs test his antenna, but it seems they didn't take him seriously (I have doubts, but I don't know what he actually did).

> So much for method. Now to accuracy.

> You MUST exhibit at least 10dB S+N/N under all circumstances; and only
> for highly separable data. 20dB is preferred. As this style of
> measurement is generally known as the substitution method, once you
> drive out the controllable sources of error (like front end overload,
> poor meter sensitivity, local field perturbation, lack of symmetries)
> your step attenuator is the determinant of accuracy. This device is
> easily calibrated and verifiable - even if it is a homebrew! The
> substitution method is one of the most powerful ways to obtain
> precision and accuracy (and in fact is the basis of the test at the
> larger level between the EH and the Standard antennas).

> Now for an alternative for more precision.

> There are far more sensitive methods for measuring than the one
> described above (which is probably adequate). This variant I will
> offer allows you to skip the requirement for matching the receiver (an
> absolute necessity above). There are many instruments that are based
> around 1000 Hz tuned detectors and bridges. The variation would have
> you modulate the transmit signal with 1000 Hz and use the step
> attenuator at the audio output where you can use some of this tuned
> instrumentation. The tuning allows you to reject interference (razor
> sharp in comparison to the original method) and gives you access to
> meters of far more sensitivity (often orders of magnitude more
> sensitive). The methods described above differ only in that the step
> attenuator has moved. As such ALL considerations MUST be met. For
> this variant, you might want to use a step attenuator with 0.1dB
> resolution. With some instrumentation, this step attenuator function
> may be found in the instrument's own range switch. Further, such
> instrumentation may allow you to make a direct difference measurement
> instead of performing the substitution to re-achieve the reference
> mark; however I would still use the substitution method as there are a
> lot of variables that could muddy the water for direct measure.

I believe we can't find suitable instrumentation for this test in short periods of time.

> Now. as to terms employed (they DO NOT all mean the same thing):

[...] I skip this part in the quoting. Those terms are all very clear to me :-)

> You who are about to measure - we salute you.

To be honest I don't feel confortably enough in the part of the "measurer", Stefano chosed me (and I still don't know why, probably because we are in the same area). I would have preferred him to let

test his antenna by universitary researchers.

Thanks for all the suggestions.

73
Francesco IZ5DWF

1999. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 11:02:57 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a35vh1$qr9$1@serra.unipi.it>
Source record: 149788

Roy Lewallen <w7el@eznec.com> wrote:

> 1. Provide a way to measure the current on the outside of the feedline.
> It's easy to do -- put a high-permeability ferrite toroid (such as type
> 43 or 70-series) over the coax. Wind a ten turn secondary, connect the
> secondary to a piece of coax to run to a scope or meter, and terminate
> it with 50 ohms. The current on the coax in amperes will be 2 * the
> voltage across the 50 ohm resistor. You can check the calibration if you
> want by putting it on one leg of the reference dipole, near the
> feedpoint, where the current will be known, given the impedance and
> applied power.

that's something I didn't think of... We'll surely make such tests too!

> 2. Besides the comparison with the half wavelength vertical dipole,
> compare the EH antenna to a short vertical antenna placed in exactly the
> same position and fed with exactly the same feedline. A fat vertical
> would be appropriate.

ok, you're the second on who asks for this. I'll try to obtain such a
fat vertical.

> 3. Disconnect the "D plate" or whatever the equivalent is in an EH
> antenna, like Trainotti did, and see what happens to the signal
> strength.

> 4. Take lots of notes, describing everything you can. Take lots of
> pictures, too, if you can.

we'll bring digital camera and probably a tape recorder.

> 5. Make lots of measurements. The more, the better.

> 6. Try to anticipate what criticisms could be made of the measurements,
> and devise your tests to minimize these.

that's the hardest part...

> Some criticisms of previous measurements of the CFA are:

> 1. Assumptions are made about the ground conductivity to determine what
> the field strength from a quarter wave radiator would be. The way to
> avoid this criticism is to make measurements of a quarter or half wave
> antenna at exactly the same position as the EH antenna, within a short
> period of time, so the ground conductivity is the same for both.

we'll do this way.

> 2. Feedline radiation. You'll be using baluns, and should measure the
> current all along the feedline to make sure it's negligible.

> 3. Poor knowledge of the actual power being supplied to the antenna. A
> directional wattmeter should prevent this problem.

we have a bird one, Stefano can bring his directional wattmeter and
we can compare the readings.

> 4. Measurements at only a few field strength points. It's well known in
> the AM broadcast industry that measured field strength can vary
> considerably from point to point, and not follow theoretical curves,
> often due to reradiation from such things as power poles. Consequently,
> broadcasters make many measurements at many points. You should do this
> if possible. If not possible, then it's even more important that the
> test antenna and reference antenna be positioned at exactly the same
> place for the measurements. If it's not possible or practical to
> position the antennas at the same place, then what you should do is make
> the measurements, exchange the antenna positions, then repeat the
> measurements. Don't be satisfied until you get very close to the same
> results with the antenna positions reversed.

I think the more practical thing to do for us is to move the receiving
station in different points (even some tenths of different points).
If the reference antenna and the EH will be placed in very (more than
half wavelenght) positions we'll try with swapped positions as well.

> When the tests show that the EH antenna works as claims, you shouldn't
> have any trouble finding an investor to put up the money for some more
> elaborate tests at a certified test range. And after those results come
> back and are published, it won't be any time at all before the EH
> inventor and supporters are rich beyond imagination.

Well, if *I* were the inventor I would put my invention in the hands
of professional testers in the first place... But well, I didn't invent
anything in my life :-)

Thanks
Francesco IZ5DWF

2000. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 11:04:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5681A1.8615F4AC@eznec.com>
Source record: 149787

Yes, it's very important to reduce the feedline radiation to a very
small value, but it's also important to measure the common mode current
to verify that this has been successfully done. The measurement is easy
to make.

Roy Lewallen, W7EL

Michele IZ2EAS wrote:
>
> You can actually minimize the feed line radiation by slipping over the coax
> a suitable number of ferrite toroids (i.e. by building an efficient
> common-mode choke); this is standard practice in Antenna works. I trust this
> will be done during the tests in Italy.
>
> Michele IZ2EAS

2001. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 11:06:54 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a35voe$qr9$2@serra.unipi.it>
Source record: 149789

J. Harvey <JM001.Harvey@sympatico.ca> wrote:
> "Richard Clark" provided much detailed advice:

> "Roy Lewallen" provide some more:

> Are those guys 'over there' planning to gather a sufficient number of
> measurements of the EH Antenna's gain (for example) in both dimensions
> (azimuth and elevation) such that someone will be able to plug the numbers
> into MS-Excel and do some simple numerical "integration over the sphere" ?

I think we can hardly fly over the antenna...
Sorry, we can just go around it at ground level.

73

Francesco IZ5DWF

2002. Re: Stacking Tri-Banders

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 12:17:09 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5691B0.D3AEDC59@bellatlantic.net>
Source record: 149790

I'll have to check my resources, but a wavelength apart would be a huge problem. I was thinking maybe 1/4 wave (~16') of spacing on 20 meters with a phasing line between them would do it. Phasing line length could be adjusted for each band. There are lots of cheap tri-banders out there, older ones are practically give aways. Friend of mine has an Old TH-4 (Guess it's 35 years old??) that still works fine with maintenance. Even if you only got say 2dB additional gain, 9dB total on 20 is in "Big Gun" territory.

'73 KI4Z

Dennis Kaylor wrote:

> hey mark
> the hard part about stacking a tri band beam is the spacing between the
> two yagis i suspect you would have to stack it with 20 meters in mind but
> as for the dissimilar yagis it would be sorta a problem with a good clean
> pattern but you should be able to find a couple of mosley ta33 or a pair
> of cushcraft A3's for somewhere under two hundred bucks but keep in mind
> the two antennas will need to be roughly a waveleght apart and on 20
> meters thats a lot of mast to use
> let me know what you find out and how it works
>
> Mark Hall wrote:
>
> > How about comments on stacking inexpensive, used, possibly non matched
> > tri-banders for a Big - Gun Signal on the cheap? Worth it?
> >
> > '73 KI4Z

2003. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 12:43:18 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5697D0.16B5DD70@bellatlantic.net>
Source record: 149791

Of course it's worth a try. Traps are parallel resonant (Hi-Z at resonance) at a frequency. They are not Low Pass filters. Low pass LC filters drop off at only 6 dB per octave which would be bad news as a trap. Hard to believe a trap designed for one frequency would by chance work as a trap at it's 5th harmonic. I think the trap will work more as a lossy series capacitor. The Z of the L will be sky high, and the capacitor Z will be very low. If anything you're working the 21st harmonic of the 40 meter vertical polluted with series capacitance. It will radiate something, but my money is on dummy load. Anyone ever try loading up a 40 meter dipole on 2? Tell us how it works!

'73 KI4Z

Mark Hall wrote:

> Sounds like a dummy load to me.. you know a 50 ohm resistor will give you
> great VSWR, but radiate like a dummy load..
>
> '73 KI4Z
>
> rasw wrote:
>
> > ...that my Hustler 4BTV has a 1.5:1 SWR on 146 MHZ, would there be anything
> > wrong with using it there?
> >
> > Would, at least, my radio be happy?

2004. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 13:05:38 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C569E22.948896E4@dialpoint.net>
Source record: 149792

As long as the SWR is low it will not hurt the radio. How well it will receive and transmitt is unknown. It might work well enough to do what you want or it might not get out across the street. Hook it up and see if you get the desired results.

rasw wrote:
>
> ...that my Hustler 4BTV has a 1.5:1 SWR on 146 MHZ, would there be anything
> wrong with using it there?
>
> Would, at least, my radio be happy?

2005. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 13:05:49 UTC
From: KC8PMX <kc8pmx@tm.net>
Message-ID: <N6x58.660$TS2.410453@monger.newsread.com>
Source record: 149793
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

I think that what Cecil was trying to say is that even though a person may achieve passing an extra class license test, there is no reason why a person cannot further their individual education. You cannot show me one Extra Class licensee, (regardless of year of license) that absolutely knows EVERYTHING about radio and electronics/electricity. There is so much to learn, that not one person could ever amass all the knowledge about the above subjects in two lifetimes. Plus there is the experimental factor. A licensee, regardless of license class, is encouraged (at least by me) to experiment, come up with something new. After all, had other not have done this, alot of the technology we appreciate now would have never been.

Ryan KC8PMX

"Dick Carroll" <dickc58@worldnet.att.net> wrote in message
news:3C56F764.D4F47C3E@worldnet.att.net...
>
>
> CAM wrote:
>
> > VE9SRB wrote:
> > > Is there anyone
> > > on this NG that stopped learning when they were 22 years old?
> >
> > There is one person who says it is OK to rest on one's laurels
> > after having achieved an extra class license. :-)
>
> With regard to amateur radio licensing what else is there for him to
> do? The same fellow also said if FCC started up a new Super Extra class
> he'd get that one, too. Sorry to spoil your fun, but your Class Envy
> still continues past your
> finally acheiving the Extra class yourself. Pity.
> Dick
>

2006. Re: Stacking Tri-Banders

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 13:57:45 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C56AA58.8555D748@tampabay.rr.com>
Source record: 149794

hey mark
its a neat idea a friend of mine wound up with 2 mosley ta33s and was thinking of doing the same thing but he has never gotten around to it
the nice thing about ham radio is not to much of it is cast in stone so all i can suggest is to try is and find out
my knowledge is limited to VHF stuff
all i can say is try to stick with 2 of the same antenna or atleast the same type of feed points you know both gamma matchs or both T matches
and they should be the same boom lenght or the patterns might be a bit weird

Mark Hall wrote:

> I'll have to check my resources, but a wavelength apart would be a huge
> problem. I was thinking maybe 1/4 wave (~16') of spacing on 20 meters with
> a phasing line between them would do it. Phasing line length could be
> adjusted for each band. There are lots of cheap tri-banders out there, older
> ones are practically give aways. Friend of mine has an Old TH-4 (Guess it's
> 35 years old??) that still works fine with maintenance. Even if you only got
> say 2dB additional gain, 9dB total on 20 is in "Big Gun" territory.
>
> '73 KI4Z
>
> Dennis Kaylor wrote:
>
> > hey mark
> > the hard part about stacking a tri band beam is the spacing between the
> > two yagis i suspect you would have to stack it with 20 meters in mind but
> > as for the dissimilar yagis it would be sorta a problem with a good clean
> > pattern but you should be able to find a couple of mosley ta33 or a pair
> > of cushcraft A3's for somewhere under two hundred bucks but keep in mind
> > the two antennas will need to be roughly a waveleght apart and on 20
> > meters thats a lot of mast to use
> > let me know what you find out and how it works
> >
> > Mark Hall wrote:
> >
> > > How about comments on stacking inexpensive, used, possibly non matched
> > > tri-banders for a Big - Gun Signal on the cheap? Worth it?
> > >
> > > '73 KI4Z

2007. Re: Stacking Tri-Banders

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 14:16:51 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C56ADBC.804C8E64@bellatlantic.net>
Source record: 149795

Good point about the matching and boom length.. seems the GetAroundToIt factor is the biggest problem with stuff like this!

'73 KI4Z

Dennis Kaylor wrote:

> hey mark
> its a neat idea a friend of mine wound up with 2 mosley ta33s and was thinking of
> doing the same thing but he has never gotten around to it
> the nice thing about ham radio is not to much of it is cast in stone so all i can
> suggest is to try is and find out
> my knowledge is limited to VHF stuff
> all i can say is try to stick with 2 of the same antenna or atleast the same type
> of feed points you know both gamma matchs or both T matches
> and they should be the same boom lenght or the patterns might be a bit weird
>
> Mark Hall wrote:
>
> > I'll have to check my resources, but a wavelength apart would be a huge
> > problem. I was thinking maybe 1/4 wave (~16') of spacing on 20 meters with
> > a phasing line between them would do it. Phasing line length could be
> > adjusted for each band. There are lots of cheap tri-banders out there, older
> > ones are practically give aways. Friend of mine has an Old TH-4 (Guess it's
> > 35 years old??) that still works fine with maintenance. Even if you only got
> > say 2dB additional gain, 9dB total on 20 is in "Big Gun" territory.
> >
> > '73 KI4Z
> >
> > Dennis Kaylor wrote:
> >
> > > hey mark
> > > the hard part about stacking a tri band beam is the spacing between the
> > > two yagis i suspect you would have to stack it with 20 meters in mind but
> > > as for the dissimilar yagis it would be sorta a problem with a good clean
> > > pattern but you should be able to find a couple of mosley ta33 or a pair
> > > of cushcraft A3's for somewhere under two hundred bucks but keep in mind
> > > the two antennas will need to be roughly a waveleght apart and on 20
> > > meters thats a lot of mast to use
> > > let me know what you find out and how it works
> > >
> > > Mark Hall wrote:
> > >
> > > > How about comments on stacking inexpensive, used, possibly non matched
> > > > tri-banders for a Big - Gun Signal on the cheap? Worth it?

> > > >
> > > > '73 KI4Z

2008. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 14:28:39 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <8u9d5ukjc9s0k63tp539ha37ms0jpnrkka@4ax.com>
Source record: 149796

On Mon, 28 Jan 2002 12:48:41 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>The funniest thing about this thread to me has been the denial of
>conventional wisdom. The market for the incredible among those who want
>to be gullible is big. Sales of pulp magazines, with stories of alien
>abductions etc. are good.
>
>In this thread there has been a receptive audience for:
>1. Amateur is better than professional.
>2. Trial and error are better than calculation.
>3. A technician is better than an engineer.
>4. Engineers can`t solder.
>5. A low grade point average is better than a high grade point average.
>
>Continuing a list of alleged paradoxes is unnecessary. An exception does
>not disprove a general rule.

I don't know what you were reading, but I didn't see this in the thread.

1) Amateur is not better than professional. It is merely an indicator that someone is probably genuinely interested in what he or she is doing. When someone takes such an interest in their work that they do it for (or have done it) for fun, you stand a pretty good chance of finding someone who takes pride in what they do. That's all.

2) Trial and error is often a maligned procedure. When environmental and system limits get less well known, sometimes this procedure is the only way out. You would be wise not to sneer at such methodology. At the same time, it's merely one tool in a very large kit of techniques engineers ought to know how to use.

3) A technician often knows something many engineers are woefully ignorant about: THE REAL WORLD PERFORMANCE. No, they're not "better" (whatever that means). They are important resources that you'd be wise not to ignore.

4) Soldering is a skill that is orthogonal to electrical engineering. Knowing what it is and how it's done is more important than being able to do it. Besides, these days it is done with machines...

5) I think most of us know folks from all walks of life who are really good at taking paper tests but haven't a clue about what they're doing. That's not to say that those who get low grades are good, merely that the grades you get in school don't correlate well with

real world performance.

The basic facts are these: Yes, you can have a person who is strictly an engineer who knows nothing of how technicians do their jobs. And as long as this person is designing a single use device which will be thrown away instead of being maintained, they'll do just fine.

However, an engineer who understands how technicians do their work has an edge over one who doesn't. They can design more maintainable products that technicians can work with and diagnose easier. It's a matter of knowing who your customers are.

Yes, you can still get a good engineer from someone who has no technical field experience. However, they'll have to work much harder at it than someone with a feel and a background of what the real world looks like.

That's been my experience as both a technician and as an engineer. They are both worthy positions. I feel that a good technician ought to be worth at least as much as a good engineer. However, few Pointy Haired Bosses understand what a good technician (or even a good engineer) can do for them. Without this knowledge, most PHBs fall back on the defective notion that a formal education somehow indicates intelligence and skill. Thus, technicians often get the short end of the stick.

That's what most of the people here are saying. I'm surprised you didn't seem to get it...

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2009. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 14:39:28 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C56B420.9781DB69@IEEE.org>
Source record: 149797
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Dick Carroll wrote:
>
> CAM wrote:
> > Contribute something of value to the Amateur Radio Service?
>
> ???? And that will get an Extra advanced to what?

To a position of respect within the Amateur Radio Service. If an Extra chooses to rest on his laurels, i.e. contribute nothing of value after obtaining his ticket, he doesn't deserve respect. What is important is what one accomplishes *after* obtaining one's license. The same concept applies to a EE degree.
--
cheers, CAM http://www.qsl.net/w5dxp

2010. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 14:41:59 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C56B4B7.5A65FB0@IEEE.org>
Source record: 149798
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

KC8PMX wrote:
>
> I think that what Cecil was trying to say is that even though a person may
> achieve passing an extra class license test, there is no reason why a person
> cannot further their individual education. You cannot show me one Extra
> Class licensee, (regardless of year of license) that absolutely knows
> EVERYTHING about radio and electronics/electricity. There is so much to
> learn, that not one person could ever amass all the knowledge about the
> above subjects in two lifetimes. Plus there is the experimental factor. A
> licensee, regardless of license class, is encouraged (at least by me) to
> experiment, come up with something new. After all, had other not have done
> this, alot of the technology we appreciate now would have never been.

Yep, an Extra class licensee doesn't have any laurels to rest upon until
he has contributed something of value to the Amateur Radio Service.
--
cheers, CAM http://www.qsl.net/w5dxp

2011. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 14:44:22 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C56B546.B3663830@IEEE.org>
Source record: 149799

"George, W5YR" wrote:
> It was around the early 50's. At the time I was still in undergrad school
> and was a member of both the AIEE and the IRE. They then merged to form the
> IEEE. That may have been as early as the spring of 1950 - just can't
> remember that far back!

It must have been late 50's or early 60's. I was a member of the IRE
while I was at Texas A&M (1955-1960). I still have the lapel pin.
--
cheers, CAM http://www.qsl.net/w5dxp

2012. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 14:54:42 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C56B7B2.341D37A3@IEEE.org>
Source record: 149800

Jerry Oxendine wrote:
> You may have meant it as a joke, but there are *some* of us who DO use the
> MFJ 259 to tune the antenna via a 2-position coax switch. Actually, it
> works pretty well as manual tuning goes.

Jerry, you have given me an idea. It would be easy to use the voltage
driving the SWR meter inside the MFJ259 to remove the voltage from
the screwdriver motor - and presto, an autotuner function for a
screwdriver. Latch one of two relays with the up/down PB and
unlatch it when the SWR voltage inside the MFJ259 falls below
a certain value. That's about $10 worth of parts external to
the MFJ259.
--
cheers, CAM http://www.qsl.net/w5dxp

2013. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 15:00:26 UTC
From: Alan White <alannc44@ix.netcom.com>
Message-ID: <eOy58.19872$A51.8461468@typhoon.southeast.rr.com>
Source record: 149803

I would've inserted the word 'necessarily' in "...the grades you get in
school don't <necessarily> correlate well with real world performance."

All in all, I'd rather have a pilot flying my jet who scored well on tests
and graduated from The Air Force Academy, a surgeon operating on me who
finished top of his class, president who scored well on tests and did his
homework, and a boss like Bill Gates with whom I could invest my confidence.

Alan
WN4HOG
--
Windsurfing Club: http://www.ibscc.org
Homepage: http://pw1.netcom.com/~alannc44/qsl.htm

>
> 5) I think most of us know folks from all walks of life who are really
> good at taking paper tests but haven't a clue about what they're
> doing. That's not to say that those who get low grades are good,
> merely that the grades you get in school don't correlate well with
> real world performance.
>

2014. Re: South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 15:01:46 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c56b95a$1@news.bnb-lp.com>
Source record: 149801
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

They are saying on-the-air they will be QRV for 8-10 days from their start date which was 28-Jan-2002. So based on that info they should be on-the-air till 05-Feb to as late as 07-Feb.

Weather conditions can change all that as well as equipment failures (generators,antennas) so it is advised to snag them as soon as one can.

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

2015. Arrow II Satellite Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 15:06:59 UTC
From: Bill Manley <bill.manley@home.com>
Message-ID: <3C56BA92.4AAE2A2A@home.com>
Source record: 149802

Can anybody comment on using the 145/437-10 Arrow II Satellite Antenna
for working AO27 and UO14?

Bill Manley KB4XE
Coral Springs, Fl.

2016. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 15:23:50 UTC
From: richardharrison@webtv.net
Message-ID: <29372-3C56BE86-58@storefull-114.iap.bryant.webtv.net>
Source record: 149808

Roy Lewallen wrote:
"It looks like we need a course in EE school to teach people how to use the web."

Sorry. I was there before computers. There was an elective on slide rule but I was self-taught on that one too.

Best regards, Richard Harrison, KB5WZI

2017. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 15:24:41 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C56BEB6.3BFDB3D7@att.net>
Source record: 149804

Interesting, Roy, and thanks for filling in the blanks for us.

My account as I recalled it was correct with one important exception.

At my undergrad school, a chapter of the IRE was formed in 1950 and was
almost immediately merged with the existing chapter of the AIEE to form the
joint AIEE-IRE student chapter. That arrangement continued until my
graduation in the mid-50's.

So, I was confusing that strictly local situation with a national merging
of the two organizations which did not take place, per your
mild-slap-on-the-wrist comment, until 1963.

I had been out of grad school for several years by 1963 and was not active
in either professional society at the time of their merger. For those who
know of the work climate at Texas Instruments in the early 60's, there was
precious little time and energy left over for professional society activity
in those days.

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Roy Lewallen wrote:
>
> It looks like we need a course in EE school to teach people how to use
> the Web. It took about two minutes to locate the fact that the IEEE was
> merged from the IRE and AIEE in 1963. See
>
http://www.ieee.org/organizations/history_center/historical_articles/history_of_ieee.html
> for example.
>
> Roy Lewallen, W7EL

2018. Re: South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 15:28:55 UTC
From: Ignacy Misztal <ignacy@arches.uga.edu>
Message-ID: <3C56BFB7.70A4DAC2@arches.uga.edu>
Source record: 149805
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx

Does the expedition have a home page? It came unexpected although I am grateful for 2 new countries. Are they going any further after S. Georgia? I would suggest 3Y0 (hi, hi).
Ignacy, NO9E

2019. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 15:36:59 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <7ecd5usg6orq53upf4iffc4gimad84389v@4ax.com>
Source record: 149806
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

On Tue, 29 Jan 2002 05:23:08 GMT, Dick Carroll
<dickc58@worldnet.att.net> wrote:

> ???? And that will get an Extra advanced to what? The context was amateur
>radio
>licensing. Of course your Troll light came on and off you went, as always.
>
> Sure is a shame you still feel inadequate because you never could do 20wpm.

Dick, Ham Radio licenses are not scouting merit badges. Neither are
degrees, certifications, licenses, membership, citizenship or anything
of the sort. They are a means to an end.

I know that some out there like to collect merit badges all through
their life until they're certified and certifiable. This is the
Scouting mentality run amok. I have a serious problem with anyone who
seeks certification for the sake of certification. They may be legal
to operate the sorts of things they're certified for; however they
often don't care enough to learn any more than what it takes to stay
certified.

I have little patience for folks who have alphabet soup credentials
and very little real experience. It's not about the certification one
has, it's what one does with it that matters.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2020. help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 15:42:30 UTC
From: don-saunders <don-saunders@supanet.com>
Message-ID: <a36fvcalu1@chilli.nntp.netline.net.uk>
Source record: 149807

Can anyone help.
I have checked my radio using a dummy load
and the output is 125watts.
when using an atu my radio output is only 60watts swr 1:1
when going straight out to antenna radio out put is 125watts swr 1:1.5.
I have tried 2 atu's and the result is the same
anyone have any suggestions.

Don G0WFT
Don-Saunders@supanet.com

2021. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 15:57:21 UTC
From: KB9TMP <NoMoreSpam4Me@antisocial.com>
Message-ID: <a36h5i$4oa$1@dagobah.blueriver.net>
Source record: 149812

"Wes Stewart" <n7ws@yahoo.com> wrote in message
news:3c55e060.91898063@news.triconet.org...
> On 28 Jan 2002 13:18:36 -0800, eustiscornhauser@yahoo.com (Eustis Cornhauser)
> wrote:
>
> |If his family did come over on the slave ship, they probably owned it.
>
> A couple of years ago my wife and I did some traveling through Iowa and
> Nebraska, where her grandparents grew up. We did a lot of visiting of small
> town libraries and historic centers where she did some research.
>
> I was killing time waiting on her in some library when I casually picked up a
> volume titled (if I remember exactly) "Bonded Passengers to America."
>
> This book documented the shipment of people (primarily from the British Isles)
> to America. The "cargo" consisted of either common criminals or other unwanted
> types who were usually sentenced to seven years of servitude. THE VERY SAME
> SHIPS that transported these people were also used to transport negro slaves
> from Africa. The only difference was that the survival rate for the Africans
> WAS HIGHER that the rate for the British.
>
> In one case a "repeat offender" (a woman) who had done one seven-year trip and
> was again convicted in England, asked to be hanged rather than suffer another
> journey.
>
> So, yes, a lot of Scots, Irish and English came here in chains and under worse
> conditions than did the African slaves.
>
> Wes Stewart, N7WS

Wow, I was just being silly, I don't really consider myself to be in a minority group.
(Other than Amateur Radio that is :) I'll have to go to the local library and see
if I can find that book, sounds interesting.

--

'73' From KB9TMP
NCI-2385

The trouble with most jobs is the job holder's resemblance
to being one of a sled dog team. No one gets a change of
scenery except the lead dog. -- Unknown Author

2022. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 16:00:47 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <vsVWPFGLuW5TSW5KkXP20hU+LDWN@4ax.com>
Source record: 149809

Bill Nelson <billn@spock.peak.org> wrote:

>AstroMan <AstroMan@dont.bug.me.with.spam.nyet> wrote:
>
>>> When Ford took his race cars to the track, people thought FORD was an
>>> acronym for First On Race Day.
>>>
>>> Best regards, Richard Harrison, KB5WZI
>
>> Now they think it means
>
>> Found On Road Dead
>> or
>> Fix Or Repair Daily
>
>Which is really scary - as Ford Motor products are more reliable than
>General Motors products, these days.

I notice in a Consumer Reports guide to all the latest vehicles, the magazine does not recommend buying a Chevy Surburban or Silverado -- reliability problems. They also recommend against buying the GMC versions of those vehicles; same reliability problems.

Bob
k5qwg

2023. Re: Arrow II Satellite Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 16:06:27 UTC
From: arrow146@aol.com
Message-ID: <20020129110627.03585.00000060@mb-mr.aol.com>
Source record: 149810

>Can anybody comment on using the 146/437-10 Arrow II Satellite Antenna
>for working AO27 and UO14?
>
>Bill Manley KB4XE
>Coral Springs, Fl.

I am sure my comments are not what you are looking for.
But,
Over half the people working these two Satellites portable,
are using an Arrow Antenna.

73 Al Lowe N0IMW
<A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>
<A HREF="http://members.aol.com/_ht_a/Arrow146/index.html">ArrowAntenna.com</A>

2024. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 16:21:51 UTC
From: dan <danlx@execpc.com>
Message-ID: <3c56cc2d$0$1603$272ea4a1@news.execpc.com>
Source record: 149811

Hi all. here is what I have done.
On Mon, 28 Jan 2002 20:01:52 -0800, Beach Bum
<hmbdude@nospamcotse.com> wrote:

>Well, Mike, I can tell you the rugrats idea is completely out of the
>question:-)
>
>I was thinking of a post too, but I'm surprised a 4x4 would be strong
>enough. There's someone in the area who installs lengths of surplus
>(wooden) utility poles as lot corner markers and jumbo fence/gate posts.
>Maybe I'll track them down and see what they can do for me.
>
>What kind/size of mast did you use?
>
>Steve
>In article <3C54AF41.9070609@europa.com>, mjordan@europa.com says...
>>
>>
>> hmbdude-no-spam@cotse.net wrote:
>>
>> > I want to put up "something" to hold a fringe TV antenna, a scanner
>> > antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
>> > 18 - 20 feet off the ground. I have a single storey house, no useable
>> > chimney, don't want to mount on the roof, and can't use wall brackets
>> > because there is a 3 foot eave overhang all around. So, I'm looking for
>> > ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
>> > fortune.
>>
>>
>> A tree is cheap, but the installation time is about 15 years.
>> <grin>
>>
>> I had basically the same problem a number of years ago, Steve.
>> What I did was build a wooden platform as part of my daughters
>> playground set I built and bolted my 25' mast to it. I had a 4
>> element 10 meter beam on top of it and had no problems. The
>> platform was built from 10' 4x4 posts in concrete and the platform
>> was at the 6' level and was made of 2x8. So the whole structure was
>> pretty solid.
>>
>> What I have done more recently was take a corner 4x4 fence post
>> (in concrete) and bolted a 22' mast to it. I had a 2 meter vertical
>> on there for awhile but moved that to a chimney mount on top of our
>> second floor roof, which gave me a little more height. The mast is

>> now the center of a 80' meter dipole. I've been wanting to put up a
>> another mast, but like you, I can't guy it. I can guy it on two
>> sides but not the third. So I've been thinking of putting a 6x6
>> into about 3 feet of concrete and 8 feet above ground and bolt a
>> mast to that. On this mast I'd like to put a small tri-bander at
>> about 20'. I'd like to put up a tower but we might move in the
>> near future and it will be easier to get a post out of the ground
>> than it would to take down a tower.
>>
>> Anyway, you might look into using a post for support. It might
>> work for you.
>>
>> Mike

I put my mast, a 3" diameter pipe, 1/4"+ wall, 21' long + a 6'X2" 1/4" wall pipe next to my garage. Now granted this Wisconsin house/roof/soffit assembly is probably stronger that a CA version, but...
I went to the scrap yards and found all the pieces I needed for about $20.00. I picked up the mast pipes, four sections of 1 1/2" X 1/4" thick angle and a water pipe-free from a local plumbing shop-used but like new, to drive into the ground to anchor the mast to/over.

I have facia boards so I used 1"X4" to space the angle down. This eliminated notching the facia. Next I built a rectangle out of the angle that went from tight to the wall on one side to 3" beyond the facia. This was bolted together at the angle corner overlaps. This was then mounted to the soffit by screwing up thru holes drilled into the angle/spacer and then screwed into the 2X6's. I then drilled thru the angle and the wall into the garage and put in threaded rod to a 2X6 board that crosses 4 of the studs in the wall. I drilled 2 holes at 90 degrees to each other through the pipe at the bottom and put an anchor bolt thru the mast and the pipe that I had driven into the ground (Water pipe, drive at least 8' into the ground). This holds the mast down, supports the mast and eliminates side movement so the soffit is nothing more than a minor alignment bracket. I then drilled 2 holes in the angle that runs parallel to and outside the facia to mount my u-bolt. To join the 2 mast pieces I overlapped the masts by about 18" and drilled 2 holes thru at 90 degree angles, I angled the holes downward a bit to create resistance to movement. I then inserted some steel scrap that I had around to keep the outer pipe from collapsing when I tightened the bolts.

Now I have a KT34 mounted on a rotor at the top of the mast pipes. On top of the rotor I have an 8'X2' dia., thick wall alum mast. At the top of this is a 10 element switchable polarization 2 meter beam. I live on top of one of the highest hills in my area, yes it sways a bit but it has not bent or come down. I also did the same with a fringe tv ant. The tv antenna is on top of the same type 3' pipe but from there it extends another 12' to where the ant is mounted. This is mounted at the other end of the house and is not through bolted. Less

wind load.

Both are doing fine after 2 years. I hope this helps.

I know that this mast set up, the KT34, would not work very long
without the thru bolting,but if you have a garage, attached or nearby,
it could work for you too.
Dan

I've rambled enough, back to the rocking chair. ZZZZZZZZZ

Remove left x for a direct reply.

2025. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 16:25:03 UTC
From: "Michael A. Terrell" <michaelaterrell@netscape.net>
Message-ID: <3C56CC8B.760ED34E@netscape.net>
Source record: 149813
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

CAM wrote:
>
> KC8PMX wrote:
> >
> > I think that what Cecil was trying to say is that even though a person may
> > achieve passing an extra class license test, there is no reason why a person
> > cannot further their individual education. You cannot show me one Extra
> > Class licensee, (regardless of year of license) that absolutely knows
> > EVERYTHING about radio and electronics/electricity. There is so much to
> > learn, that not one person could ever amass all the knowledge about the
> > above subjects in two lifetimes. Plus there is the experimental factor. A
> > licensee, regardless of license class, is encouraged (at least by me) to
> > experiment, come up with something new. After all, had other not have done
> > this, alot of the technology we appreciate now would have never been.
>
> Yep, an Extra class licensee doesn't have any laurels to rest upon until
> he has contributed something of value to the Amateur Radio Service.
> --
> cheers, CAM http://www.qsl.net/w5dxp

Crap like this is why I never bothered to get a ham ticket. I built one of the first 2 meter FM repeaters in southwest Ohio in the 60's, helped my high school start a ham radio club, raised the money to buy the equipment, and got permission to put up all the antennas on school property. Then i listened to the boring, boastful morons who bragged about their license, their new tower, and that their station cost more than someone else, and decided I wanted nothing to do with it. I went into broadcast, and manufacturing, working with state of the art microwave equipment that is used all over the world. I enjoyed building and repairing the equipment more than spending hours of listening to crap.

I have watched as the technical level of hams continued to drop. I had one tell me at a hamfest that the day he had to solder a plug on a cable he would sell all his equipment. I suggested that everyone would appreciate it more if he didn't wait. Its sad that I get phone calls from hams who can't read the manual for their latest chinese box to wire a microphone, or who don't understand the first thing about the proper way to install an antenna at their home, or in a vehicle. I have known a few hams who were very good techs, or engineers, but every one of them have become inactive, because they got tired of all the idiots on the airwaves. I have worked with a few engineers who were excellent designers in RF, and they had all been hams, and several kept a copy of the ARRL handbook in their office to remind them where they started

their career. I never cared for morse code, so HF didn't interest me, and 2 Meter quickly became a CB band with a phone patch. Welcome to ham radio, any class, but these days, there aren't very many hams who care to learn electronics, or try to keep up to date. Of course, having worked at sites with 5 MW ERP, and 1700 foot towers, you get to where you don't care about anything but signal quality, and zero downtime. I miss the days I could call a ham or two and discuss electronics. I used to love to design HF receivers, but I can't put up a decent antenna where I live. So, I'll probably go back to working as TV engineer. At least the new HDTV systems will hold my interest, hopefully till i retire in 14 years.

2026. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 16:26:19 UTC
From: rasw <atdot.dotat@at.sorry>
Message-ID: <a36ifo$3qvmd$1@rn.area.com>
Source record: 149814

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message
news:3C5697D0.16B5DD70@bellatlantic.net...
> Of course it's worth a try. Traps are parallel resonant (Hi-Z at
resonance) at
> a frequency. They are not Low Pass filters.

The antenna's first trap, about 9' up is labelled 10 meters, above that is
15 and above that is 20.

I see what you mean now. The 10 meter trap is a high Z at 10 meters, so it's
wrong to assume that it's also a high z at 5x 10 meters (146 MHz).

However, I couldn't resist the experiment, so I made a 10 meter 1/4 wave
groundplane and put it in the center of my antenna lab (OK, my garage) and
also a 2 meter groundplane. I a/b tested them and they were roughly
comperable. Both presented nice looking loads to my radio (and to the
MFJ-259B)

--
Robert

2027. Re: South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 16:58:08 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c56d4a1$1@news.bnb-lp.com>
Source record: 149815
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx

Hello Ignacy,
No there is not any homepage for the VP8THU - or - VP8GEO expedition.
They have not announced any further operations on this trip once they
finish up with VP8GEO.

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

2028. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 17:20:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a36ljtdit1@nntp9.atl.mindspring.net>
Source record: 149817

Richard:

[snip]
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29372-3C56BE86-58@storefull-114.iap.bryant.webtv.net...
> Roy Lewallen wrote:
> "It looks like we need a course in EE school to teach people how to use
> the web."
>
> Sorry. I was there before computers. There was an elective on slide rule
> but I was self-taught on that one too.
>
> Best regards, Richard Harrison, KB5WZI
>[snip]

Slide Rule, eh... I wonder what ever happened to my great Hemi bamboo log-log only cost me, $35 complete with leather case. No need to upgrade with new version numbers every other year either! Better times?

I was at an IEEE Section meeting a good while ago, where there was a heated discussion, one that emerges from time to time, regarding a desire on the part of some elements within the IEEE Computer Society to separate from the IEEE. Of course there were, and still are, two sides of the aisle on this issue, and the existence of the venerable ACM is often thrown out as an alternative, or refuge, for those who maybe wanted a separate organization with a little more scientific/software bent and less Engineering.

Somewhere in the midst of this heated discussion, some wag offered the following comment: "Back then we didn't have "Slide Rule Scientists" why do we now need "Computer Scientists"... this was followed by a lot of laughter and the tone of the meeting degenerated thereafter...

--Peter K1PO

2029. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 17:22:06 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C56DA3E.4E4C010@coqui.net>
Source record: 149816
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Michael A. Terrell" wrote:
>
> CAM wrote:
> >
> > KC8PMX wrote:
> > >
> > > I think that what Cecil was trying to say is that even though a person may
> > > achieve passing an extra class license test, there is no reason why a person
> > > cannot further their individual education. You cannot show me one Extra
> > > Class licensee, (regardless of year of license) that absolutely knows
> > > EVERYTHING about radio and electronics/electricity. There is so much to
> > > learn, that not one person could ever amass all the knowledge about the
> > > above subjects in two lifetimes. Plus there is the experimental factor. A
> > > licensee, regardless of license class, is encouraged (at least by me) to
> > > experiment, come up with something new. After all, had other not have done
> > > this, alot of the technology we appreciate now would have never been.
> >
> > Yep, an Extra class licensee doesn't have any laurels to rest upon until
> > he has contributed something of value to the Amateur Radio Service.
> > --
> > cheers, CAM http://www.qsl.net/w5dxp
>
> Crap like this is why I never bothered to get a ham ticket. I built one
> of the first 2 meter FM repeaters in southwest Ohio in the 60's, helped
> my high school start a ham radio club, raised the money to buy the
> equipment, and got permission to put up all the antennas on school
> property. Then i listened to the boring, boastful morons who bragged
> about their license, their new tower, and that their station cost more
> than someone else, and decided I wanted nothing to do with it. I went
> into broadcast, and manufacturing, working with state of the art
> microwave equipment that is used all over the world. I enjoyed building
> and repairing the equipment more than spending hours of listening to
> crap.
>
> I have watched as the technical level of hams continued to drop. I
> had one tell me at a hamfest that the day he had to solder a plug on a
> cable he would sell all his equipment. I suggested that everyone would
> appreciate it more if he didn't wait. Its sad that I get phone calls
> from hams who can't read the manual for their latest chinese box to wire
> a microphone, or who don't understand the first thing about the proper
> way to install an antenna at their home, or in a vehicle. I have known
> a few hams who were very good techs, or engineers, but every one of them
> have become inactive, because they got tired of all the idiots on the

> airwaves. I have worked with a few engineers who were excellent
> designers in RF, and they had all been hams, and several kept a copy of
> the ARRL handbook in their office to remind them where they started
> their career. I never cared for morse code, so HF didn't interest me,
> and 2 Meter quickly became a CB band with a phone patch. Welcome to ham
> radio, any class, but these days, there aren't very many hams who care
> to learn electronics, or try to keep up to date. Of course, having
> worked at sites with 5 MW ERP, and 1700 foot towers, you get to where
> you don't care about anything but signal quality, and zero downtime. I
> miss the days I could call a ham or two and discuss electronics. I used
> to love to design HF receivers, but I can't put up a decent antenna
> where I live. So, I'll probably go back to working as TV engineer. At
> least the new HDTV systems will hold my interest, hopefully till i
> retire in 14 years.

Geez, what a tirade, Michael. Does this mean I supposed to be
embarrassed about having a ham ticket?
-Bill

2030. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 17:25:10 UTC
From: Alan White <alannc44@ix.netcom.com>
Message-ID: <WVA58.20400$A51.8631332@typhoon.southeast.rr.com>
Source record: 149719
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna

Well, join the club of "boring, boastful morons".

Alan

> Crap like this is why I never bothered to get a ham ticket. I built one
> of the first 2 meter FM repeaters in southwest Ohio in the 60's, helped
> my high school start a ham radio club, raised the money to buy the
> equipment, and got permission to put up all the antennas on school
> property. Then i listened to the boring, boastful morons who bragged
> about their license, their new tower, and that their station cost more
> than someone else, and decided I wanted nothing to do with it. I went
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> microwave equipment that is used all over the world. I enjoyed building
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>
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> from hams who can't read the manual for their latest chinese box to wire
> a microphone, or who don't understand the first thing about the proper
> way to install an antenna at their home, or in a vehicle. I have known
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> have become inactive, because they got tired of all the idiots on the
> airwaves. I have worked with a few engineers who were excellent
> designers in RF, and they had all been hams, and several kept a copy of
> the ARRL handbook in their office to remind them where they started
> their career. I never cared for morse code, so HF didn't interest me,
> and 2 Meter quickly became a CB band with a phone patch. Welcome to ham
> radio, any class, but these days, there aren't very many hams who care
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> worked at sites with 5 MW ERP, and 1700 foot towers, you get to where
> you don't care about anything but signal quality, and zero downtime. I
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> to love to design HF receivers, but I can't put up a decent antenna
> where I live. So, I'll probably go back to working as TV engineer. At
> least the new HDTV systems will hold my interest, hopefully till i
> retire in 14 years.

2031. Re: Stacking Tri-Banders

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 17:29:32 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3C56DBFC.6A4FD214@iquest.net>
Source record: 149818

Guys-
do a little searching and planning - Dean Straw and K1VR(?) wrote a
excellent paper on stacking tribanders in QST - era 1995. Several sites
online area also full of details. To 'try it and see' is a major
mistake - sticking up antennas even as small as A3's gets old when you
have to change them a ozen times. Software modeling will save you the
pain of not planning.

FYI - the rule of thumb is 3/4 wave spacing. But that only works for
certain TA's.

Visit Array Solutions website - Jay is well versed in stacking and can
offer concrete advise for various yagi's.

Bests,

Patrick
W9GTA

Mark Hall wrote:
>
> Good point about the matching and boom length.. seems the GetAroundToIt factor is
> the biggest problem with stuff like this!
>
> '73 KI4Z
>
> Dennis Kaylor wrote:
>
> > hey mark
> > its a neat idea a friend of mine wound up with 2 mosley ta33s and was thinking of
> > doing the same thing but he has never gotten around to it
> > the nice thing about ham radio is not to much of it is cast in stone so all i can
> > suggest is to try is and find out
> > my knowledge is limited to VHF stuff
> > all i can say is try to stick with 2 of the same antenna or atleast the same type
> > of feed points you know both gamma matchs or both T matches
> > and they should be the same boom lenght or the patterns might be a bit weird
> >
> > Mark Hall wrote:
> >
> > > I'll have to check my resources, but a wavelength apart would be a huge
> > > problem. I was thinking maybe 1/4 wave (~16') of spacing on 20 meters with
> > > a phasing line between them would do it. Phasing line length could be
> > > adjusted for each band. There are lots of cheap tri-banders out there, older
> > > ones are practically give aways. Friend of mine has an Old TH-4 (Guess it's
> > > 35 years old??) that still works fine with maintenance. Even if you only got

> > > say 2dB additional gain, 9dB total on 20 is in "Big Gun" territory.
> > >
> > > '73 KI4Z
> > >
> > > Dennis Kaylor wrote:
> > >
> > > > hey mark
> > > > the hard part about stacking a tri band beam is the spacing between the
> > > > two yagis i suspect you would have to stack it with 20 meters in mind but
> > > > as for the dissimilar yagis it would be sorta a problem with a good clean
> > > > pattern but you should be able to find a couple of mosley ta33 or a pair
> > > > of cushcraft A3's for somewhere under two hundred bucks but keep in mind
> > > > the two antennas will need to be roughly a waveleght apart and on 20
> > > > meters thats a lot of mast to use
> > > > let me know what you find out and how it works
> > > >
> > > > Mark Hall wrote:
> > > >
> > > > > How about comments on stacking inexpensive, used, possibly non matched
> > > > > tri-banders for a Big - Gun Signal on the cheap? Worth it?
> > > > >
> > > > > '73 KI4Z

2032. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 17:42:44 UTC
From: richardharrison@webtv.net
Message-ID: <9256-3C56DF14-32@storefull-118.iap.bryant.webtv.net>
Source record: 149722

Reg wrote:
"---can you remember what fraction of total power is diverted downwards, towards the horizon, by a phase inversion beyond 5/8-wave?"

Depends on how much more antenna you stack above the 5/8-wave section. The more common configuration is a phase reversal at the 1/2-wave point so that the added length is in phase with all of the first section of the antenna. Seems to be a problem for modeling.

The most common broadcast application has probably been stacking two 1/2-waves, which is a full wave center-fed. This is called a Franklin. Two 5/8-waves have also been stacked for the truly power hungry.

These arrays are also called "collinears". The 19th edition of the ARRL Antenna Book shows the configuration on page 8-2 in fig. 2(B).

I`ll borrow the words of John E. Cunningham in "The Complete Broadcast Handbook". "---it is apparent that, for the greatest primary service area with a given radiated power, we should maximize the radiation along the surface of the earth and minimize the radiation at angles above the horizon. One approach is to use a tower that is nearly 1/2 wavelength high. If its height is increased beyond this, a high-angle lobe will form that can cause skywave interference and reduce the distance to the fading wall.

As noted earlier, the vertical-radiation pattern of an antenna is related to the current distribution along the tower. In Fig. 6-16 we see that when a tower is greater than 180 degrees (1/2-wave), there is a phase reversal of the current. This means that current is flowing on the tower in two directions at the same time. This is responsible for the high-angle lobe that is found in the vertical-radiation pattern in towers that are taller than 180 degrees. If we could find a way to avoid the phase reversal in a tall tower, we could increase the field intensity along the surface of the earth without creating a high-angle lobe in the pattern. This can be done, and many different types of antennas have been designed for the purpose.

The simplest antenna of this type is the so-called Franklin antenna or Franklin array, shown in Fig. 6-17. Here we have two 180 degree towers, one mounted on top of the other. This arrangement does not act like a 360 degree tower because of the way signals are fed to it. The feed system is designed so that the currents in the two 180 degree sections are in phase----".

Cunningham did a far better job of explaining the Franklin than I could, and I won`t add anything to it although there is a lot more to the

subject. You can find more in literature on the colinear or collinear array.

Best regards, Richard Harrison, KB5WZI

2033. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 17:54:42 UTC
From: Dave D <Dave_d@default.com>
Message-ID: <a36nl2kmc1@helle.btinternet.com>
Source record: 149720
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Jake Brodsky" <frussle@erols.com> wrote in message
news:7ecd5usg6orq53upf4iffc4gimad84389v@4ax.com...
> On Tue, 29 Jan 2002 05:23:08 GMT, Dick Carroll
> <dickc58@worldnet.att.net> wrote:
>
> > ???? And that will get an Extra advanced to what? The context was
amateur
> >radio
> >licensing. Of course your Troll light came on and off you went, as
always.
> >
> > Sure is a shame you still feel inadequate because you never could do
20wpm.
>
> Dick, Ham Radio licenses are not scouting merit badges. Neither are
> degrees, certifications, licenses, membership, citizenship or anything
> of the sort. They are a means to an end.
>
> I know that some out there like to collect merit badges all through
> their life until they're certified and certifiable. This is the
> Scouting mentality run amok. I have a serious problem with anyone who
> seeks certification for the sake of certification. They may be legal
> to operate the sorts of things they're certified for; however they
> often don't care enough to learn any more than what it takes to stay
> certified.
>
> I have little patience for folks who have alphabet soup credentials
> and very little real experience. It's not about the certification one
> has, it's what one does with it that matters.
>
I seriously doubt anyone sits the RAE without the intention of operating a
radio, it is a pretty specific test, (especially the licensing conditions)
and unless one takes an interest in amateur radio I think learning enough to
pass would be very difficult. However the certificates are simply an
indication that you can set up, maintain and operate a radio without causing
interference to others. Michael A Terrel made a very valid point and I left
AR for similar reasons to his. There are at one end the snobby intellectuals
who didn't like to speak to class B operators, newbies or anyone they didn't
know, and at the other end the black box brigade who used 2 and 70 like CB
channels and wouldn't know a PA from a PLL. There are some very decent
people in AR but the bad ones are the loudest, unfortunately. At the end of
the day anyone who gets their AR pass purely as a ticket to financial gain
has kind of missed the point of it all.

Dave

2034. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 18:09:43 UTC
From: "Michael A. Terrell" <michaelaterrell@netscape.net>
Message-ID: <3C56E512.ED45184A@netscape.net>
Source record: 149721
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

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" .Your Friend Bill" wrote:
>
> "Michael A. Terrell" wrote:
> >
> > CAM wrote:
> > >
> > > KC8PMX wrote:
> > > >
> > > > I think that what Cecil was trying to say is that even though a person may
> > > > achieve passing an extra class license test, there is no reason why a person
> > > > cannot further their individual education. You cannot show me one Extra
> > > > Class licensee, (regardless of year of license) that absolutely knows
> > > > EVERYTHING about radio and electronics/electricity. There is so much to
> > > > learn, that not one person could ever amass all the knowledge about the
> > > > above subjects in two lifetimes. Plus there is the experimental factor. A
> > > > licensee, regardless of license class, is encouraged (at least by me) to
> > > > experiment, come up with something new. After all, had other not have done
> > > > this, alot of the technology we appreciate now would have never been.
> > >
> > > Yep, an Extra class licensee doesn't have any laurels to rest upon until
> > > he has contributed something of value to the Amateur Radio Service.
> > > --
> > > cheers, CAM http://www.qsl.net/w5dxp
> >
> > Crap like this is why I never bothered to get a ham ticket. I built one
> > of the first 2 meter FM repeaters in southwest Ohio in the 60's, helped
> > my high school start a ham radio club, raised the money to buy the
> > equipment, and got permission to put up all the antennas on school
> > property. Then i listened to the boring, boastful morons who bragged
> > about their license, their new tower, and that their station cost more
> > than someone else, and decided I wanted nothing to do with it. I went
> > into broadcast, and manufacturing, working with state of the art
> > microwave equipment that is used all over the world. I enjoyed building
> > and repairing the equipment more than spending hours of listening to
> > crap.
> >
> > I have watched as the technical level of hams continued to drop. I
> > had one tell me at a hamfest that the day he had to solder a plug on a
> > cable he would sell all his equipment. I suggested that everyone would
> > appreciate it more if he didn't wait. Its sad that I get phone calls
> > from hams who can't read the manual for their latest chinese box to wire
> > a microphone, or who don't understand the first thing about the proper
> > way to install an antenna at their home, or in a vehicle. I have known
```

> > a few hams who were very good techs, or engineers, but every one of them
> > have become inactive, because they got tired of all the idiots on the
> > airwaves. I have worked with a few engineers who were excellent
> > designers in RF, and they had all been hams, and several kept a copy of
> > the ARRL handbook in their office to remind them where they started
> > their career. I never cared for morse code, so HF didn't interest me,
> > and 2 Meter quickly became a CB band with a phone patch. Welcome to ham
> > radio, any class, but these days, there aren't very many hams who care
> > to learn electronics, or try to keep up to date. Of course, having
> > worked at sites with 5 MW ERP, and 1700 foot towers, you get to where
> > you don't care about anything but signal quality, and zero downtime. I
> > miss the days I could call a ham or two and discuss electronics. I used
> > to love to design HF receivers, but I can't put up a decent antenna
> > where I live. So, I'll probably go back to working as TV engineer. At
> > least the new HDTV systems will hold my interest, hopefully till i
> > retire in 14 years.
>
> Geez, what a tirade, Michael. Does this mean I supposed to be
> embarrassed about having a ham ticket?
> -Bill

Not at all. Its just that over all, ham radio isn't what it was. At one time a ham was knowledgeable about his equipment, and most took pride in the quality of their work, and how they behaved on air. Its rare to find more than a handful of hams these days that can repair their equipment, unless they are old timers, still running a tube rig. I realize that modern equipment is complex, but most of it is overly complex for the job. I'll admit the telemetry equipment I worked on was quite complex, but i also realize it was used by people who had little idea of how to make it do what they wanted it to. Up to 12 IF bandwidths and 12 Video bandwidths confuse most users.

A radio to talk to someone on a single, or a couple bands should be built to be repaired, even if only by being able to run diagnostics and exchange a bad board from a repair center. My point was that most hams these days do not measure up to technical standards like they did in the past. Also, I don't mind helping the local hams, if asked. What i do mind is when one arrives, demanding help with something he should be able to do. Solder work is simple in most cases. I understand doing it with vision problems My eyesight is poor. 20/200 & 20/400. But I compensate by using better tools. I have to do most of my solder work under a high power stereo inspection microscope. That doesn't stop me from working on 288 pin surface mount parts. I am self taught, and I continue to learn, almost every day.

There is nothing wrong with being a ham, unless you have no desire to learn. It really should be the end, rather a tool to an end. I feel that you should keep learning, all your life. If you reach a point where you don't exercise your mind, you'll start to lose the ability to learn. I'll be 50 in a few months, and I do not have an EE to my name, but I have spent a lot of time fixing design problems, after i show the

engineer that I know what I'm talking about, and that all i want is Stable, buildable piece of equipment. I hope you can do most, or al of your own work. it give s satisfaction to attack a piece of dead equipment and make it work, or start with a blank page and build something from scratch.

Also, its not just hams who are letting their skills fall behind. A lot of ET's and some EE's are so far out of date that they are nearly useless, because they haven't done anything to learn new skills.

Take care, and God bless.
Michael A. Terrell

2035. Cushcraft R5 for Sale UK

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 18:21:40 UTC
From: Ken Ashcroft <ken@g3msw.demon.co.uk>
Message-ID: <eOk1ybA0guV8EwCC@g3msw.demon.co.uk>
Source record: 149557

I am in Herts, and have one at a sensible price.
--
Ken Ashcroft

2036. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 18:25:49 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C56E92D.95ED30F2@IEEE.org>
Source record: 149723

rasw wrote:
> However, I couldn't resist the experiment, so I made a 10 meter 1/4 wave
> groundplane and put it in the center of my antenna lab (OK, my garage) and
> also a 2 meter groundplane. I a/b tested them and they were roughly
> comperable. Both presented nice looking loads to my radio (and to the
> MFJ-259B)

A 10m 1/4 wave groundplane is a cloudwarmer on 2m. Why would you want
most of your 2m energy taking off at an angle around 60 degrees? Do
you live at the base of Mt. Everest?
--
cheers, CAM http://www.qsl.net/w5dxp

2037. Re: help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 19:29:36 UTC
From: ni4l <ni4l@charter.net>
Message-ID: <3C56F820.D3A8B3B3@charter.net>
Source record: 149724

if you say straight out the antenna it is 1.1 why in the world would you
even consider putting an atu in line. they will cut your power back.
The best thing to do is to have ALL your antennas at resonate for the
band you wish to talk on. then you don't have to use one.

don-saunders wrote:
>
> Can anyone help.
> I have checked my radio using a dummy load
> and the output is 125watts.
> when using an atu my radio output is only 60watts swr 1:1
> when going straight out to antenna radio out put is 125watts swr 1:1.5.
> I have tried 2 atu's and the result is the same
> anyone have any suggestions.
>
> Don G0WFT
> Don-Saunders@supanet.com

2038. Re: help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 19:32:14 UTC
From: pws <p.grace@ntlworld.com>
Message-ID: <tNC58.53373$Ph2.8528063@news2-win.server.ntlworld.com>
Source record: 149726

don-saunders <don-saunders@supanet.com> wrote in message
news:a36fvcalu1@chilli.nntp.netline.net.uk...
> Can anyone help.
> I have checked my radio using a dummy load
> and the output is 125watts.
> when using an atu my radio output is only 60watts swr 1:1
> when going straight out to antenna radio out put is 125watts swr 1:1.5.
> I have tried 2 atu's and the result is the same
> anyone have any suggestions.
>
> Don G0WFT
> Don-Saunders@supanet.com

hi
forgive my ignorance (mw call)....is this on a continous carrier (fm?) or
on ssb ?

its just that not many power meters can handle real time PEP.
just a thought....sorry
regards
paul
>
>
>
>

2039. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 19:32:40 UTC
From: ni4l <ni4l@charter.net>
Message-ID: <3C56F8D8.54292CC7@charter.net>
Source record: 149725

the power people here will set one for 65.00 here
bore the hole for you and put it in the ground
that is what i would do contact them alot safe.

Brokebob wrote:
>
> What is the biggest utility pole you have experienced setting? I plan on
> setting a 40 footer using a back hoe to dig a ditch eight foot deep and
> tapering out to nothing at about 18 feet or so. Plan on rolling the butt end
> into the 8 foot end then using the back hoe to push or pull the top end up.
> Of course will have to back fill the thing by hand. Any suggestions?
>
> brokebob@aol.com (broke=not working, retired=not working, retired=broke)

2040. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 20:12:48 UTC
From: mrhandupsideyurhead@YAHOO.COM
Message-ID: <f48aa443.0201291212.645ccfa8@posting.google.com>
Source record: 149727
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

yes you did you are this voobner idiot and you are just hidding the
fact you are scared. im terlling the truth about yur soory ass you are
voobner/steelganagta/foolltime/middlefiger/now i found out you are
keyclownslappa. man you have got more fake screeen names then a cia
agaent.
go ahaed and lye about not having an aol account you know its treu and
i know its true that you do have a aol accountt. so quit yur crieing
and shut up pussy boy.
"ToolTime" <middlefinger4@home.comspam> wrote in message
news:<lnl58.7286$X64.3327583@news1.rdc2.pa.home.com>...
> I didn't even post to this thread you idiotic Moron who
> crys like a little baby. Lets see how many other people posted at that time
> on the internet? you sorry excuse for a human being.
>
>
>
> "Mr. Hand" <mrhandUPSIDEYURHEAD@yahoo.com> wrote in message
> news:46cdc863.0201281112.55ecbf86@posting.google.com...
> > what a crock of shit1 how long is this iodiot going to keep up
> > this sherade of im not voobner. just look at the times that this
> > morons posting
> > From: ToolTime (middlefinger4@home.comspam)
> > Subject: Re: Kenwood TS520SE
> > Newsgroups: rec.radio.cb
> > View: Complete Thread (29 articles) | Original Format
> > Date: 2002-01-26 15:26:42 PST
> >
> > Message 24 in thread
> > From: Aaron H. Voobner (voobner@yahoo.com)
> > Subject: Re: Kenwood TS520SE
> > Newsgroups: rec.radio.cb
> > View this article only
> > Date: 2002-01-26 15:28:39 PST
> > just look 2 minites later after middlefuck post he posts from his
> > aol account. yes virginia voobner is middlefinger/steelgangsta and
> > god knows how many other peeple he is.
> > voobner@yahoo.com (Aaron H. Voobner) wrote in message
> news:<fbc7a2.0201280032.4d23e26b@posting.google.com>...
> > > "Train" <cbmods@optonlineNOSPAM.com> wrote in message
> news:<GEZ48.89763$6L5.14523908@news02.optonline.net>...
> > > > $120 for a Palomar 225?
> > > >
> > > > "Stephen Gale" <stephengale@sympatico.ca> wrote in message

> > > > news:LuX48.1382$9y2.249997@news20.bellglobal.com...
> > > > > a few things here........just getting started......check out the
> accessories
> > > > > link
> > > > > >
> > > > > > http://members.kingston.net/sgale/gold2/radio.html
> > > > > >
> > > > > >
> > > >
> > > > "Train", CB amps are illegal.
> > >
> > > -Aaron-

2041. Re: Need advice: FM radio antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 20:39:49 UTC
From: russ crisp <crisp@soco.wcu.edu>
Message-ID: <ms1e5ucn1cg6mhec7g03i7qhb99mvoj4gu@4ax.com>
Source record: 149728

i had this experince once..

the building i was in had a drop ceiling throught the entire floor i
was on, so i ran a 75 ohm coax (rg6) from my new location over
to the area where i was stationed previously, and hooked to the
T antenna with a little balun. worked like a charm. i moved, but
my antenna didn't...

73
russ
ka4uxz

On 16 Aug 2001 20:40:42 -0700, sm@rt66.com (SteveM) wrote:

>richardharrison@webtv.net (Richard Harrison) wrote in message
news:<5457-3B7BD610-141@storefull-115.iap.bryant.webtv.net>...
>> Steve M. wrote:
>> "I just moved to another office inside a CMU building. The move was only
>> 50 feet. But I can no longer get my favorite FM station at all."
>>
>> The problem seems to be location, not the antenna?
>>
>> You may use an FM portable to find a nearby location for your antenna
>> which will work.
>> Richard,
>Thanks for the help. I will take this to work and give your ideas a
>try. My latest attempt was cutting about 20 feet of cat 5 cable,
>attaching it to the tuner, and stuffing it in the ceiling. This did
>not work. This station does broadcast over the internet, but the IS
>department frowns on using the band width.
>Steve
>> You may be able to remotely place an antenna which will work.
>>
>> You may be able to remotely place a radio repeater for your favorite FM
>> station at a satisfactory receiving location with a clear path to your
>> new office.
>>
>> 50 feet of coax, if the cable can be run between the satisfactory
>> receiving location and your office, seems an easier solution than a
>> high-gain antenna which might not even work.
>>
>> Since you don`t seem to need to retune the FM radio, you could find it
>> convenient to site the radio for satisfactory reception and run the
>> loudspeaker wires to your office.
>>

>> Does your favorite FM station also broadcast its program on the
>> internet?
>>
>> Best regards, Richard Harrison, KB5WZI

2042. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 20:52:27 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <272e5u87juvv6ud46eccplbpebjcdrc2m1@4ax.com>
Source record: 149729

On Tue, 29 Jan 2002 15:00:26 GMT, "Alan White"
<alannc44@ix.netcom.com> wrote:

>
>I would've inserted the word 'necessarily' in "...the grades you get in
>school don't <necessarily> correlate well with real world performance."

The word is redundant. Correlations can be poor as well as good. I'm
saying that you can sit and learn theory all day long, you won't know
who can do what until they're put to the test and faced with a
practical application.

>All in all, I'd rather have a pilot flying my jet who scored well on tests
>and graduated from The Air Force Academy, a surgeon operating on me who
>finished top of his class, president who scored well on tests and did his
>homework, and a boss like Bill Gates with whom I could invest my confidence.

Then you're looking for the certificate, not the performance. Bill
Gates didn't graduate if what I've read is true. Military pilots
don't make good captains of civilian airliners, (Cockpit Resource
Management isn't something they teach much at the Air Force Academy).
And I'd rather have a surgeon who is relaxed, done the operation many
times before, and has had a good night's rest.

It seems to me you're falling in to exactly the same trap that I
outlined before. If you know nothing else, go for the certificate.
If you're looking for someone to do the job right, look beyond it.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2043. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 21:15:53 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <dc3e5u8rgh6nuc22f1er8bl7uo8uabu0pq@4ax.com>
Source record: 149730
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

On Tue, 29 Jan 2002 18:09:43 GMT, "Michael A. Terrell"
<michaelaterrell@netscape.net> wrote:

>" .Your Friend Bill" wrote:
>> Geez, what a tirade, Michael. Does this mean I supposed to be
>> embarrassed about having a ham ticket?
>> -Bill
>
>Not at all. Its just that over all, ham radio isn't what it was. At
>one time a ham was knowledgeable about his equipment, and most took
>pride in the quality of their work, and how they behaved on air. Its
>rare to find more than a handful of hams these days that can repair
>their equipment, unless they are old timers, still running a tube rig.

My, what rosy colored glasses you're wearing. It's amazing how cool
the hobby looks when you're young and don't know half of what's going
on. Why not re-read QST editorials and other such magazines going all
the way back to the early parts of the last century. That will set
you straight.

Hams have ALWAYS been sneered at. Their technical abilities have
always been sub par. The reason is that ham licenses are licenses to
learn. The ham radio spectrum is reserved for people to play with
the technology. If it didn't exist, it would have to be invented all
over again to accommodate the demand.

And yes, when you're fooling around and having fun, you're not going
to sound professional. Why should hams be any different?

I don't get on the air much, but I do design stuff and occasionally
test it on the air. Having lots of "Rotten QRM" to work with helps me
at improving on existing designs...

>I realize that modern equipment is complex, but most of it is overly
>complex for the job.

Says who? What exactly is the "job" they're supposed to do? Answer
that, and you'll realize why they build them the way they do...

> A radio to talk to someone on a single, or a couple bands should be
>built to be repaired, even if only by being able to run diagnostics and
>exchange a bad board from a repair center. My point was that most hams
>these days do not measure up to technical standards like they did in the
>past. Also, I don't mind helping the local hams, if asked. What i do
>mind is when one arrives, demanding help with something he should be
>able to do. Solder work is simple in most cases. I understand doing it

>with vision problems My eyesight is poor. 20/200 & 20/400. But I
>compensate by using better tools. I have to do most of my solder work
>under a high power stereo inspection microscope. That doesn't stop me
>from working on 288 pin surface mount parts. I am self taught, and I
>continue to learn, almost every day.

As should we all. The only question is to learn about what?
Antennas? Operating practices? Propagation? Radio repair? Radio
design?

<snipped other comments that I happen to agree with>

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2044. Re: Origins of Log Periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 21:21:43 UTC
From: richardharrison@webtv.net
Message-ID: <18302-3C571267-25@storefull-117.iap.bryant.webtv.net>
Source record: 149731

Chip, N1IR wrote:
"Anyone know details?"

Often, the ARRL Antenna Book is the last place I look when it should have been the first. Chapter 10, written by L.B. Cebik, W4RNL, attributes the LPDA to D.E. Isbell at the University of Illinois in the late 1950s.

Best regards, Richard Harrison, KB5WZI

2045. Re: Mast Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 21:48:24 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a375b8$s8v$2@quark.scn.rain.com>
Source record: 149732

Beach Bum <hmbdude@nospamcotse.com> wrote:
> Can you reference someone selling 3' brackets?

I made my own. But you could try Rohn. They sell 36" standoff
brackets for their towers.

--
Bill Nelson (billn@peak.org)

2046. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 22:00:30 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <cn6e5usufk1liadu980mmc4imfeut4g45m@4ax.com>
Source record: 149733

On Tue, 29 Jan 2002 10:49:07 +0000 (UTC), Francesco Messineo
<frank@ares.ccii.unipi.it> wrote:

>Richard Clark <kb7qhc@attbi.com> wrote:
>
snip
>
>> You might want to try a vertical monopole the same elevation (above
>> ground) as the EH with the monopole as tall (same height) as the EH.
>> After-all, the proponents suggest the EH should be better in
>> performance; otherwise there is no commercial advantage for the EH
>> given the complexity of construction and difficulty of tuning the EH
>> over this simple alternative.
>
>well, we might as well try something like this, I hope a standard tuner
>can tune such a small antenna.

Yes, that could be a problem, especially losing power to the tuner
that the EH has accepted (and presumably not lost to its matching
elements).

>
>> I say this because you will be measuring the ground wave (line of
>> sight too) of a 20M source. I would suspect that comparison to a
>> standard vertical at this high frequency changes the mechanics of
>> propagation sufficiently to make this a new ball game. Commercial
>> claims are at 200M, Jack tested at 80M and you guys have cut that by a
>> fourth to a tenth with 20M.
>
>So are you suggesting us to not use a well know reference antenna?
>We are chosing the frequency in order to have the possibility to
>use the half wave vertical monopole. We could test the antenna
>even at 7 MHz, but in that case all we can erect is a quarter wave
>groundplane with 30 to 40 full size radials lawn just over the ground.

No. Don't go changing the frequency now. What I was suggesting was
the comparison to the EH be made by a simpler variant rather than the
larger, more problematic Standard (be it 0.25, 0.5, or 0.625
wavelength). The logic is that if the EH is no better than a well
documented small antenna, it could not be better than the Standard.

>
>> Using only the S-meter has very little value for serious work. Roy
>> has often suggested one of the more accurate means for using an
>> S-Meter for comparisons. That is to place a calibrated step
>> attenuator in the receive antenna path, but only in that portion of

>> the line that is matched to 50 Ohms. This means you MUST match the
>> receiver input to the sense antenna, and both MUST present a
>> non-reactive 50 Ohm system to the inserted attenuator.
>
>yes, that makes sense and we probably end up doing that with a matched
>short vertical and step attenuator.

You might reflect that if you anticipate trouble with matching the
transmitter to a small antenna, then matching to the receive antenna
will be no easier.

>
snip
>
>I fully understand what you mean. However you must consider that we
>are just a group of amateur radio operators, with some professional
>skills (everyone is at least engineer or physic researcher) and that
>we are doing that on our spare time (read weekends) and also that
>nobody will give us a cent for that (which isn't a problem after all,
>but yet nobody between us believe this antenna is worth the effort
>nonetheless we are going to test it carefully).
>After some preliminar test we'll know how many measures we can reasonably
>take. I suggested Stefano to make some professional researchers and
>universitary labs test his antenna, but it seems they didn't take
>him seriously (I have doubts, but I don't know what he actually did).
>
We all have restrictions to cope with.
>
>> Now for an alternative for more precision.
>
>> There are far more sensitive methods for measuring than the one
>> described above (which is probably adequate). This variant I will
>> offer allows you to skip the requirement for matching the receiver (an
>> absolute necessity above). There are many instruments that are based
>> around 1000 Hz tuned detectors and bridges. The variation would have
>> you modulate the transmit signal with 1000 Hz and use the step
>> attenuator at the audio output where you can use some of this tuned
>> instrumentation. The tuning allows you to reject interference (razor
>> sharp in comparison to the original method) and gives you access to
>> meters of far more sensitivity (often orders of magnitude more
>> sensitive). The methods described above differ only in that the step
>> attenuator has moved. As such ALL considerations MUST be met. For
>> this variant, you might want to use a step attenuator with 0.1dB
>> resolution. With some instrumentation, this step attenuator function
>> may be found in the instrument's own range switch. Further, such
>> instrumentation may allow you to make a direct difference measurement
>> instead of performing the substitution to re-achieve the reference
>> mark; however I would still use the substitution method as there are a
>> lot of variables that could muddy the water for direct measure.
>
>I believe we can't find suitable instrumentation for this test in

>short periods of time.
>

Keep your eye open, especially if one of your friends works in a lab where these instruments will be hidden away, replaced by newer computerized gear. This is technology that saw its height in the 1950's and 1960's.

>> You who are about to measure - we salute you.
>
>To be honest I don't feel confortably enough in the part of the
>"measurer", Stefano chosed me (and I still don't know why, probably
>because we are in the same area). I would have preferred him to let
>test his antenna by universitary researchers.
>
>Thanks for all the suggestions.
>
>73
>Francesco IZ5DWF

Hi Francesco,

You will feel much more comfortable if you build the test plan before you get to the site. The testing itself, with the observation of all the comments both Roy and I have made, will proceed quite easily. Most of the work is in the handling of the results. With such in mind, it is better to have a lot of data rather than a little. The test plan will reveal how much you have available to interpret.

As for the full size Standard Antenna, or a much smaller one, there are several considerations. For one, how is the debate framed? The EH proponents will claim superior or equal performance to the Standard size antenna, but do they all agree what size that is?

Testing should anticipate future disputes, or should short-circuit them. The proponents of the EH also claim "mysterious" characteristics somewhat in the mold of the psuedo-science of fractal electro-magnetics (fractal-electro-magic). They also deny correlation to already well studied small antennas. If you can draw a correlation by comparing to a known small radiator, you close that avenue of specious defense. This would also eliminate the appeal to such nonsense. The logic goes, if they cannot do better than a simpler small antenna (same size, same elevation) why bother? The extension of this logic is that if they cannot perform better than a known poor radiator, there is no reason to presume they will do better with a larger one (the poor, known, antenna already establishes that fact).

Myself, I am not terribly concerned about induced or conducted spurious currents in adjacent structures. The swap of antennas at the same drive point should exhibit similar characteristics (for small antennas of equal size/elevation). However, I am fully supportive of taking of that data.

This is certainly not the end of the topic. I would suggest, again, build a more complete test grid and publish it here for comment. The plan should emphasize the data to be taken, and not necessarily the means of obtaining it (we've done that largely).

73's
Richard Clark, KB7QHC

2047. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 22:12:11 UTC
From: richardharrison@webtv.net
Message-ID: <18302-3C571E3B-28@storefull-117.iap.bryant.webtv.net>
Source record: 149738

Jake, AB3A wrote:
"You`re falling into exactly the same trap that I outlined before. If you know nothing else, go for the certificate."

The record is important.

Who would your choice be as a military defender, George A. Custer, who said: "My career as a cadet had but little to recommend it to those who came after me, unless as an example to be carefully avoided." Or, Douglas C. McArthur who collected the highest grades ever awarded at West Point?

Best regards, Richard Harrison, KB5WZI

2048. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 22:15:30 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a376v8029cc@enews1.newsguy.com>
Source record: 149737

i would recommend checking with the local utility company, they are very experienced in such things and have the right equipment.

If you do ending up digging a ditch like that to lever it up, and are lucky enough to get it vertical, be very sure that when you backfill that you compact the earth very well, and i don't mean by foot, rent a real tamper and use it every 6" or so. If you don't you will have a weak side on the hole that is holding up the pole.

"Brokebob" <brokebob@aol.com> wrote in message news:20020128220933.11433.00000552@mb-cb.aol.com...
> What is the biggest utility pole you have experienced setting? I plan on
> setting a 40 footer using a back hoe to dig a ditch eight foot deep and
> tapering out to nothing at about 18 feet or so. Plan on rolling the butt end
> into the 8 foot end then using the back hoe to push or pull the top end up.
> Of course will have to back fill the thing by hand. Any suggestions?
>
> brokebob@aol.com (broke=not working, retired=not working, retired=broke)

2049. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 22:19:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C571FE9.F69DE01D@eznec.com>
Source record: 149734

That's an interesting perspective. I've found that employers of engineers never, ever ask how well one did in school unless hiring a new graduate with no other experience. Instead, they're intensely interested, as they should be, in what the candidate has accomplished in his career, as the best indicator of what he's likely to do in the future. I'd rather have my heart transplant done by a surgeon who had done 500 successful heart transplants than one who was at the top of his class but had done only a few which he flubbed. Likewise for pilots. When the visibility is bad and the landing gear flaky(*), I'd much rather have a pilot that lived through 20 years of flying bush planes in Alaska than some fellow who got the best grades in Military History, English Literature, and Differential Equations at Colorado Springs. But you make your choices and I make mine.

Bill Gates, you know, is a college dropout. I have no idea how well he did while he was in school, but suspect that his extracurricular activities interfered with studying.

Roy Lewallen, W7EL

(*)True story: I'd been dozing since shortly after taking off from the Indian village of Hughes, Alaska. The Fairchild F-27, a two-engine overhead wing turboprop, had only a half dozen or so passengers, just me and the other members of the crew that had been overhauling the radar at the remote DEW Line site, and a load of mail. As I came out of my sleepy haze, I saw that we were circling a remote FAA station that was a frequent stopping point in that part of Alaska. It was getting dark. A few rows in front of me, there was a fellow shining a flashlight out the window at the landing gear. He was yelling to the pilot through the open cockpit door. "Well, she looks like she's locked, but she don't say she's locked." "What the hell," came the response, "We gotta get 'er down sooner or later."

And that's just one of the stories.

Alan White wrote:
>
> I would've inserted the word 'necessarily' in "...the grades you get in
> school don't <necessarily> correlate well with real world performance."
>
> All in all, I'd rather have a pilot flying my jet who scored well on tests
> and graduated from The Air Force Academy, a surgeon operating on me who
> finished top of his class, president who scored well on tests and did his
> homework, and a boss like Bill Gates with whom I could invest my confidence.
>
> Alan

> WN4HOG

2050. Re: help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 22:22:46 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <3C572054.59F63CA3@earthlink.net>
Source record: 149735

Don, All ATUs have losses. Some of your input power is converted to heat, mostly in the inductors. You are listing a -3dB loss which seems high. This is caused by high circulating currents inside the ATU.

Now a VSWR of 1.5 to 1 is a voltage reflection coefficient of 0.2, or a power loss of 4% or -0.18dB. If you really have a 1.5 to 1 VSWR forget the tuner!!

73, Dave, W1MCE

don-saunders wrote:
>
> Can anyone help.
> I have checked my radio using a dummy load
> and the output is 125watts.
> when using an atu my radio output is only 60watts swr 1:1
> when going straight out to antenna radio out put is 125watts swr 1:1.5.
> I have tried 2 atu's and the result is the same
> anyone have any suggestions.
>
> Don G0WFT
> Don-Saunders@supanet.com

2051. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 22:27:47 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0201291427.33820396@posting.google.com>
Source record: 149736

richardharrison@webtv.net (Richard Harrison) wrote in message news:<9256-
>
> Depends on how much more antenna you stack above the 5/8-wave section.
> The more common configuration is a phase reversal at the 1/2-wave point
> so that the added length is in phase with all of the first section of
> the antenna. Seems to be a problem for modeling.

Shouldn't be, that I know of. I've modeled lots of collinears. Seemed
to work ok so far. MK

2052. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 22:32:12 UTC
From: Alan White <alannc44@ix.netcom.com>
Message-ID: <MpF58.45840$a07.8252322@typhoon.southeast.rr.com>
Source record: 149748

> On Tue, 29 Jan 2002 15:00:26 GMT, "Alan White"
> <alannc44@ix.netcom.com> wrote:
>
> >
> >I would've inserted the word 'necessarily' in "...the grades you get in
> >school don't <necessarily> correlate well with real world performance."
>
Jake responded:
> The word is redundant.
> Correlations can be poor as well as good. I'm
> saying that you can sit and learn theory all day long, you won't know
> who can do what until they're put to the test and faced with a
> practical application.

Agreed. But that's not exactly what you said in the original version. You are now saying one can sit all day long learning theory and not understand practical applications. That's different than saying grades don't correlate well with real world performance. Unless you have some scientific evidence that demonstrates grades have no correlation with real world performance I'm afraid you're just propagating a popular american myth.

How many kids use the stupid excuse: 'But Einstein was a poor student' and look what he did!', not realizing Einstein spent his youth in special academies and European gymnasiums because he, in fact, was a good student. We seem to want to believe poor grades, bad academic performance, and lack of theoretical knowledge is a good thing. I suspect that this is an american concept; we don't want anyone to 'feel' bad for not making the grade.

You previously said:

"5) I think most of us know folks from all walks of life who are really good at taking paper tests but haven't a clue about what they're doing. That's not to say that those who get low grades are good, merely that the grades you get in school don't correlate well with real world performance.

I know plenty who have done well in school and enjoyed real world 'success', whatever that is. As far as studying for the test in order to make the grade, I think tests can indeed provide a focal point. I was a liberal arts major. I never really knew much about electronics nor do I even know any physics buffs or electronics people. What I know is self-taught. Had it not been for the Ham license upgrades, and the practice tests, I still wouldn't have a clue. Heck, without a test I wouldn't even know where to begin to study. I do tinker, but, I always know how long to cut a dipole and a loop because I learned the formulas in order to pass the test. What we accept as common knowledge, common sense, is for some theoretical.

I think of tests as goals because I know that while I reach for a goal I'm also learning the important stuff along the way.

Alan
WN4HOG

2053. Re: help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 22:32:35 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a38kkv$16c4g2$1@ID-124126.news.dfncis.de>
Source record: 149679

don-saunders wrote

> Can anyone help.
> I have checked my radio using a dummy load
> and the output is 125watts.
> when using an atu my radio output is only 60watts swr 1:1
> when going straight out to antenna radio out put is 125watts swr 1:1.5.
> I have tried 2 atu's and the result is the same
> anyone have any suggestions.
==========

Just plug in the key or microphone and get on with it.

2054. Re: Condo Isoloop RFI problems - advice? *see web page photos*

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 22:56:24 UTC
From: tegwilym@hotmail.com
Message-ID: <efb6d1ef.0201291456.60d71f03@posting.google.com>
Source record: 149739

> >
> I Think what your experienceing is signal overload of your TV. this is a
> tuff one to beat.. Suspect your getting into the preamp in the Sat dish.
> Try placing those Ferrite chokes on the incoming Sat. Dish feedline.. also
> on the power cord of your rig.. ,The Radio Shack snap ons are ok but you
> need more that just a few usually about 10 to fifteen of them to make a real
> difference but use what you have and see if it make any difference.
> 73 Dave

Thanks Dave. I just ordered a bunch of chokes from the Radio shack
website that say they are for frequencies above 30 mhz. I'll put
those around and see if that does any good. Other than that, the
antenna seems to be working well and I have made a few contacts on it
already.

Tom KA7VIK

2055. interference

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 23:03:55 UTC
From: MSC <MSC@jestbyte.com>
Message-ID: <a379nj$4e2$1@newsg4.svr.pol.co.uk>
Source record: 149740

Hi,
When a set with a ferrite rod aerial is used or a set with a Frame aerial, interference from electrical items and TV is minimal. Any set requiring a wire aerial, around the picture rail for example, gives terrible signal to interference ratio in the same room. What gives? I should have thought that the "RATIO" would be the same so only signal to noise difference would be an issue.

Is it intrinsically "quieter" to capture the magnetic component of the wave?

Spencer

2056. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 23:08:13 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <3C572B92.11DCE9DE@sprintmail.com>
Source record: 149741

As others have recommended, check with whomever sets the poles for the local telephone or power company. Often it's an independent contractor. I seem to recall that 8' is considerably too deep for a 40 foot pole. The pros can drill the hole just a bit larger than the pole, and you'll end up with a much more solid installation. It's been a long time, but I remember that the guys who installed mine even put plastic down on the grass to catch the dirt that the drill through up. When they had the pole set, they backfilled and hauled the excess dirt away.

Brokebob wrote:
>
> What is the biggest utility pole you have experienced setting? I plan on
> setting a 40 footer using a back hoe to dig a ditch eight foot deep and
> tapering out to nothing at about 18 feet or so. Plan on rolling the butt end
> into the 8 foot end then using the back hoe to push or pull the top end up.
> Of course will have to back fill the thing by hand. Any suggestions?
>
> brokebob@aol.com (broke=not working, retired=not working, retired=broke)

--
K8AC
Floyd Sense - Angier, NC

2057. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 23:19:41 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C572DFC.1BAE@earthlink.net>
Source record: 149742
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

.Your Friend Bill wrote:
...
> Geez, what a tirade, Michael. Does this mean I supposed to be
> embarrassed about having a ham ticket?
> -Bill

Not necessarily. Only if you're a pompous, know-it-all incompetent
moron. ;-)
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

2058. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 23:24:05 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C572F04.2C7A@earthlink.net>
Source record: 149743
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Jake Brodsky wrote:
>
> Hams have ALWAYS been sneered at.

Yeah, until there's an earthquake or tornado or some other
disaster, and the phone lines and power lines and gas lines
and water lines are down. Then who do you turn to to let
your rels know you're alive?

--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

2059. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-29 23:37:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C573257.9D102AB1@eznec.com>
Source record: 149744

Richard Clark wrote:

> . . .
> You might reflect that if you anticipate trouble with matching the
> transmitter to a small antenna, then matching to the receive antenna
> will be no easier.
> . . .

Assuming that you have more than enough signal strength, you can "match" the receive antenna to the attenuator and/or receiver simply by inserting a fixed attenuator in series with the antenna. Anything connected to either side of the attenuator will see very nearly 50 ohms. You can't, of course, use this simple method at the transmitter, since you'll be comparing different antennas having different impedances. (In theory, you could, but then the power to the different antennas would be different. And this could be measured and accounted for, but it's wisest to keep the power applied to the antenna, and everything else you possibly can, constant for all the measurements.)

Roy Lewallen, W7EL

2060. Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 00:45:32 UTC
From: pgardella@yahoo.com
Message-ID: <57d04feb.0201291645.4fbc77e5@posting.google.com>
Source record: 149745

I've got a simple question about a "shorty forty" antenna I've built (details at http://www.flashwebhost.com/circuit/shortant.php). Now, I've got the coax (RG-58) coming off the antenna down to my shack. When I just connect the center conductor to the receiver (for now), everything works great. But when I attach the coax to the BNC connector, and then to the receiver, the signal disappears.

Where do you connect the shield/braid of a dipole? To ground?

Patrick
KD4LOX

2061. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 00:45:42 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C574236.27D6D5AC@IEEE.org>
Source record: 149746

Patrick Gardella wrote:
>
> I've got a simple question about a "shorty forty" antenna I've built
> (details at http://www.flashwebhost.com/circuit/shortant.php). Now,
> I've got the coax (RG-58) coming off the antenna down to my shack.
> When I just connect the center conductor to the receiver (for now),
> everything works great. But when I attach the coax to the BNC
> connector, and then to the receiver, the signal disappears.

Have you checked your coax for shorts?
--
cheers, CAM http://www.qsl.net/w5dxp

2062. Re: interference

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 00:57:59 UTC
From: M Kolber <mkolber@bellatlanictNS.net>
Message-ID: <ryH58.4167$0V6.149@nwrddc02.gnilink.net>
Source record: 149747

I do recall that a loop (H field) antenna will pick up less near field interference compared to a rod or wire (E -field) antenna.

This is because the H field decays more rapidly in the near field compared to the E field. So if you are near the interference source, the H field antenna will work better

I cannot find a reference to this. Perhaps someone else can.

Also the loop antenna is directional and can be aimed to pick up the desired signal and reject the interference.

Mark
WB2WHC

MSC wrote in message ...
+AD4-Hi,
+AD4-When a set with a ferrite rod aerial is used or a set with a Frame aerial,
+AD4-interference from electrical items and TV is minimal. Any set requiring a
+AD4-wire aerial, around the picture rail for example, gives terrible signal to
+AD4-interference ratio in the same room. What gives? I should have thought
that
+AD4-the +ACI-RATIO+ACI- would be the same so only signal to noise difference would be
an
+AD4-issue.
+AD4-
+AD4-Is it intrinsically +ACI-quieter+ACI- to capture the magnetic component of the
wave?
+AD4-
+AD4-Spencer
+AD4-
+AD4-
+AD4-

2063. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 01:02:24 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <pCH58.15035$yi5.1950727@news20.bellglobal.com>
Source record: 149749

> 'J. Harvey' asked about:
"integration over the sphere"

"Francesco Messineo"
> I think we can hardly fly over the antenna...
> Sorry, we can just go around it at ground level.

Let me put the question to you this way:

Can you tell if a woman is beautiful based upon only a single cross section
?

Often, the antenna 'glossy brochures' will have both elevation and azimuth
pattern data (typically a single slice each). Even with such a limited data
set, it can be interesting to plug the numbers into Excel.

2064. Re: Origins of Log Periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 01:15:41 UTC
From: fractenna@aol.com
Message-ID: <20020129201541.12872.00000085@mb-mk.aol.com>
Source record: 149750

>
>Chip, N1IR wrote:
>"Anyone know details?"
>
>Often, the ARRL Antenna Book is the last place I look when it should
>have been the first. Chapter 10, written by L.B. Cebik, W4RNL,
>attributes the LPDA to D.E. Isbell at the University of Illinois in the
>late 1950s.
>
>Best regards, Richard Harrison, KB5WZI
>
>

Hi Richard,

I actually refer to Isbell and DuHamel in the original post.

It is a nice piece (that you refer to) but I am having fun with the
'pre-history'---as it were.

Nice to hear from you.

73,
Chip N1IR

2065. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 01:41:39 UTC
From: Brian <lib_mrducks@yahoo.com>
Message-ID: <nbl58.60157$XZ1.3271673@typhoon.austin.rr.com>
Source record: 149751
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

well...at least his name was spelled right....LOL....

"Mr. Hand" <mrhandupsideyurhead@YAHOO.COM> wrote in message
news:f48aa443.0201291212.645ccfa8@posting.google.com...
> yes you did you are this voobner idiot and you are just hidding the
> fact you are scared. im terlling the truth about yur soory ass you are
> voobner/steelganagta/foollltime/middlefiger/now i found out you are
> keyclownslappa. man you have got more fake screeen names then a cia
> agaent.
> go ahaed and lye about not having an aol account you know its treu and
> i know its true that you do have a aol accountt. so quit yur crieing
> and shut up pussy boy.
> "ToolTime" <middlefinger4@home.comspam> wrote in message
news:<lnl58.7286$X64.3327583@news1.rdc2.pa.home.com>...
> > I didn't even post to this thread you idiotic Moron who
> > crys like a little baby. Lets see how many other people posted at that
time
> > on the internet? you sorry excuse for a human being.
> >
> >
> >
> > "Mr. Hand" <mrhandUPSIDEYURHEAD@yahoo.com> wrote in message
> > news:46cdc863.0201281112.55ecbf86@posting.google.com...
> > > what a crock of shit1 how long is this iodiot going to keep up
> > > this sherade of im not voobner. just look at the times that this
> > > morons posting
> > > From: ToolTime (middlefinger4@home.comspam)
> > > Subject: Re: Kenwood TS520SE
> > > Newsgroups: rec.radio.cb
> > > View: Complete Thread (29 articles) | Original Format
> > > Date: 2002-01-26 15:26:42 PST
> > >
> > > Message 24 in thread
> > > From: Aaron H. Voobner (voobner@yahoo.com)
> > > Subject: Re: Kenwood TS520SE
> > > Newsgroups: rec.radio.cb
> > > View this article only
> > > Date: 2002-01-26 15:28:39 PST
> > > just look 2 minites later after middlefuck post he posts from his
> > > aol account. yes virginia voobner is middlefinger/steelgangsta and
> > > god knows how many other peeple he is.
> > > voobner@yahoo.com (Aaron H. Voobner) wrote in message
> > news:<fbc7a2.0201280032.4d23e26b@posting.google.com>...

> > > > "Train" <cbmods@optonlineNOSPAM.com> wrote in message
> > news:<GEZ48.89763$6L5.14523908@news02.optonline.net>...
> > > > > $120 for a Palomar 225?
> > > > >
> > > > > "Stephen Gale" <stephengale@sympatico.ca> wrote in message
> > > > > news:LuX48.1382$9y2.249997@news20.bellglobal.com...
> > > > > > a few things here........just getting started......check out the
> > accessories
> > > > > > link
> > > > > >
> > > > > > http://members.kingston.net/sgale/gold2/radio.html
> > > > > >
> > > > > >
> > > > >
> > > > "Train", CB amps are illegal.
> > > > >
> > > > -Aaron-

2066. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 01:51:21 UTC
From: ToolTime <middlefinger4@home.comspam>
Message-ID: <tkl58.12060$X64.4084855@news1.rdc2.pa.home.com>
Source record: 149752
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

Shut Up Stupid!

"Mr. Hand" <mrhandupsideyurhead@YAHOO.COM> wrote in message
news:f48aa443.0201291212.645ccfa8@posting.google.com...
> yes you did you are this voobner idiot and you are just hidding the
> fact you are scared. im terlling the truth about yur soory ass you are
> voobner/steelganagta/foollltime/middlefiger/now i found out you are
> keyclownslappa. man you have got more fake screeen names then a cia
> agaent.
> go ahaed and lye about not having an aol account you know its treu and
> i know its true that you do have a aol accountt. so quit yur crieing
> and shut up pussy boy.
> "ToolTime" <middlefinger4@home.comspam> wrote in message
news:<lnl58.7286$X64.3327583@news1.rdc2.pa.home.com>...
> > I didn't even post to this thread you idiotic Moron who
> > crys like a little baby. Lets see how many other people posted at that
time
> > on the internet? you sorry excuse for a human being.
> >
> >
> >
> > "Mr. Hand" <mrhandUPSIDEYURHEAD@yahoo.com> wrote in message
> > news:46cdc863.0201281112.55ecbf86@posting.google.com...
> > > what a crock of shit1 how long is this iodiot going to keep up
> > > this sherade of im not voobner. just look at the times that this
> > > morons posting
> > > From: ToolTime (middlefinger4@home.comspam)
> > > Subject: Re: Kenwood TS520SE
> > > Newsgroups: rec.radio.cb
> > > View: Complete Thread (29 articles) | Original Format
> > > Date: 2002-01-26 15:26:42 PST
> > >
> > > Message 24 in thread
> > > From: Aaron H. Voobner (voobner@yahoo.com)
> > > Subject: Re: Kenwood TS520SE
> > > Newsgroups: rec.radio.cb
> > > View this article only
> > > Date: 2002-01-26 15:28:39 PST
> > > just look 2 minites later after middlefuck post he posts from his
> > > aol account. yes virginia voobner is middlefinger/steelgangsta and
> > > god knows how many other peeple he is.
> > > voobner@yahoo.com (Aaron H. Voobner) wrote in message
> > news:<fbc7a2.0201280032.4d23e26b@posting.google.com>...

> > > > "Train" <cbmods@optonlineNOSPAM.com> wrote in message
> > news:<GEZ48.89763$6L5.14523908@news02.optonline.net>...
> > > > > $120 for a Palomar 225?
> > > > >
> > > > > "Stephen Gale" <stephengale@sympatico.ca> wrote in message
> > > > > news:LuX48.1382$9y2.249997@news20.bellglobal.com...
> > > > > > a few things here........just getting started......check out the
> > accessories
> > > > > > link
> > > > > >
> > > > > > http://members.kingston.net/sgale/gold2/radio.html
> > > > > >
> > > > > >
> > > > >
> > > > "Train", CB amps are illegal.
> > > > >
> > > > -Aaron-

2067. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 02:00:55 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <idge5ugt8v1ddcmoorj1iak30ktjti4e8i@4ax.com>
Source record: 149753

On Tue, 29 Jan 2002 16:12:11 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Jake, AB3A wrote:
>"You`re falling into exactly the same trap that I outlined before. If
>you know nothing else, go for the certificate."
>
>The record is important.
>
>Who would your choice be as a military defender, George A. Custer, who
>said: "My career as a cadet had but little to recommend it to those who
>came after me, unless as an example to be carefully avoided." Or,
>Douglas C. McArthur who collected the highest grades ever awarded at
>West Point?
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

This is one of the singlemost absurd comparisons I have ever seen you draw (you hit a hot button). You would have failed utterly and abysmally if you had chosen to compare Lee to Grant on the same basis!

These two men exhibited the one compelling virtue that is a required, according to MacArthur:
"From the Far East I send you one single thought, one sole idea - written in red on every beachhead from Australia to Tokyo - "There is no substitute for victory!""

From Schofield's Definition of Discipline:
"...He who feels the respect which is due to others cannot fail to inspire in them regard for himself, while he who feels, and hence manifests, disrespect toward others, especially his inferiors, cannot fail to inspire hatred against himself."

Both quotes from "Bugle Notes," published by the Corps of Cadets, 1958. This book is mandatory reading, to the point of instant recall, for ALL cadets.

BOTH MacArthur AND Custer exhibited considerable arrogance. BOTH MacArthur AND Custer saw their fortunes decline after their initiation to war. BOTH MacArthur AND Custer lost major engagements. It is only through the accident of history that Custer died and MacArthur escaped by PT Boat (commemorated in John Ford's classic war saga "They Were Expendable"). There is absolutely no correlative in GPA, class ranking or any allusion to academia that separated their brush with

death and in their willingness to step up and take the risk personally.

If MacArthur had died during his escape, we would have celebrated his massacre by the Japanese (instead of the indians). However, his career would have been no more, nor less accomplished than Custer's. Face it, he was in the Philippines because his career was washed out - just like Custer's posting to the wilderness. Any other interpretation of their careers to these points is misty eyed sentimentalism.

Both MacArthur and Custer subscribed wholly to the West Point motto: "Duty, Honor, Country"

Few realize that the hallmark of West Point went far beyond the battlefield. The officers of West Point were the first American Engineers of note - they built the infrastructure of the 19th century that turned the Louisiana purchase into a productive part of the growing nation.

West Point is the bedrock Engineering school of every road, canal, bridge and railroad found east of the Mississippi. No other school in the world could compare in the remarkable talent that graduated to form "The Long Gray Line." Those, who feel dunned by this attitude and wish to challenge it should study their history, much less the admissions of those other schools to this very fact. The bottom of any class (the "goat") at West Point would've been first at another institution.

Our Civil War was considered the first modern War and was studied by every military attachï¿½ from Europe as it was being conducted. Later, from our junior service the Navy, Alfred Thayer Mahan's "The Influence of Sea Power upon History" was considered by European attachï¿½s as a masterpiece of history equal to Jomini and Clausewitz and required reading for the emerging issues that lead to World War One.

As a sidebar, I would point out that the single greatest failure of an Engineering education is to be educated only as an Engineer. I would also point out that Engineers are notorious for being poorly tutored in the classics of humanities and arts - by the students' choice, and the collusion of schools. This is/was not an option in the curriculum at the Point.

73's
Richard Clark, KB7QHC

2068. Re: G5RV - Extending one side - Will it help - HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 02:01:08 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u5ekvk3il78h88@corp.supernews.com>
Source record: 149754

Reg,
What about putting a choke balun on the input of the ATU?

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a32h3u$153tul$1@ID-124126.news.dfncis.de...
> > Reg Edwards" wrote:
> >
> > >If you have any coax in the feeder consign it to the junk box. Bring
the
> > >feedline right into the shack if you can manage it. Fit a choke balun
> > >between feedline and tuner. There may be any length of coax between
tuner
> > >and transmitter but the shorter the better of course. It's convenient
for
> > >tuning-up purposes if the SWR meter is at the tuner end of this coax to
> the
> > >transmitter.
> > >
> > >You will then have the most efficient, all-band 160 to 10m antenna
> possible
> > >at your QTH.
> >
> > Good evening, Reg.
> >
> > Any particular reason for the choke balun, if you have a tuner that
> > takes balanced feeders?
> >
> > I have a 160-meter inverted V, up 60 feet at the center, and fed with
> > 450-ohm line that connects directly into the back of a Nye Viking
> > tuner. It works beautifully on all bands 160-10 as well as MARS
> > frequencies outside the ham bands.
> > ============================
> Hello old man,
>
> I'm not familiar with your Nye Viking tuner. But if it is designed to
> accept a balanced feedline then an external balun of any sort is not
needed
> of course. There must be one inside the tuner already even if it is in the
> form of a link coupling.
>
> I mentioned it because most tuners are unbalanced at both ends and the
most
> simple, economic and efficient means of connecting the balanced line is
via

> a choke balun. Neither of the pair of line wires is then grounded at the
> tuner terminals.
>
> Construction can be just 8 to 16 turns of a pair of 18 or 20 gauge wires,
> like twin speaker cable or similar, wound round a ferrite ring.
>
> A choke balun is not an imedance transformer. It is just a bifiar-wound
> choke. Its input impedance is practically the same as the impedance it is
> terminated with. Its purpose is to force the currents in the pair of line
> wires to be equal and oposite to each other. ie., there is little or no
> longitudial current in the line when the two wires are considered to be a
> single wire. Radiation from or pick-up on the feeder is then minimised.
>
> Because it is not an impedance transformer, a choke balun may result in
> inconvenient L and C settings in the tuner. In your case, the internal
balun
> is probably a true impedance step-down transformer from 450/4 = 113 ohms.
Or
> 450/9 = 50 ohms. This is nearer to 50 than 450 and so the tuner's L and C
> values may be more reasonable.
>
> Bear in mind the impedance looking into the 450-ohm line is 450 ohms only
> when SWR on the line is 1-to-1 which it never is. A choke balun is much
> more accommodating to wide swings in line input impedance than 4:1 or 9:1
> true transformers.
>
> As I suggested earlier, you have found a high centre-fed dipole, fed over
a
> balanced high-impedance line all the way to a good tuner in the shack, is
> the best possible all-round, multiband antenna in the book. Few people
fully
> appreciate this until they have tried all the many other wierd
contraptions.
> Should novices be restricted to short lengths and low heights alongside
> their radiated power limitations ? ;o)
> ---
> **************************
> Regards, Reg G4FGQ
> Free Radio Modelling Programs
> Http://www.g4fgq.com
> **************************
>
>

2069. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 02:05:00 UTC
From: richardharrison@webtv.net
Message-ID: <9634-3C5754CC-127@storefull-113.iap.bryant.webtv.net>
Source record: 149755

Roy Lewallen wrote:
"I`ve found that empoyers of engineers never,ever ask how well one did in school unless hiring a new graduate with no other experience."

Depends on the employment climate. But, I agree with Roy on this point, in general. Why question an academic record if a more recent work record exists. It`s usually more indicative of what can be expected from a new hire.

I`d intended withdrawing from this discussion because I think this group wants to believe that academic acvhievement is of secondary importance. My resolve didn`t last.

Acadremic achievement is not only a fair indicator of continuing academic achievement but in a work situation which requires the same traits, brains and a work ethic, it is an indicator of performance on the job.

Employers of new graduating engineers pick the schools that will be used for recruiting. Recruiters can pick from those who came to college on the basis of merit scholarships and those who won honors in college. It`s a matter of record. Some graduates will get invitations from many interviewers and some will get few if any.

Academic achievement counts!

Best regards, Richard Harrison, KB5WZI

2070. Re: help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 02:17:38 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C5757B6.F963624B@icok.net>
Source record: 149756

It also may be a difference in the what the watt meter is
reading, Pep, Peak, RMS, or "Bird watts"...
'Doc

2071. Re: Mast Ideas - Thanks Everyone

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 02:30:13 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.16c0fa8f6654c53b9896a8@news.onlynews.com>
Source record: 149757

Great, thanks everyone! I have some good ideas now.

Steve

In article <3c56cc2d$0$1603$272ea4a1@news.execpc.com>, danlx@execpc.com
says...
>
>
> Hi all. here is what I have done.
> On Mon, 28 Jan 2002 20:01:52 -0800, Beach Bum
> <hmbdude@nospamcotse.com> wrote:
>
> >Well, Mike, I can tell you the rugrats idea is completely out of the
> >question:-)
> >
> >I was thinking of a post too, but I'm surprised a 4x4 would be strong
> >enough. There's someone in the area who installs lengths of surplus
> >(wooden) utility poles as lot corner markers and jumbo fence/gate posts.
> >Maybe I'll track them down and see what they can do for me.
> >
> >What kind/size of mast did you use?
> >
> >Steve
> >In article <3C54AF41.9070609@europa.com>, mjordan@europa.com says...
> >>
> >>
> >> hmbdude-no-spam@cotse.net wrote:
> >>
> >> > I want to put up "something" to hold a fringe TV antenna, a scanner
> >> > antenna, and an (as yet undefined) HF vertical. The TV antenna needs to be
> >> > 18 - 20 feet off the ground. I have a single storey house, no useable
> >> > chimney, don't want to mount on the roof, and can't use wall brackets
> >> > because there is a 3 foot eave overhang all around. So, I'm looking for
> >> > ideas for a self supporting (no guys) 20 foot mast, that doesn't cost a
> >> > fortune.
> >>
> >>
> >> A tree is cheap, but the installation time is about 15 years.
> >> <grin>
> >>
> >> I had basically the same problem a number of years ago, Steve.
> >> What I did was build a wooden platform as part of my daughters
> >> playground set I built and bolted my 25' mast to it. I had a 4
> >> element 10 meter beam on top of it and had no problems. The
> >> platform was built from 10' 4x4 posts in concrete and the platform

> >> was at the 6' level and was made of 2x8. So the whole structure was
> >> pretty solid.
> >>
> >> What I have done more recently was take a corner 4x4 fence post
> >> (in concrete) and bolted a 22' mast to it. I had a 2 meter vertical
> >> on there for awhile but moved that to a chimney mount on top of our
> >> second floor roof, which gave me a little more height. The mast is
> >> now the center of a 80' meter dipole. I've been wanting to put up a
> >> another mast, but like you, I can't guy it. I can guy it on two
> >> sides but not the third. So I've been thinking of putting a 6x6
> >> into about 3 feet of concrete and 8 feet above ground and bolt a

2072. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 03:14:25 UTC
From: Landshark <S3Buell@SBCGlobal.Net>
Message-ID: <lyJ58.40104$o%1.3719598094@newssvr21.news.prodigy.com>
Source record: 149759
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

Just kill file the goofy bastards, you and
your newsreader will be a lot happier in the
long run.

Landshark

--
Please note that any post that is from
S3Buell_SBCGlobailnet@hotmail.com
is a FORGE. My Addy is always going to
be from SBCGlobal.Net This person has
been a troll on Rec.Radio.CB for a long
time now. If you want to send a complaint,
forward each message complete with headers
to TOSUSENET@AOL.COM. abuse@hotmail.com,
groups-abuse@google.com
Beware of George WA3MO^

"Brian" <lib_mrducks@yahoo.com> wrote in message
news:nbI58.60157$XZ1.3271673@typhoon.austin.rr.com...
> well...at least his name was spelled right....LOL....
>
> "Mr. Hand" <mrhandupsideyurhead@YAHOO.COM> wrote in message
> news:f48aa443.0201291212.645ccfa8@posting.google.com...
> > yes you did you are this voobner idiot and you are just hidding the
> > fact you are scared. im terlling the truth about yur soory ass you are
> > voobner/steelganagta/foolltime/middlefiger/now i found out you are
> > keyclownslappa. man you have got more fake screeen names then a cia
> > agaent.
> > go ahaed and lye about not having an aol account you know its treu and
> > i know its true that you do have a aol accountt. so quit yur crieing
> > and shut up pussy boy.
> > "ToolTime" <middlefinger4@home.comspam> wrote in message
> news:<lnl58.7286$X64.3327583@news1.rdc2.pa.home.com>...
> > > I didn't even post to this thread you idiotic Moron who
> > > crys like a little baby. Lets see how many other people posted at that
> time
> > > on the internet? you sorry excuse for a human being.
> > >
> > >
> > >
> > > "Mr. Hand" <mrhandUPSIDEYURHEAD@yahoo.com> wrote in message
> > > news:46cdc863.0201281112.55ecbf86@posting.google.com...
> > > > what a crock of shit1 how long is this iodiot going to keep up

> > > > this sherade of im not voobner. just look at the times that this
> > > > morons posting
> > > > From: ToolTime (middlefinger4@home.comspam)
> > > > Subject: Re: Kenwood TS520SE
> > > > Newsgroups: rec.radio.cb
> > > > View: Complete Thread (29 articles) | Original Format
> > > > Date: 2002-01-26 15:26:42 PST
> > > > >
> > > > Message 24 in thread
> > > > From: Aaron H. Voobner (voobner@yahoo.com)
> > > > Subject: Re: Kenwood TS520SE
> > > > Newsgroups: rec.radio.cb
> > > > View this article only
> > > > Date: 2002-01-26 15:28:39 PST
> > > > just look 2 minites later after middlefuck post he posts from his
> > > > aol account. yes virginia voobner is middlefinger/steelgangsta and
> > > > god knows how many other peeple he is.
> > > > voobner@yahoo.com (Aaron H. Voobner) wrote in message
> > > news:<fbc7a2.0201280032.4d23e26b@posting.google.com>...
> > > > > "Train" <cbmods@optonlineNOSPAM.com> wrote in message
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> > > > > > $120 for a Palomar 225?
> > > > > >
> > > > > > "Stephen Gale" <stephengale@sympatico.ca> wrote in message
> > > > > > news:LuX48.1382$9y2.249997@news20.bellglobal.com...
> > > > > > > a few things here........just getting started......check out
the
> > > accessories
> > > > > > > link
> > > > > > >
> > > > > > > http://members.kingston.net/sgale/gold2/radio.html
> > > > > > >
> > > > > > >
> > > > > >
> > > > > "Train", CB amps are illegal.
> > > > > >
> > > > > -Aaron-
>
>

2073. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 03:18:06 UTC
From: KC8SSG <kc8ssg@qsl.net>
Message-ID: <OBJ58.13$A02.199@news>
Source record: 149758

If your going to use the pipe you might try using a fence post driver.
Basically its a bigger pipe with a end cap and you slam it up and down on
the pipe or rod your driving in. It would help.
Rob
"avatar" <avatar@frii.com> wrote in message
news:3c516676$0$2196$7586b60c@news.frii.com...
> I have installed two ground rods over the years and they both have been
> eaten away to a small spike in just a few years. These were copper cladded
> steel rods. I was recently told that a pure copper rod won't be affected
by
> the chemical reaction. I'd like to use a 3/4 inch copper pipe, but driving
a
> 10 foot length into the ground is a problem, especially with some clay in
> the soil. While a copper pipe is fairly rigid, it won't withstand a sledge
> hammer. I'm looking for solutions to accomplish this task.
>
> Dave
> W�MAY
>
>
>

2074. G5RV to Icom 746

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 03:21:23 UTC
From: Tom Nelson <nelsonca@stormnet.com>
Message-ID: <3C5766B3.2FF18BC8@stormnet.com>
Source record: 149761

The manual of my new 746 explicitly advises against connecting anything but coax to the output. Is there a G5RV that I can build/buy to skirt this problem? I'm thinking there must be a coax balun combination that I could put ahead of the ladder line to make things work. I would prefer to use ladder line to keep the initial SWR as low as possible since the built-in tuner of the 746 does not seem to offer much latitude.

The built-in tuner of the 746 does not tune my existing antennas to 40 Meters like my Kenwood AT-250 does. It WILL tune the same antennas to 10 Meters where the AT-250 would not! I'm wondering if anyone has had success using a multiband antenna like the G5RV with the 746?

Thanks in advance
Tom
KD6EVM

2075. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 03:34:32 UTC
From: ToolTime <middlefinger4@home.comspam>
Message-ID: <cRJ58.12170$X64.4176011@news1.rdc2.pa.home.com>
Source record: 149760
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

Yes , Maybe you should try it sometime.

"Landshark" <S3Buell@SBCGlobal.Net> wrote in message
news:lyJ58.40104$o%1.3719598094@newssvr21.news.prodigy.com...
> Just kill file the goofy bastards, you and
> your newsreader will be a lot happier in the
> long run.
>
> Landshark
>
>
> --
> Please note that any post that is from
> S3Buell_SBCGlobailnet@hotmail.com
> is a FORGE. My Addy is always going to
> be from SBCGlobal.Net This person has
> been a troll on Rec.Radio.CB for a long
> time now. If you want to send a complaint,
> forward each message complete with headers
> to TOSUSENET@AOL.COM. abuse@hotmail.com,
> groups-abuse@google.com
> Beware of George WA3MO^
>
>
> "Brian" <lib_mrducks@yahoo.com> wrote in message
> news:nbI58.60157$XZ1.3271673@typhoon.austin.rr.com...
> > well...at least his name was spelled right....LOL....
> >
> > "Mr. Hand" <mrhandupsideyurhead@YAHOO.COM> wrote in message
> > news:f48aa443.0201291212.645ccfa8@posting.google.com...
> > > yes you did you are this voobner idiot and you are just hidding the
> > > fact you are scared. im terlling the truth about yur soory ass you are
> > > voobner/steelganagta/foolltime/middlefiger/now i found out you are
> > > keyclownslappa. man you have got more fake screeen names then a cia
> > > agaent.
> > > go ahaed and lye about not having an aol account you know its treu and
> > > i know its true that you do have a aol accountt. so quit yur crieing
> > > and shut up pussy boy.
> > > "ToolTime" <middlefinger4@home.comspam> wrote in message
> > news:<lnl58.7286$X64.3327583@news1.rdc2.pa.home.com>...
> > > > I didn't even post to this thread you idiotic Moron who
> > > > crys like a little baby. Lets see how many other people posted at
that

> > time
> > > > on the internet? you sorry excuse for a human being.
> > > >
> > > >
> > > >
> > > > "Mr. Hand" <mrhandUPSIDEYURHEAD@yahoo.com> wrote in message
> > > > news:46cdc863.0201281112.55ecbf86@posting.google.com...
> > > > > what a crock of shit1 how long is this iodiot going to keep up
> > > > > this sherade of im not voobner. just look at the times that this
> > > > > morons posting
> > > > > From: ToolTime (middlefinger4@home.comspam)
> > > > > Subject: Re: Kenwood TS520SE
> > > > > Newsgroups: rec.radio.cb
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> > > > > Date: 2002-01-26 15:26:42 PST
> > > > >
> > > > > Message 24 in thread
> > > > > From: Aaron H. Voobner (voobner@yahoo.com)
> > > > > Subject: Re: Kenwood TS520SE
> > > > > Newsgroups: rec.radio.cb
> > > > > View this article only
> > > > > Date: 2002-01-26 15:28:39 PST
> > > > > just look 2 minites later after middlefuck post he posts from his
> > > > > aol account. yes virginia voobner is middlefinger/steelgangsta and
> > > > > god knows how many other peeple he is.
> > > > > voobner@yahoo.com (Aaron H. Voobner) wrote in message
> > > > news:<fbc7a2.0201280032.4d23e26b@posting.google.com>...
> > > > > > "Train" <cbmods@optonlineNOSPAM.com> wrote in message
> > > > news:<GEZ48.89763$6L5.14523908@news02.optonline.net>...
> > > > > > > $120 for a Palomar 225?
> > > > > > >
> > > > > > > "Stephen Gale" <stephengale@sympatico.ca> wrote in message
> > > > > > > news:LuX48.1382$9y2.249997@news20.bellglobal.com...
> > > > > > > > a few things here........just getting started......check out
> the
> > > > accessories
> > > > > > > > link
> > > > > > > >
> > > > > > > > http://members.kingston.net/sgale/gold2/radio.html
> > > > > > > >
> > > > > > > >
> > > > > > >
> > > > > > > "Train", CB amps are illegal.
> > > > > > >
> > > > > > -Aaron-
> >
> >
>
>

2076. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 03:56:17 UTC
From: richardharrison@webtv.net
Message-ID: <29374-3C576EE1-20@storefull-114.iap.bryant.webtv.net>
Source record: 149763

Richard Clark wrote:
"You would have failed utterly and abysmally if you had chosen Lee to Grant on the same basis!"

Sure! It takes more than brains and energy to beat the competition. It takes motivation, manpower, materials, money----etc. If Lee had the resources Grant had, the Lincoln Memorial would be the Jefferson Davis Memorial.

Best regards, Richard Harrison, KB5WZI

2077. Re: G5RV to Icom 746

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 03:56:39 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C576EF7.4A7486FC@IEEE.org>
Source record: 149762

Tom Nelson wrote:
>
> The manual of my new 746 explicitly advises against connecting anything
> but coax to the output. Is there a G5RV that I can build/buy to skirt
> this problem? I'm thinking there must be a coax balun combination that I
> could put ahead of the ladder line to make things work. I would prefer
> to use ladder line to keep the initial SWR as low as possible since the
> built-in tuner of the 746 does not seem to offer much latitude.
>
> The built-in tuner of the 746 does not tune my existing antennas to 40
> Meters like my Kenwood AT-250 does. It WILL tune the same antennas to 10
> Meters where the AT-250 would not! I'm wondering if anyone has had
> success using a multiband antenna like the G5RV with the 746?

Doesn't the G5RV have about 80ft of coax? Your 746 should be able to
tune 80m, 40m, 20m, and 12m using a standard G5RV. Also 15m if you're
lucky. There should be a 1:1 choke balun between the coax and twinlead
on a G5RV.
--
cheers, CAM http://www.qsl.net/w5dxp

2078. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 04:19:23 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201292019.65ecd3dd@posting.google.com>
Source record: 149764

Jake Brodsky <frussle@erols.com> wrote in message
news:<8u9d5ukjc9s0k63tp539ha37ms0jpnrkka@4ax.com>...
>
> 5) I think most of us know folks from all walks of life who are really
> good at taking paper tests but haven't a clue about what they're
> doing. That's not to say that those who get low grades are good,
> merely that the grades you get in school don't correlate well with
> real world performance.
>
I fit this description as a student. All I cared about was giving the teacher or professor the answer he/she wanted. I didn't care about how well I learned the material. This pattern worked fine in K-12 (I was salutatorian, National Merit Finalist, and Advanced Placement Scholar with Honor), but it broke down in college. Unfortunately, it seems that today's students are even more deeply entrenched in the Academic Performance Cult than I ever was.

The U-turn in my attitude towards electrical engineering concepts illustrates the difference between know-how and studying to pass a class. I am living proof that you don't need to understand the material to pass a class - you just need to be skilled at regurgitating the "right" answer (or something resembling it) on homework and test papers. Only recently have I begun to truly grasp SWR, antenna efficiency, antenna patterns, matching networks, and filter circuits. HAM RADIO MADE THE DIFFERENCE.

Jason Hsu, AG4DG
jason_hsu_802701@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

2079. Re: If my MFJ-259B says...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 04:28:31 UTC
From: richardharrison@webtv.net
Message-ID: <29372-3C57766F-129@storefull-114.iap.bryant.webtv.net>
Source record: 149766

Mark Keith wrote:
"Shouldn`t be, that I know of. I`ve modeled lots of collinears."

I worded my post very poorly. "Seems to be a problem for modeling." I meant seems to be a problem just made for modeling. Sorry.

Best regards, Richard Harrison, KB5WZI

2080. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 04:36:05 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020129233605.16506.00000229@mb-cu.aol.com>
Source record: 149765

Dave -

I think you got some bum advice there. Copper is a very reactive metal and
will not last any longer than the steel clad rods you used before, maybe less.
I don't know what would be better but you might try aluminum wire buried in the
ground like a radial.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free,
Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

2081. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 05:03:57 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201292103.3f77b036@posting.google.com>
Source record: 149767
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Cons of prior ham radio experience for EEs:
1. Some of you have said that prior ham radio experience could make an EE cocky, and this would be an impediment for an EE student.
2. Some of you also mentioned that not all hams are interested in the EE principles. I was like this for about my first 3-4 years as a ham. Being a weather weenie and discovering SKYWARN is what drew me into ham radio, and I considered myself a SKYWARN ham and social ham but not a technical ham.
3. One of you mentioned that several hams you knew dropped out of school because they could earn good money as broadcast engineers.
4. Roy mentioned that his professors didn't know the practical world and that he found this to be an impediment in the academic world.
5. Richard Harrison said that the EE curriculum left little time for ham radio. Mac tells of one ham who was an enthusiastic participant in the lunchtime seminars flunked out (but somehow managed to pull himself back together elsewhere).

Pros:
1. On the flip side, Roy easily found a job in spite of a GPA of only 2.01. Roy reminds me of Einstein and Bill Gates - he had more productive things to do than the extra studying required to get a B or A average instead of a C - like designing instrumentation for the company that would later employ him after graduation. Roy: Would all this have been possible without ham radio? (On the 4.0 GPA scale, I graduated with a GPA of 3.13. I would have killed to be more like Roy, even with the MUCH lower GPA.)
2. In Mac's experience, most of the best engineers and faculty members in his college days were hams. Whether their EE curiosity drew them into ham radio or ham radio aroused their EE curiosity, the curiosity motivated them to learn the material.

I am still convinced that prior experience in ham radio is usually a substantial advantage to an EE or an EE student.

I can only speculate, but I'll bet that any good study would show that EE students and EEs tend to be better performers than their nonham counterparts. Of course, the correlation wouldn't be perfect, and the factors I summarized in the list of cons would be good reason for this. It would, however, be interesting to see just how strong the correlation would be. (Admittedly, things like GPA and salary don't tell the whole story on how successful one is.) I should ask the ARRL to do a study on this.

Jason Hsu, AG4DG
jason_hsu_802701@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

2082. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 05:23:29 UTC
From: richardharrison@webtv.net
Message-ID: <21761-3C578351-12@storefull-112.iap.bryant.webtv.net>
Source record: 149671

Jason Hsu wrote:
"Ham Radio made the difference."

That is great! The more you know, the more associations you can make with new knoweledge. Associations assist recording, retention, and recall. Repetition is a big help too. All memory is a memory process, even mathematics.

It may be dangerous to your grade point average to spend too much time on subjects on which you won`t be graded unless they are closely related to to your test subjects.

Best regards, Richard Harrison, KB5WZI

2083. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 05:26:21 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C5783FD.7B934745@coqui.net>
Source record: 149768
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Jason Hsu wrote:
>

> I am still convinced that prior experience in ham radio is usually a
> substantial advantage to an EE or an EE student.
>
> I can only speculate, but I'll bet that any good study would show that
> EE students and EEs tend to be better performers than their nonham
> counterparts.

Part of the equation that's not going to reveal itself in the discussion here is the ham+ee+internet fan combination.
I know lots of technically minded hams or EEs that have no use for Usenet and Usenet nurds that have no use for hamming, and the combinations so forth.
After all the culling, there's few individuals here to present the argument...but that doesn't imply that its wrong.
EE curriculum and hamming are entirely different disciplines. The only common thread is the enthusiasm to immerse oneself in the interest. The same may apply to ee's (or hams) who are also model-railroad buffs.

-Bill
(jack of all trades, master of none)

2084. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 05:31:22 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C58C8B5.609037B4@worldnet.att.net>
Source record: 149669

Bill Nelson wrote:

> AstroMan <AstroMan@dont.bug.me.with.spam.nyet> wrote:
>
> >> When Ford took his race cars to the track, people thought FORD was an
> >> acronym for First On Race Day.
> >>
> >> Best regards, Richard Harrison, KB5WZI
>
> > Now they think it means
>
> > Found On Road Dead
> > or
> > Fix Or Repair Daily
>
> Which is really scary - as Ford Motor products are more reliable than
> General Motors products, these days.
>

That hasn't been my experience.

Dick

2085. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 05:39:24 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C58CA96.DB5384EA@worldnet.att.net>
Source record: 149670

Bob Miller wrote:

> Bill Nelson <billn@spock.peak.org> wrote:
>
> >AstroMan <AstroMan@dont.bug.me.with.spam.nyet> wrote:
> >
> >>> When Ford took his race cars to the track, people thought FORD was an
> >>> acronym for First On Race Day.
> >>>
> >>> Best regards, Richard Harrison, KB5WZI
> >
> >> Now they think it means
> >
> >> Found On Road Dead
> >> or
> >> Fix Or Repair Daily
> >
> >Which is really scary - as Ford Motor products are more reliable than
> >General Motors products, these days.
>
> I notice in a Consumer Reports guide to all the latest vehicles, the magazine
> does not recommend buying a Chevy Surburban or Silverado -- reliability
> problems. They also recommend against buying the GMC versions of those vehicles;
> same reliability problems.

That's odd, I've owned a 2000 model Sierra 1500 for the past year and a half,
32,000 miles worth, and it's far and away the most reliable - and in every way the
best vehicle - I've ever owned.
I won't even drive the Ford car anymore- it sat til the battery went down, and I
used to be a Ford man.

Dick

2086. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 06:13:44 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C578F18.2E7923C5@coqui.net>
Source record: 149672

Dick Carroll wrote:
>
> Bob Miller wrote:
>
> > Bill Nelson <billn@spock.peak.org> wrote:
> >
> > >AstroMan <AstroMan@dont.bug.me.with.spam.nyet> wrote:
> > >
> > >>> When Ford took his race cars to the track, people thought FORD was an
> > >>> acronym for First On Race Day.
> > >>>
> > >>> Best regards, Richard Harrison, KB5WZI
> > >
> > >> Now they think it means
> > >
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> > >Which is really scary - as Ford Motor products are more reliable than
> > >General Motors products, these days.
> >
> > I notice in a Consumer Reports guide to all the latest vehicles, the magazine
> > does not recommend buying a Chevy Surburban or Silverado -- reliability
> > problems. They also recommend against buying the GMC versions of those vehicles;
> > same reliability problems.
>
> That's odd, I've owned a 2000 model Sierra 1500 for the past year and a half,
> 32,000 miles worth, and it's far and away the most reliable - and in every way the
> *best* vehicle - I've ever owned.
> I won't even drive the Ford car anymore- it sat til the battery went down, and I
> used to be a Ford man.
>
> Dick

Is the Ford vs GM argument anything like the old Hallicrafters vs.
Hammarlund argument where equal numbers say their's is the better
one..and become vehement about it? "That d**n Ha*** rig blew a fuse so
I tossed it out in the barn and my other rig continued to work. Ha***
is just crap"
Oops, this is the 'EE majors' thread.
-Bill

2087. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 06:16:25 UTC
From: richardharrison@webtv.net
Message-ID: <16136-3C578FB9-140@storefull-115.iap.bryant.webtv.net>
Source record: 149674

Craig, K4IA wrote:
"Copper is a very reactive metal and will not last any longer than the steel clad rods you used before, maybe less."

Reality check! Millions of copper-clad ground rods, millions of radials buried in the earth, copper roofs over countless ancient buildings in the world, millions of copper radiators, millions of buried copper water pipes, would all these be in place if copper were "a very reactive metal"?

Best regards, Richard Harrison, KB5WZI

2088. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 06:19:41 UTC
From: richardharrison@webtv.net
Message-ID: <16138-3C57907D-28@storefull-115.iap.bryant.webtv.net>
Source record: 149675

All learning is a memory process too.
Best regards, Richard Harrison, KB5WZI

2089. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 06:29:57 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a383t3$u2a$1@slb1.atl.mindspring.net>
Source record: 149673

Jason:

It seem from the comments on this thread that many participants do not really understand what it means to be an Engineer.

Practical experience, theory, and passing tests go hand in hand in the creation of any Professional. Medicine, Law, Engineering, etc... all require both rigorous practical experience, and some academic training... Folks who aspire only to be bookish nerds need not apply! Ya gotta produce as well as pass tests! I'm sorry, but to be good, "ya gotta have it all"! If not, you are simply not within the classification of "Professional".

Such statements alone certainly do not protect us from "false prophets". And so... when presented with an individual claiming to be an Engineer, I say... caveat emptor. Since today you can get a "Microsoft Engineer" certificate with a few hundred dollars and a few days memorizing a few hundred multiple choice questions.

Would you like the gal doing your triple bypass operation to have got her medical accreditation by that method? The same is true of the ham license, except you don't have to spend as much to pass the multiple choice exam. Many years ago, in many parts of the world, it used to be the case that you could not obtain a higher level ham ticket wihout first proving that you have built, tested and operated radio equpment over at least a certain specified time period. I wonder today... just as we all seem to agree that the overall requirements to become a ham have been watered down over the years, I am not saying that this was/is a bad thing, since ham radio is amateur not professional, but do you suppose the same thing is happening to Engineering?

Paraphrasing Marvin Minsky, one of the great leading thinkers on intellgence, "An ounce of perspective is worth 50 points on the next examination". More to the point, we could do no better than think about the famous quote from Rudyard Kipling who wrote the "Oath of an Engineer", that to become an Engineer, one must first have experienced, "the perversity of inaminate objects". Engineers are the Sons of Martha, not of Mary!

Despite what many say, and some believe, a graduate of a four year engineering school, is *NOT* an engineer. Myself, I was a technician, trained in the military service for four years, before I attended University, and so I approached academic Engineering with some awe and trepeditation. Later, I recall saying to myself when I graduated, "Is that all there is?" I simply couldn't believe that "they" would let me out of that engineering school with such little knowledge and so ill-prepared. What??? Heck... I wasn't an Engineer yet!

In many jurisdictions the role of Professional Engineering is "policed" as is Medicine and Law by professional societies. It is often strictly forbidden in some parts of the world and in some fields of practice, to call oneself an Engineer until one has at least served an "apprenticeship" as a graduate engineer in training, having demonstrated at least several years of working in the creation of practical designs...and having passed the various criterion set forth by an association of practicing Engineers, not of academics! This universally requires, as Kipling would say, "practical experience with perverse inaminate objects".

To be an Engineer is to be a truly well rounded individual.

Not only should an Engineer be an extremely practical person, but she should also be skilled in academic subjects, the passing of technical examinations and of understanding the impact of her works on the rest of society.

Unfortunately, although it is in many ways a challenging technology, electronics, communications and software, has been an engineering field in which it was/is relatively inexpensive to learn design by practical construction. Compare building a ham transmitter to building a bridge. To a great extent the fields of engineering associated with ham radio: electronics, software, are accessible to "weaker" cousins more so than those of other more venerable and demanding Engineering disciplines. This is evidenced by the practical and commercial success in our hobby and industry of shoddy, individuals, companies and so called designs which just would never pass muster in truly demanding Engineering fields. And so... even partially rounded, persons can "claim" to be engineers in most fields of interest to hams. The field of software "engineering", one of the newest disciplines, is especially rife with charlatans and rip offs....

How many would feel comfortable flying in a 767, staring at a screen in the cockpit presenting a blinking message "If you don't want to see this message again, then next time shut down the plane properly"... now checking for errors... or while crossing the Golden Gate, being asked if you want to "abort, retry, or... whatever" before continuing your trip, or riding an elevator to the top of the Sears tower staring at a button that says "reset" and wondering why the hell did they put that button there?

Engineering indeed!

Let's first try to get the definition of Engineer understood, and then try to decide whether being a ham before, during ,or after the intiation into that sacred sisterhood is aided or abetted by the "ham experience".

Thoughts, comments?

--Peter K1PO

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0201292103.3f77b036@posting.google.com...
> Cons of prior ham radio experience for EEs:
> 1. Some of you have said that prior ham radio experience could make
> an EE cocky, and this would be an impediment for an EE student.
> 2. Some of you also mentioned that not all hams are interested in the

> EE principles. I was like this for about my first 3-4 years as a ham.
> Being a weather weenie and discovering SKYWARN is what drew me into
> ham radio, and I considered myself a SKYWARN ham and social ham but
> not a technical ham.
> 3. One of you mentioned that several hams you knew dropped out of
> school because they could earn good money as broadcast engineers.
> 4. Roy mentioned that his professors didn't know the practical world
> and that he found this to be an impediment in the academic world.
> 5. Richard Harrison said that the EE curriculum left little time for
> ham radio. Mac tells of one ham who was an enthusiastic participant
> in the lunchtime seminars flunked out (but somehow managed to pull
> himself back together elsewhere).
>
> Pros:
> 1. On the flip side, Roy easily found a job in spite of a GPA of only
> 2.01. Roy reminds me of Einstein and Bill Gates - he had more
> productive things to do than the extra studying required to get a B or
> A average instead of a C - like designing instrumentation for the
> company that would later employ him after graduation. Roy: Would all
> this have been possible without ham radio? (On the 4.0 GPA scale, I
> graduated with a GPA of 3.13. I would have killed to be more like
> Roy, even with the MUCH lower GPA.)
> 2. In Mac's experience, most of the best engineers and faculty
> members in his college days were hams. Whether their EE curiosity
> drew them into ham radio or ham radio aroused their EE curiosity, the
> curiosity motivated them to learn the material.
>
> I am still convinced that prior experience in ham radio is usually a
> substantial advantage to an EE or an EE student.
>
> I can only speculate, but I'll bet that any good study would show that
> EE students and EEs tend to be better performers than their nonham
> counterparts. Of course, the correlation wouldn't be perfect, and the
> factors I summarized in the list of cons would be good reason for
> this. It would, however, be interesting to see just how strong the
> correlation would be. (Admittedly, things like GPA and salary don't
> tell the whole story on how successful one is.) I should ask the ARRL
> to do a study on this.
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

2090. Re: G5RV to Icom 746

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 08:35:21 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C57B02A.CAF0A576@icok.net>
Source record: 149676

Tom,
Your '746's manual means that you shouldn't try to use
balanced feed line, just a 50 ohm, unbalanced feedline. It
doesn't mean you can't use a G5RV antenna. Your internal
tuner may not be able to handle the impedance differences that
a G5RV presents on bands other than 20 meters, though.
'Doc

2091. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 10:17:58 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a38h8mevn1@serra.unipi.it>
Source record: 149677

Richard Clark <kb7qhc@attbi.com> wrote:

[...]

> Keep your eye open, especially if one of your friends works in a lab
> where these instruments will be hidden away, replaced by newer
> computerized gear. This is technology that saw its height in the
> 1950's and 1960's.

most labs here don't take space to hold unused gears I'm afraid...

[...]

> You will feel much more comfortable if you build the test plan before
> you get to the site. The testing itself, with the observation of all
> the comments both Roy and I have made, will proceed quite easily.
> Most of the work is in the handling of the results. With such in
> mind, it is better to have a lot of data rather than a little. The
> test plan will reveal how much you have available to interpret.

sure, I'll make the test plan available for all for comment once
we gather sufficient informations about what we have and how much
time we can spend for testing.

> As for the full size Standard Antenna, or a much smaller one, there
> are several considerations. For one, how is the debate framed? The
> EH proponents will claim superior or equal performance to the Standard
> size antenna, but do they all agree what size that is?

Stefano told me (and others) several times that the EH is 2 to 3 dB
better than a full size dipole. Now a full size dipole, as far as I know,
is an half wave radiator fed in the middle. Using an end fed half wave
vertical just allow us to handle better the reference antenna, i.e.
there's no need to rotate it as we change receiveir position, there's no need
to put it up an height at least equal to half a wavelenght and also I believe
that EH radiates vertically polarized.

> Testing should anticipate future disputes, or should short-circuit
> them. The proponents of the EH also claim "mysterious"
> characteristics somewhat in the mold of the psuedo-science of fractal
> electro-magnetics (fractal-electro-magic). They also deny correlation
> to already well studied small antennas. If you can draw a correlation
> by comparing to a known small radiator, you close that avenue of
> specious defense. This would also eliminate the appeal to such
> nonsense. The logic goes, if they cannot do better than a simpler
> small antenna (same size, same elevation) why bother? The extension
> of this logic is that if they cannot perform better than a known poor

> radiator, there is no reason to presume they will do better with a
> larger one (the poor, known, antenna already establishes that fact).

that again is why we'll try to compare it to a small antenna. Though, as
you suggested, there might be differences in tuner's wasted powers.

> Myself, I am not terribly concerned about induced or conducted
> spurious currents in adjacent structures. The swap of antennas at the
> same drive point should exhibit similar characteristics (for small
> antennas of equal size/elevation). However, I am fully supportive of
> taking of that data.

I tend to agree with you, but blocking and measuring currents on the
coax braid will be easy enough I think. We'll try to avoid the use of
metallic supports for any transmitting antenna also.

> This is certainly not the end of the topic. I would suggest, again,
> build a more complete test grid and publish it here for comment. The
> plan should emphasize the data to be taken, and not necessarily the
> means of obtaining it (we've done that largely).

I'm going to meet some of the other "testers" this weekend, so probably
I will post something next monday.

Thanks

Francesco IZ5DWF

2092. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 10:43:57 UTC
From: Andy M <andrew.markham@virgin.net>
Message-ID: <P6Q58.326$zB.192811@news2-win.server.ntlworld.com>
Source record: 149678

I had a similar problem and found a short in the plug between braid and centre conductor.

Andy

"Patrick Gardella" <pgardella@yahoo.com> wrote in message news:57d04feb.0201291645.4fbc77e5@posting.google.com...
> I've got a simple question about a "shorty forty" antenna I've built
> (details at http://www.flashwebhost.com/circuit/shortant.php). Now,
> I've got the coax (RG-58) coming off the antenna down to my shack.
> When I just connect the center conductor to the receiver (for now),
> everything works great. But when I attach the coax to the BNC
> connector, and then to the receiver, the signal disappears.
>
> Where do you connect the shield/braid of a dipole? To ground?
>
> Patrick
> KD4LOX

2093. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 11:32:44 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a38rll$1662om$1@ID-124126.news.dfncis.de>
Source record: 149683

Peter said -
> the overall requirements to become a ham have been watered down over the
> years, I am not saying that this was/is a bad thing, since ham radio is
> amateur not professional, but do you suppose the same thing is happening
to
> Engineering?
==========

Pete, you hit the nail right on the head.

It HAS happened !

2094. Re: G5RV - Extending one side - Will it help - HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 12:17:01 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a38rlm$1662om$2@ID-124126.news.dfncis.de>
Source record: 149684

AstroMan wrote -

> What about putting a choke balun on the input of the ATU?
==========

It would work. Keep the ATU box small, mount it on 3 tall porcelain legs and wear a thick, high-voltage, electricians' rubber glove when adjusting it.

Or instead of 3 porcelain legs suspend the ATU on a dry string from the ceiling.

Such arrangements always impress visiting novices.

Putting a choke balun in the transmitter 60Hz power lead is not recommended.

Reg, G4FGQ

2095. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 12:22:46 UTC
From: pgardella@yahoo.com
Message-ID: <57d04feb.0201300422.3d1d5c12@posting.google.com>
Source record: 149680

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C574236.27D6D5AC@IEEE.org>...
> Patrick Gardella wrote:
> >
> > I've got a simple question about a "shorty forty" antenna I've built
> > (details at http://www.flashwebhost.com/circuit/shortant.php). Now,
> > I've got the coax (RG-58) coming off the antenna down to my shack.
> > When I just connect the center conductor to the receiver (for now),
> > everything works great. But when I attach the coax to the BNC
> > connector, and then to the receiver, the signal disappears.
>
> Have you checked your coax for shorts?

Well, that was another question. Since the shield and the center wire
are attached to the coil only 3 turns apart, isn't it shorted there?

Patrick

2096. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 13:06:41 UTC
From: Val <val_a20@hotmail.com>
Message-ID: <3C57EFE1.A8483D7@hotmail.com>
Source record: 149681

Yes, DC-wise. No AC-wise.
You'll have to disconnect the center wire at the
coil b4 checking with an ohm- meter.

73 de V.

Patrick Gardella wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C574236.27D6D5AC@IEEE.org>...
> > Patrick Gardella wrote:
> > >
> > > I've got a simple question about a "shorty forty" antenna I've built
> > > (details at http://www.flashwebhost.com/circuit/shortant.php). Now,
> > > I've got the coax (RG-58) coming off the antenna down to my shack.
> > > When I just connect the center conductor to the receiver (for now),
> > > everything works great. But when I attach the coax to the BNC
> > > connector, and then to the receiver, the signal disappears.
> > >
> > Have you checked your coax for shorts?
>
> Well, that was another question. Since the shield and the center wire
> are attached to the coil only 3 turns apart, isn't it shorted there?
>
> Patrick

2097. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 13:08:24 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201300508.57283925@posting.google.com>
Source record: 149682

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<16136-3C578FB9-140@storefull-115.iap.bryant.webtv.net>...
> Craig, K4IA wrote:
> "Copper is a very reactive metal and will not last any longer than the
> steel clad rods you used before, maybe less."
>
> Reality check! Millions of copper-clad ground rods, millions of radials
> buried in the earth, copper roofs over countless ancient buildings in
> the world, millions of copper radiators, millions of buried copper water
> pipes, would all these be in place if copper were "a very reactive
> metal"?
>
> Best regards, Richard Harrison, KB5WZI

As it turns out, commercial tower companies, cell phone companies,
power companies, etc, have been using galvanized steel for several
years now. Copper may be better to start, but after several years the
galvanized holds up better.

Jim
N8EE

2098. Re: interference

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 13:31:29 UTC
From: MSC <MSC@jestbyte.com>
Message-ID: <a38siapc1@newsg4.svr.pol.co.uk>
Source record: 149685

Thanks Mark,
that's the first time I've seen any reference to it - knowing it to be true.
The Ferrite rod receiver is quieter on interference even when you nul out
(or nearly) the station. It is a seriously different order of magnitude of
interference.

Another question. What about hanging a ferrite aerial on the back of a
receiver that was not designed to take one. Or put up a multi-turn loop
between the aerial and earth sockets with some kind of impedance matching
transformer?

thanks again

Spencer

"M Kolber" <mkolber@bellatlanictNS.net> wrote in message
news:ryH58.4167$0V6.149@nwrddc02.gnilink.net...
> I do recall that a loop (H field) antenna will pick up less near field
> interference compared to a rod or wire (E -field) antenna.
>
> This is because the H field decays more rapidly in the near field compared
> to the E field. So if you are near the interference source, the H field
> antenna will work better
>
> I cannot find a reference to this. Perhaps someone else can.
>
> Also the loop antenna is directional and can be aimed to pick up the
desired
> signal and reject the interference.
>
> Mark
> WB2WHC
>
>
>
> MSC wrote in message ...
> +AD4-Hi,
> +AD4-When a set with a ferrite rod aerial is used or a set with a Frame
aerial,
> +AD4-interference from electrical items and TV is minimal. Any set
requiring a
> +AD4-wire aerial, around the picture rail for example, gives terrible
signal to
> +AD4-interference ratio in the same room. What gives? I should have
thought

> that
> +AD4-the +ACI-RATIO+ACI- would be the same so only signal to noise
difference would be
> an
> +AD4-issue.
> +AD4-
> +AD4-Is it intrinsically +ACI-quieter+ACI- to capture the magnetic
component of the
> wave?
> +AD4-
> +AD4-Spencer
> +AD4-
> +AD4-
> +AD4-
>
>

2099. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 13:52:10 UTC
From: KC8PMX <kc8pmx@tm.net>
Message-ID: <eUS58.296$fc.178059@monger.newsread.com>
Source record: 149686
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

```
. I am self taught, and I
> continue to learn, almost every day.
>
> There is nothing wrong with being a ham, unless you have no desire to
> learn. It really should be the end, rather a tool to an end. I feel
> that you should keep learning, all your life. If you reach a point
> where you don't exercise your mind, you'll start to lose the ability to
> learn.

These are the statements basically echoeing what I believe the intent of
what Cecil was saying a few messages ago in the thread. Just because you
reach a certain point does not mean a person should stop learning.

Ryan KC8PMX
```

2100. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 13:52:22 UTC
From: KC8PMX <kc8pmx@tm.net>
Message-ID: <qUS58.297$fc.177841@monger.newsread.com>
Source record: 149687

"David Robbins" <k1ttt@arrl.net> wrote in message
news:a376v8029cc@enews1.newsguy.com...
> i would recommend checking with the local utility company, they are very
> experienced in such things and have the right equipment.
>
> If you do ending up digging a ditch like that to lever it up, and are
lucky
> enough to get it vertical, be very sure that when you backfill that you
> compact the earth very well, and i don't mean by foot, rent a real tamper
> and use it every 6" or so. If you don't you will have a weak side on the
> hole that is holding up the pole.
>

My sentiments exactly. Having worked in excavation in the past, plenty of tamping would be prudent, and also including extra dirt on the surface to fill in around the pole as it will still "settle" a bit. One thing he may consider is setting the thing up with concrete at the base.
It may be worthwile to do this if the cost permits. 8 feet deep by however wide may help assure that this pole would stay put. Just some thoughts........

Ryan KC8PMX

2101. Re: help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 14:23:38 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5801EA.8832DA03@IEEE.org>
Source record: 149688

don-saunders wrote:
>
> Can anyone help.
> I have checked my radio using a dummy load
> and the output is 125watts.
> when using an atu my radio output is only 60watts swr 1:1
> when going straight out to antenna radio out put is 125watts swr 1:1.5.
> I have tried 2 atu's and the result is the same
> anyone have any suggestions.

The average T-net antenna tuner can be tuned worst case for a match. There
are multiple settings. If the setting is made using maximum inductance,
the losses will be greater than if made using minimum inductance. Just
a thought. Are you using minimum inductance?
--
cheers, CAM http://www.qsl.net/w5dxp

2102. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 14:28:31 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C58030F.F9678337@IEEE.org>
Source record: 149690

Patrick Gardella wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote:
> > Have you checked your coax for shorts?
>
> Well, that was another question. Since the shield and the center wire
> are attached to the coil only 3 turns apart, isn't it shorted there?

That would be a DC short but not an RF short. What I am asking is: have
you checked your coax for shorts with the coil disconnected? Is the coil
performing an autotransforming function at the antenna?
--
cheers, CAM http://www.qsl.net/w5dxp

2103. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 14:29:46 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <74tf5us8pa7p2k6uceoal5fll13cjq4bee@4ax.com>
Source record: 149689

On Tue, 29 Jan 2002 22:32:12 GMT, "Alan White"
<alannc44@ix.netcom.com> wrote:

>Agreed. But that's not exactly what you said in the original version. You
>are now saying one can sit all day long learning theory and not understand
>practical applications. That's different than saying grades don't correlate
>well with real world performance. Unless you have some scientific evidence
>that demonstrates grades have no correlation with real world performance I'm
>afraid you're just propagating a popular american myth.

These are flip sides of the same coin. I used the word "correlate" in
a statistical sense. Yes, there will be good test takers who are also
very pragmatic, practical people. There will be test takers who are
completely clueless. There will be practical people who can't pass a
test if their lives depended on it...

What I'm saying is that performance in formal educational studies has
very little relation with performance in a practical setting. Yes,
you see people who can do both very well, yes, some are only good at
one thing or the other, and some will never do well with either.

>How many kids use the stupid excuse: 'But Einstein was a poor student' and
>look what he did!', not realizing Einstein spent his youth in special
>academies and European gymnasiums because he, in fact, was a good student.
>We seem to want to believe poor grades, bad academic performance, and lack
>of theoretical knowledge is a good thing. I suspect that this is an american
>concept; we don't want anyone to 'feel' bad for not making the grade.

I think you read more in to this situation than I do. I see a
contrived situation in a classroom and people feeling stupid because
they can't relate their own experiences to a severely limited
scenario. It is then that we need to be reminded that school
performance doesn't correlate well with performance in other similar
endeavors.

>I think of tests as goals because I know that while I reach for a goal I'm
>also learning the important stuff along the way.

Learning stuff is good. Applying what one learns is why most people
learn in the first place.

I look at most tests as a means to an end. It's a preliminary and
limited "proof of performance" to show that someone is at least aware
of the fundamentals. The key is whether that person can translate the
fundamentals to real world applications. Seeking a good score on a
test for the sake of scoring well on a test is to have missed the
point.

Mother nature doesn't care what you scored in the classroom. I don't look for good pilots by seeing who did best on the written exam. In fact, that score is completely irrelevant. I look for people with experience and mature judgment.

Do you still include the GPA you received in college on your Resume? I didn't think so...

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2104. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 14:34:13 UTC
From: richardharrison@webtv.net
Message-ID: <1731-3C580465-15@storefull-118.iap.bryant.webtv.net>
Source record: 149692

Jim, N8EE wrote:
"As it turns out, commercial tower companies, cell phone companies, power companies, etc. have been using galvanized steel for several years now. Copper may be better to start, but after several years the galvanized holds up better.'

There is more to the story or the companies named are all wrong.

Galvanized coating is zinc. Its virtue is that it is at the opposite end of the electromotive series from steel, which it protects by eroding instead of the steel rusting away.

The electromotive series lists metals in "decreasing order of their tendencies to pass into ionic form by losing electrons" (CRC Handbook).

The sacrificial anode protecting ship hulls and other metals around the woprld is called a "zinc". The zinc is eaten away instead of the steel.

Two common metals are more active in eroding in an electrolyte. They are aluminum and magnesium. But, zinc is the metal of choice for most protective anodes.

A pretty good primary cell can be made by copper and zinc in a saline solution. When current flows, the zinc erodes, not the copper.

Best regards, Richard Harrison, KB5WZI

2105. Re: G5RV to Icom 746

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 14:45:08 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <GAVYPPLWNMcjDFJuo93UqdJ6B72u@4ax.com>
Source record: 149691

Tom Nelson <nelsonca@stormnet.com> wrote:

>The manual of my new 746 explicitly advises against connecting anything
>but coax to the output. Is there a G5RV that I can build/buy to skirt
>this problem? I'm thinking there must be a coax balun combination that I
>could put ahead of the ladder line to make things work.

You might want to check Mr. Varney's article on his antenna at
http://www.qsl.net/aa3px/g5rv.htm

You'll probably need an external antenna tuner, except on 20 where the g5rv is
resonant.

Bob
k5qwg

> I would prefer
>to use ladder line to keep the initial SWR as low as possible since the
>built-in tuner of the 746 does not seem to offer much latitude.
>
>The built-in tuner of the 746 does not tune my existing antennas to 40
>Meters like my Kenwood AT-250 does. It WILL tune the same antennas to 10
>Meters where the AT-250 would not! I'm wondering if anyone has had
>success using a multiband antenna like the G5RV with the 746?
>
>Thanks in advance
>Tom
>KD6EVM

2106. Re: 40 meters in attic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 15:21:14 UTC
From: Martin <mab@delete-this.capita.nildram.co.uk>
Message-ID: <u5g3c76dq1qj26@corp.supernews.com>
Source record: 149693

Yes, it worked reasonably well...

Then as an experiment, I hooked another 5 metres of wire onto each end bent round
the outside of the attic, hooked about 9 metres of 300 ohm twin between the feed
point and the coax, keeping as much of it vertical as possible (high ridge to the roof!) and
ended up with a full size G5RV bent round to look like an old VHF "squalo" - it tunes
up on all bands from 80 up though the radiation pattern is a bit weird!

Martin (M3ABL)

"CF" <ni4l@charter.net> wrote in message
news:3BD5DD75.DCDBD056@charter.net...
> anyone tried a 40 meter dipole in a attic?
>
> --
> "We'll go to the utmost ends of the Earth to hunt down the last of
> Satan's spawn. . ." William Pierce 1978
>
> "Chance favors the prepared mind." Louis Pasteur
>
>

2107. Re: 40 meters in attic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 15:21:14 UTC
From: Martin <mab@delete-this.capita.nildram.co.uk>
Message-ID: <u5g4ks2809jvf3@corp.supernews.com>
Source record: 149694

Yes, it worked reasonably well...

Then as an experiment, I hooked another 5 metres of wire onto each end bent round
the outside of the attic, hooked about 9 metres of 300 ohm twin between the feed
point and the coax, keeping as much of it vertical as possible (high ridge to the roof!) and
ended up with a full size G5RV bent round to look like an old VHF "squalo" - it tunes
up on all bands from 80 up though the radiation pattern is a bit weird!

Martin (M3ABL)

"CF" <ni4l@charter.net> wrote in message
news:3BD5DD75.DCDBD056@charter.net...
> anyone tried a 40 meter dipole in a attic?
>
> --
> "We'll go to the utmost ends of the Earth to hunt down the last of
> Satan's spawn. . ." William Pierce 1978
>
> "Chance favors the prepared mind." Louis Pasteur
>
>

2108. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 16:05:20 UTC
From: richardharrison@webtv.net
Message-ID: <24019-3C5819C0-3@storefull-114.iap.bryant.webtv.net>
Source record: 149695

Jake, AB3A wrote:
"It is then, we need to be reminded that school performance doesn`t correlate well with other similar endeavors."

Any statistics to support that assertion?

Learning is remembering what you`ve been exposed to. Tests are given to discover if you`ve learned.

A "similar endeavor" requires remembering what you`ve been exposed to for some other purpose than a test. The same ability is required.

Training may require physical abilities in addition to mental ability. Animals, musicians, athletes, etc. are trained.

Best regards, Richard Harrison, KB5WZI

2109. Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 16:20:46 UTC
From: joe.g@nospam.gmx.co.uk
Message-ID: <3c581d00.3049389@news.uni-koeln.de>
Source record: 149696

I am looking for a mobile HF antenna suitable for a motorhome. I am working with an FT 817 and MFJ945 but do not like the ATAS100 - any suggestions what kind of antenna to choose ?

Regards, Joe

2110. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 17:36:49 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <hl7g5u0g2hvb483qolnf3ur02eojtgkrvv@4ax.com>
Source record: 149697

On Wed, 30 Jan 2002 10:17:58 +0000 (UTC), Francesco Messineo
<frank@ares.ccii.unipi.it> wrote:

>
>> As for the full size Standard Antenna, or a much smaller one, there
>> are several considerations. For one, how is the debate framed? The
>> EH proponents will claim superior or equal performance to the Standard
>> size antenna, but do they all agree what size that is?
>
>Stefano told me (and others) several times that the EH is 2 to 3 dB
>better than a full size dipole. Now a full size dipole, as far as I know,
>is an half wave radiator fed in the middle. Using an end fed half wave
>vertical just allow us to handle better the reference antenna, i.e.
>there's no need to rotate it as we change receiveir position, there's no need
>to put it up an height at least equal to half a wavelenght and also I believe
>that EH radiates vertically polarized.
>

Hi Francesco,

This kind of specification
>Stefano told me (and others) several times that the EH is 2 to 3 dB
>better than a full size dipole.
is exactly what I was speaking about. This has all the hallmarks of
an escape clause that allows the poor debater to argue the merits of
ANOTHER antenna rather than his own.

A full size dipole? I won't descend to ask them just what size that
is. No, if they cannot beat an antenna the same height/elevation,
there is no other appeal to confusion.

As for
>also I believe
>that EH radiates vertically polarized.
That too suggests some confusion as to what is being measured,
especially when the debate is couched in terms of full size dipoles.
The common experience of these is horizontal operation. We here on
this board could cynically agree that yes, the EH's vertical
polarization is as poor as a Standard Halfwave Horizontal Dipole and
walk away from the debate satisfied. However, I wouldn't want to hear
from Stefano about how no one understands that the special
electromagnetics of this invention allow it to be a horizontally
optimized radiator that was never properly tested (as such).

In short, there is no reason to proceed before you get the sign-off
from the proponents that your test grid will cover all characteristics

that are important and meaningful. You might be surprised how difficult this last requirement may be.

73's
Richard Clark, KB7QHC

2111. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 18:46:28 UTC
From: James Follett <james@marage.demon.co.uk>
Message-ID: <f9OXUJAE+DW8EwIu@james-follett.com>
Source record: 149698
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

In article <cRJ58.12170$X64.4176011@news1.rdc2.pa.home.com>, ToolTime
<middlefinger4@home.comspam> writes
>Yes , Maybe you should try it sometime.

(About 200 lines of unnecessary repost trimmed)

Dearest Middlefinger,

Please learn to post correctly to Usenet. I.e. Add your points
immediately below reposted articles that have been trimmed to salient
points.

I know Outlook Express users rightly consider themselves exempt from the
appropriate RFCs because scrolling and snipping is such an
intellectually challenging exercise that few are equal to, but if you
could at least give it a try...

It means moving your mouse about. It can be done if you apply yourself
and I promise that it won't bite!

--
James Follett Novelist (Callsign G1LXP) http://www.davew.demon.co.uk Part 1
audio CD of "Mindwarp" (prelude to Earthsearch) with Colin Baker & Neil Henry
now avail from Big Finish Productions http://www.bigfinish.net/earthsearch

2112. Re: Antenna Ground installation questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 19:38:36 UTC
From: NM5K <NSnm5k@wt.net>
Message-ID: <3C584BBC.390@wt.net>
Source record: 149699

Pete Ritter wrote:
>

>
> While it's true that there's little we can do against *direct* lightning
> strikes, there is a lot we can do against voltages induced by nearby
> strikes and against static buildup.

You can protect against direct strikes even while operating, but it's
not exactly cheap, and it's not simple.
One single mistake and you will have problems.

That's what "lightning arrestors" are
> for. Read the ARRL handbook on the subject of grounding. Basically it
> tells you to use a lightning arrestor on each line coming into your house,
> to ground them *outside* the house at the entrance and to bind that ground
> to the electrical service ground. They also suggest using some sort of
> interruptor *outside* the house to disconnect everything when the radios
> are not in use.

A good idea. Even if the cheap arrestor doesn't protect the radio, it
should keep the bulk of the energy outside as long as the connection to
ground is good. In his case, the single most important thing he can do
is have a VERY GOOD ground connection from the roof mast to ground. You
really want to have the ground rod/rods/radials near and below the mast
, and have no sharp turns. I would want to use copper flashing that is
intended for this job to have a good path to ground from the mast.
Polyphaser has that for lightning rod systems. You could use thick gauge
wire, but I think the wide flashing is better. If you can direct the
strike to ground efficiently, you have 85% of it licked. I'd use the
arrestors as a way to protect the house, and I'd have a way near the
window or whatever to be able to unhook and ground out in bad storms.
Even a grounded antenna switch near the window with a ground position
would be better than nothing. I unhook mine and ground out outside to
so-239's. I've taken two direct strikes on my mast in about the last 3-4
years, but had zero damage. My mast efficiently directed the strike to
ground, and the rest on the coax just went to ground at my window
"bulkhead". There was not enough energy on the coax's to cause any
damage. The mast did 95% of the work I think. But I use a metal mast on
the side of the house, not on top. It's a lightning rod. What he wants
to do is turn his roof mast into an efficient lightning rod also. Thats
what it's going to think it is, if it gets struck. If no good ground
connection, it will find one, and I bet you won't like the path it
chooses. :(And high resistance means high likelyhood of firework type
emulation. It could easisly start a house fire. With a good ground

connection he should be fairly safe. MK
--
Remove NS from mail address to reply
http://web.wt.net/~nm5k

2113. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 20:11:11 UTC
From: mrhandupsideyurhead@hotmail.com
Message-ID: <6242fdc7.0201301211.79dd8249@posting.google.com>
Source record: 149700
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

you shut the fuck up fuck face. you are the main probolem here so why
dont you just shut the fliyning fuck up suck dick
boy!!!

> > > > Subject: Re: Kenwood TS520SE
> > > > Newsgroups: rec.radio.cb
> > > > View this article only
> > > > Date: 2002-01-26 15:28:39 PST
> > > > just look 2 minites later after middlefuck post he posts from his
> > > > aol account. yes virginia voobner is middlefinger/steelgangsta and
> > > > god knows how many other peeple he is.
> > > > voobner@yahoo.com (Aaron H. Voobner) wrote in message
> news:<fbc7a2.0201280032.4d23e26b@posting.google.com>...
> > > > > "Train" <cbmods@optonlineNOSPAM.com> wrote in message
> news:<GEZ48.89763$6L5.14523908@news02.optonline.net>...
> > > > > > $120 for a Palomar 225?
> > > > > >
> > > > > > "Stephen Gale" <stephengale@sympatico.ca> wrote in message
> > > > > > news:LuX48.1382$9y2.249997@news20.bellglobal.com...
> > > > > > > a few things here........just getting started......check out the
> accessories
> > > > > > > link
> > > > > > >
> > > > > > > http://members.kingston.net/sgale/gold2/radio.html
> > > > > > >
> > > > > > >
> > > > > >
> > > > > "Train", CB amps are illegal.
> > > > >
> > > > > -Aaron-

2114. 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 20:36:58 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c58596a$1@news.bnb-lp.com>
Source record: 149701
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

This has got to be the epitome of ignorance....a 15,000W (15KW) rated antenna....

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028

ofcourse (in true CB fashion) it is "guaranteed" to "increase your range"

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

2115. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 20:53:26 UTC
From: dan <danlx@execpc.com>
Message-ID: <3c585f37$0$35575$272ea4a1@news.execpc.com>
Source record: 149702

On Wed, 30 Jan 2002 13:52:22 GMT, "KC8PMX" <kc8pmx@tm.net> wrote:

>
>"David Robbins" <k1ttt@arrl.net> wrote in message
>news:a376v8029cc@enews1.newsguy.com...
>> i would recommend checking with the local utility company, they are very
>> experienced in such things and have the right equipment.
>>
>> If you do ending up digging a ditch like that to lever it up, and are
>lucky
>> enough to get it vertical, be very sure that when you backfill that you
>> compact the earth very well, and i don't mean by foot, rent a real tamper
>> and use it every 6" or so. If you don't you will have a weak side on the
>> hole that is holding up the pole.
>>
>
>My sentiments exactly. Having worked in excavation in the past, plenty of
>tamping would be prudent, and also including extra dirt on the surface to
>fill in around the pole as it will still "settle" a bit. One thing he may
>consider is setting the thing up with concrete at the base.
>It may be worthwile to do this if the cost permits. 8 feet deep by however
>wide may help assure that this pole would stay put. Just some
>thoughts........
>
>
>Ryan KC8PMX
>
>
Hi all,
Tamping is great if you are going to put something onto the tamped down surface and don't want it to move, like a wall foundation or a concrete slab. As far as keeping the pole from moving, I would suggest it would only be marginal at best. Once the earth is disturbed the best way to get it to settle back into a condition anything like it was pre excavation is to backfill and water it down as you go. Then just to be sure use a pipe on the hose to insert into the disturbed sections and see how much more it settles. The best method is to have a hole drilled and set the pole into the hole, then backfill with dirt or concrete. Safety first. BTW does anyone out here know of a company (construction) looking for a Safety specialist, OSHA Outreach Trainer, preferably in WI or North/South Carolina? I know, It's of topic, but a guy has to get money for radio and fishing stuff somehow!!!
Dan

N9JBF

I've rambled enough, back to the rocking chair. ZZZZZZZZZ

Remove left x for a direct reply.

2116. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 21:08:36 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <reZ58.17385$yi5.2438864@news20.bellglobal.com>
Source record: 149703
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c58596a$1@news.bnb-lp.com...
> This has got to be the epitome of ignorance....a 15,000W (15KW) rated
> antenna....
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
>
> ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> range"

at an unbeatable price no less!

2117. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 21:10:26 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <9gZ58.17389$yi5.2439449@news20.bellglobal.com>
Source record: 149704

"Joe Gern" <joe.g@nospam.gmx.co.uk> wrote in message
news:3c581d00.3049389@news.uni-koeln.de...
> I am looking for a mobile HF antenna suitable for a motorhome. I am
> working with an FT 817 and MFJ945 but do not like the ATAS100 - any
> suggestions what kind of antenna to choose ?
>
> Regards, Joe

Tell you what Joe, I'll trade you a 102" whip for your ATAS100. We will
both probably do better than we are now.

2118. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 21:16:12 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <v9lg5ucaqknsckajhqi6aom8melogrqqvb@4ax.com>
Source record: 149705

On Wed, 30 Jan 2002 10:05:20 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Jake, AB3A wrote:
>"It is then, we need to be reminded that school performance doesn`t
>correlate well with other similar endeavors."
>
>Any statistics to support that assertion?

No. How does one evaluate a person's ability to translate learning in to real world applications, anyway? I wrote that I used the word in a statistical sense, not that I had any statistics to back it up.

>Learning is remembering what you`ve been exposed to. Tests are given to
>discover if you`ve learned.

That's what I'd like to believe, but my experience is different. Most tests are given to see if you *remember* what you've learned in the context in which the test is given. Classrooms are contexts in their own right.

>A "similar endeavor" requires remembering what you`ve been exposed to
>for some other purpose than a test. The same ability is required.

How I wish that were true.

The memory systems of Homo Sapiens tends to be associative. In other words, things are remembered in the context they are most commonly used. It's not surprising that so many learn things in the classroom that they can't relate to the real world.

Thus I posit that most tests only demonstrate knowledge in the context of a classroom. Whether that classroom context can be applied to the real world is a different story. That's why I think a ham radio background can be relevant to an EE student. It can provide them another context to remember the concepts they learn in class. And in doing so, it can help associate many ideas learned in the classroom in to the real world.

Another area where the ham radio license used to be pretty cool: When morse code was commonly used, it was a wonderful performance test to use on hams to use their radios and experience to improve their morse receiving speed. As a performance test, it had a definite practical hands-on aspect. Unfortunately, Morse code is about as relevant to radio as horses are relevant to transportation. Yes, both are still used here and there, but for the most part, they've been superseded by better technologies. I wish we had a better performance test to

replace morse code.

>Training may require physical abilities in addition to mental ability.
>Animals, musicians, athletes, etc. are trained.

...And so is thought. --Your point?

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2119. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 21:35:52 UTC
From: radiofun <radiofun@charter.net>
Message-ID: <u5gq18fg3fdbc6@corp.supernews.com>
Source record: 149707
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I think that's manufactured by MAC...Moron Antenna Co. In all
seriosness..as odd as they look, they do perform VERY well!

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c58596a$1@news.bnb-lp.com...
> This has got to be the epitome of ignorance....a 15,000W (15KW) rated
> antenna....
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
>
> ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> range"
>
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

2120. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 21:36:27 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c58675c@news.bnb-lp.com>
Source record: 149706
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Oh Yeah! I am convinced one could really clean-up by selling an empty box with an so-239 on each end and a coax jumper inside connecting the two as long as it was advertised as....

" Citizen's Band Power Booster " and sold for at least $99.99

Thanks for your comment VE3TMT

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

"ve3tmt" <ve3tmt@rac.ca> wrote in message
news:reZ58.17385$yi5.2438864@news20.bellglobal.com...
>
> "Charles Johnston" <ctj92@cableone.net> wrote in message
> news:3c58596a$1@news.bnb-lp.com...
> > This has got to be the epitome of ignorance....a 15,000W (15KW)
rated
> > antenna....
> >
> > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
> >
> > ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> > range"
>
>
> at an unbeatable price no less!
>
>

2121. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 21:58:55 UTC
From: John P Vassel <john@vassel.net>
Message-ID: <3c586c9f$0$1608$2c3e98f8@news.voyager.net>
Source record: 149708
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Charles Johnston" <ctj92@cableone.net> wrote in news:3c58596a$1@news.bnb-lp.com:

> This has got to be the epitome of ignorance....a 15,000W (15KW) rated
> antenna....
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
>
> ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> range"
>
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>
>

If it's bigger, then it may help you hear further, thereby increasing range of your radio in a 'technical' kinda way.
What I find interesting is the 'stinger' matching piece on top. I'd bet money that even at 1Kw, it'd become a bright orange piece of flaming metal. 15kw?.. I suppose that's a safe bet, since who's going to try it at that power??...
--
John Vassel
KC8SKE
RTFD Volunteer Firefighter

2122. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 22:11:02 UTC
From: ToolTime <middlefinger4@home.comspam>
Message-ID: <Wb_58.13225$X64.4578857@news1.rdc2.pa.home.com>
Source record: 149709
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

James, we don't follow these rules in the States It is loike the freebanders there are no rules. Now go play in traffic.

"James Follett" <james@marage.demon.co.uk> wrote in message news:f9OXUJAE+DW8EwIu@james-follett.com...
> In article <cRJ58.12170$X64.4176011@news1.rdc2.pa.home.com>, ToolTime
> <middlefinger4@home.comspam> writes
> >Yes , Maybe you should try it sometime.
>
> (About 200 lines of unnecessary repost trimmed)
>
> Dearest Middlefinger,
>
> Please learn to post correctly to Usenet. I.e. Add your points
> immediately below reposted articles that have been trimmed to salient
> points.
>
> I know Outlook Express users rightly consider themselves exempt from the
> appropriate RFCs because scrolling and snipping is such an
> intellectually challenging exercise that few are equal to, but if you
> could at least give it a try...
>
> It means moving your mouse about. It can be done if you apply yourself
> and I promise that it won't bite!
>
> --
> James Follett Novelist (Callsign G1LXP) http://www.davew.demon.co.uk
Part 1
> audio CD of "Mindwarp" (prelude to Earthsearch) with Colin Baker & Neil Henry
> now avail from Big Finish Productions http://www.bigfinish.net/earthsearch

2123. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 22:27:23 UTC
From: Sylvan Butler <Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna5gsrv.pvs.Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 149710

On Wed, 30 Jan 2002 08:34:13 -0600 (CST), Richard Harrison <richardharrison@webtv.net> wrote:
> Two common metals are more active in eroding in an electrolyte. They are
> aluminum and magnesium. But, zinc is the metal of choice for most
> protective anodes.

The big exception being home (and perhaps other) water heaters. The protective anode in home water heaters is usually magnesium or aluminum (10 years ago aluminum was almost unheard of, but it is very common now).

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

2124. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 22:45:05 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <FH_58.14233$DE3.2361995@news20.bellglobal.com>
Source record: 149711

I've been asked (off-line) how one might approach the problem of obtaining (complete) elevation pattern data for such an antenna. The purpose being to enable the complete picture to be gathered and sanity-checked against 0 dBi (100%).

Ah, step 1: Why not follow the industry standard and make the first model scaled to a frequency such that it would fit through the door of your local anechoic chamber. Making the 'first' prototype (if that can be said of an EH antena...) suitable for operation in the HF frequency range is just silliness.

As far as the dual E+H feed and/or matching network is concerned - eliminate that part of the equation. Beg, borrow, rent two individual signal generators that can be phase locked. This way you could vary the amplitudes and relative phases till the cows come home. Assuming that you account for the double input (ah... x2), it should eliminate that unknown part of the system.

2125. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 22:58:38 UTC
From: richardharrison@webtv.net
Message-ID: <15711-3C587A9E-49@storefull-112.iap.bryant.webtv.net>
Source record: 149713

Jake, AB3A wrote:
(Animals, musicians, athletes, etc. are trained.) "And so is
thought.--Your point?"

Memorizing a list of facts is education. It may also be a work requirement. A test proving you are able to remember a list of facts may augur well for work performance.

Jumping through hoops or some other physical act is proved by physical performance. Stuffing parts in a board, then soldering them in place requires physical performance in addition to mental performance. The physical is training or making conform to a particular discipline. It is a little different from recalling miscellanea.

I think I mostly agree with your posting.

I insist that memory content testing is indicative of likely mental performance on the job and in school. Notice, I said indicative, not predictive. In other words, it is not 100%, but the odds are with the testing, that is why it is used.

Best regards, Richard Harrison, KB5WZI

2126. I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:11:13 UTC
From: arrow146@aol.com
Message-ID: <20020130181113.22343.00000051@mb-mb.aol.com>
Source record: 149712

I would like to get the Opinion from some of the Experts here.
If you have the time, would you please look at this antenna, and give me your Opinion.

One Question: Does a direct feed (Receive Only) antenna
really need a balun?
<A HREF="http://Arrowantennas.com/adf1.html">Arrow Antenna ADF1</A>
Thank You for your Time.
73 Al Lowe N0IMW

2127. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:23:04 UTC
From: John P Vassel <john@vassel.net>
Message-ID: <3c588058$0$35618$2c3e98f8@news.voyager.net>
Source record: 149714
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

"ToolTime" <middlefinger4@home.comspam> wrote in
news:Wb_58.13225$X64.4578857@news1.rdc2.pa.home.com:

> James, we don't follow these rules in the States It is loike the
> freebanders there are no rules. Now go play in traffic.

>
>
>

Welcome to the *Plonk* file.

--
John Vassel
KC8SKE
RTFD Volunteer Firefighter

2128. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:25:24 UTC
From: John P Vassel <john@vassel.net>
Message-ID: <3c5880e4$0$35618$2c3e98f8@news.voyager.net>
Source record: 149715
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Charles Johnston" <ctj92@cableone.net> wrote in news:3c58675c@news.bnb-lp.com:

> Oh Yeah! I am convinced one could really clean-up by selling an empty
> box with an so-239 on each end and a coax jumper inside connecting the
> two as long as it was advertised as....
>
> " Citizen's Band Power Booster " and sold for at least $99.99
>
>

Not without an on/off switch and a pre-amp light ;)

--
John Vassel
KC8SKE
RTFD Volunteer Firefighter

2129. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:34:12 UTC
From: laborkei <laborkeiNOSPAM@hotmail.com>
Message-ID: <3c5882db$1_1@nopics.sjc>
Source record: 149717
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

If you think this antenna is interesting..
How about an Amplifier to go with it !

http://www.davemade.com/base.htm

--

"ve3tmt" <ve3tmt@rac.ca> wrote in message
news:reZ58.17385$yi5.2438864@news20.bellglobal.com...
>
> "Charles Johnston" <ctj92@cableone.net> wrote in message
> news:3c58596a$1@news.bnb-lp.com...
> > This has got to be the epitome of ignorance....a 15,000W (15KW) rated
> > antenna....
> >
> > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
> >
> > ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> > range"
>
>
> at an unbeatable price no less!
>
>

2130. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:37:38 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <bq%58.34499$f53.2344920@news20.bellglobal.com>
Source record: 149716
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c58675c@news.bnb-lp.com...
> Oh Yeah! I am convinced one could really clean-up by selling an empty
> box with an so-239 on each end and a coax jumper inside connecting the
> two as long as it was advertised as....
>
> " Citizen's Band Power Booster " and sold for at least $99.99

Seems to be an attractive price for most CB related gear.

Sure I am a fan of a wide bandwidth antenna, but I consider looks as well.
You should have seen the looks I got with the BB3 screwdriver mounted on the
back of my Intrepid! Least I had the sense to paint it to match the car!

2131. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:39:50 UTC
From: richardharrison@webtv.net
Message-ID: <25873-3C588446-47@storefull-111.iap.bryant.webtv.net>
Source record: 149624

Sylvan Butler wrote:
"The protective anode in home water heaters is usually magnesium or aluminum (10 years ago aluminum was almost unheard of, but it is very common now)."

I am not a cathodic protection engineer. I don`t even play one on TV. My education is a half-century old. "In my day", zinc was almost universal. In WW-2, I changed out exhausted zincs in heat exchangers and other protected structures aboard my ship.

Zinc probably produces enough current in most instances for protection, and doesn`t erode as fast as the more active aluminum and magnesium. So, it wouldn`t have to be replaced as often. The current price of metals (pun) may have something to do with their choice.

A steel-zinc battery doesn`t have to be made to protect the steel by mking the zinc migrate toward the steel instead of the steel eroding and migrating away. A current can be impressed on the steel and an inert carbon anode by using a "rectifier" or other d-c supply of the correct polarity. This ensures current is always flowing toward the steel instead of away from the steel. This has the advantage of not eating zincs.

Best regards, Richard Harrison, KB5WZI

2132. Re: interference

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:44:03 UTC
From: M Kolber <mkolber@bellatlanictNS.net>
Message-ID: <7z%58.6742$pb.2590@nwrddc01.gnilink.net>
Source record: 149718

I have seen large loop antennas advertised on the web used for augmenting AM
reception. Look for it. It does not need to be connected to the receiver
but simply couples into it. Any loop is good, it does not need to be
ferrite loaded.

Mark

MSC wrote in message ...
+AD4-Thanks Mark,
+AD4-that's the first time I've seen any reference to it - knowing it to be
true.
+AD4-The Ferrite rod receiver is quieter on interference even when you nul out
+AD4-(or nearly) the station. It is a seriously different order of magnitude of
+AD4-interference.
+AD4-
+AD4-Another question. What about hanging a ferrite aerial on the back of a
+AD4-receiver that was not designed to take one. Or put up a multi-turn loop
+AD4-between the aerial and earth sockets with some kind of impedance matching
+AD4-transformer?
+AD4-
+AD4-thanks again
+AD4-
+AD4-Spencer
+AD4-
+AD4AIg-M Kolber+ACI- +ADw-mkolber+AEA-bellatlanictNS.net+AD4- wrote in message
+AD4-news:ryH58.4167+ACQ-0V6.149+AEA-nwrddc02.gnilink.net...
+AD4APg- I do recall that a loop (H field) antenna will pick up less near field
+AD4APg- interference compared to a rod or wire (E -field) antenna.
+AD4APg-
+AD4APg- This is because the H field decays more rapidly in the near field
compared
+AD4APg- to the E field. So if you are near the interference source, the H field
+AD4APg- antenna will work better
+AD4APg-
+AD4APg- I cannot find a reference to this. Perhaps someone else can.
+AD4APg-
+AD4APg- Also the loop antenna is directional and can be aimed to pick up the
+AD4-desired
+AD4APg- signal and reject the interference.
+AD4APg-
+AD4APg- Mark
+AD4APg- WB2WHC
+AD4APg-
+AD4APg-
+AD4APg-

+AD4APg- MSC wrote in message ...
+AD4APg- +AD4-Hi,
+AD4APg- +AD4-When a set with a ferrite rod aerial is used or a set with a Frame
+AD4-aerial,
+AD4APg- +AD4-interference from electrical items and TV is minimal. Any set
+AD4-requiring a
+AD4APg- +AD4-wire aerial, around the picture rail for example, gives terrible
+AD4-signal to
+AD4APg- +AD4-interference ratio in the same room. What gives? I should have
+AD4-thought
+AD4APg- that
+AD4APg- +AD4-the +ACI-RATIO+ACI- would be the same so only signal to noise
+AD4-difference would be
+AD4APg- an
+AD4APg- +AD4-issue.
+AD4APg- +AD4-
+AD4APg- +AD4-Is it intrinsically +ACI-quieter+ACI- to capture the magnetic
+AD4-component of the
+AD4APg- wave?
+AD4APg- +AD4-
+AD4APg- +AD4-Spencer
+AD4APg- +AD4-
+AD4APg- +AD4-
+AD4APg- +AD4-
+AD4APg-
+AD4APg-
+AD4-
+AD4-

2133. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:48:51 UTC
From: James Follett <james@marage.demon.co.uk>
Message-ID: <4G3uKLAjZIW8EweQ@james-follett.com>
Source record: 149558
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

In article <Wb_58.13225$X64.4578857@news1.rdc2.pa.home.com>, ToolTime
<middlefinger4@home.comspam> writes

>James, we don't follow these rules in the States It is loike the freebanders
>there are no rules. Now go play in traffic.

At the risk of shocking our colonial cousins, Usenet is a global
community with one set of common sense, easy-to-follow conventions,
designed to ensure that its essential forum nature is preserved
for people to freely exchange views and comments in a manner
understandable to the majority. Without conventions in communication we
would never be able to communicate. Usnet's conventions were evolved
primarily in America.

Extract from:

Network Working Group, S. Hambridge, Request For Comments:
1855 Intel Corp.
FYI: 28
October 1995
Category: Informational

Netiquette Guidelines

3.1 User Guidelines

3.1.1 General Guidelines for mailing lists and NetNews

If you are sending a reply to a message or a posting be sure
you summarize the *original at the top of the message*, or
include just enough text of the original to give a context.
This will make sure readers understand when they start to
read your response.

Since NetNews, especially, is proliferated by distributing
the postings from one host to another, it is possible to see
a response to a message before seeing the original. Giving
context helps everyone. But do not include the entire
original!

One problem is that many of the upside-down posters don't bother
to trim attributions; they stick their comment at the top and
leave everything trailing below so that one is never sure what
point in a multiple attribution repost they're actually responding
to.

The considerate poster, and there are many on these newsgroups,
will show a trimmed attribution and his or her comment below
after a white line separator.

You've no idea of the havoc that upside-down postings causes with text-
reading programs for the blind such as JAWS.

Visit one of the more academic newsgroups in which posts are
frequently responded to point by point, and you will see just
how important chronological posting is.

--
James Follett Novelist (Callsign G1LXP) http://www.davew.demon.co.uk Part 1
audio CD of "Mindwarp" (prelude to Earthsearch) with Colin Baker & Neil Henry
now avail from Big Finish Productions http://www.bigfinish.net/earthsearch

2134. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:49:51 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3c588834$0$35575$1dc6e903@news.corecomm.net>
Source record: 149619
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Actually I worry about arcing across the turns on the coil at 15KW.
I once saw a warning sign that said "Warning 50,000millivolts", could
this be similar
Dave WD9BDZ

John P Vassel wrote:
>
> "Charles Johnston" <ctj92@cableone.net> wrote in news:3c58596a$1@news.bnb-
> lp.com:
>
> > This has got to be the epitome of ignorance....a 15,000W (15KW) rated
> > antenna....
> >
> > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
> >
> > ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> > range"
> >
> > --
> >
> >
> > 73 / DX
> >
> > Charles T Johnston
> > Prescott, Arizona - U.S.A.
> > charles@ab7sl.com
> >
> > AB7SL - Ham Radio Pages
> > Official W9INN Antennas Page
> > www.ab7sl.com
> >
> >
> >
> >
> >
>
> If it's bigger, then it may help you hear further, thereby increasing
> range of your radio in a 'technical' kinda way.
> What I find interesting is the 'stinger' matching piece on top. I'd bet
> money that even at 1Kw, it'd become a bright orange piece of flaming
> metal. 15kw?.. I suppose that's a safe bet, since who's going to try it at
> that power??...
> --

> John Vassel
> KC8SKE
> RTFD Volunteer Firefighter

2135. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:53:15 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c588769@news.bnb-lp.com>
Source record: 149620
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Oh yeah..the pre-amp light..what was I thinking! Thanks for the
chuckle....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

"John P Vassel" <john@vassel.net> wrote in message
news:3c5880e4$0$35618$2c3e98f8@news.voyager.net...
> "Charles Johnston" <ctj92@cableone.net> wrote in
news:3c58675c@news.bnb-
> lp.com:
>
> > Oh Yeah! I am convinced one could really clean-up by selling an
empty
> > box with an so-239 on each end and a coax jumper inside connecting
the
> > two as long as it was advertised as....
> >
> > " Citizen's Band Power Booster " and sold for at least $99.99
> >
> >
>
> Not without an on/off switch and a pre-amp light ;)
>
> --
> John Vassel
> KC8SKE
> RTFD Volunteer Firefighter

2136. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-30 23:54:03 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c588799$1@news.bnb-lp.com>
Source record: 149621
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hasn't Riley put this criminal out-of-business and behind bars yet?

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

"laborkei" <laborkeiNOSPAM@hotmail.com> wrote in message
news:3c5882db$1_1@nopics.sjc...
> If you think this antenna is interesting..
> How about an Amplifier to go with it !
>
> http://www.davemade.com/base.htm
>
>
>
> --
>
>
> "ve3tmt" <ve3tmt@rac.ca> wrote in message
> news:reZ58.17385$yi5.2438864@news20.bellglobal.com...
> >
> > "Charles Johnston" <ctj92@cableone.net> wrote in message
> > news:3c58596a$1@news.bnb-lp.com...
> > > This has got to be the epitome of ignorance....a 15,000W (15KW)
rated
> > > antenna....
> > >
> > > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
> > >
> > > ofcourse (in true CB fashion) it is "guaranteed" to "increase
your
> > > range"
> >
> >
> > at an unbeatable price no less!
> >
> >

>
>

2137. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 00:08:54 UTC
From: laborkei <laborkeiNOSPAM@hotmail.com>
Message-ID: <3c588b04$1_2@nopics.sjc>
Source record: 149622
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Does not look like it...
I saw one of these amps last year...
Although very illegal, I found it very interesting that someone
would go through so much expense to run this kind of power on 11 meters.

The one I saw took the whole rear of an enclosed pickup truck.
Out of curiosity, this guy proudly showed it off, and showed me
his output on a Bird Meter. He was running a Amateur rig on 11 meters
to drive it.

--

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c588799$1@news.bnb-lp.com...
> Hasn't Riley put this criminal out-of-business and behind bars yet?
>
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
> "laborkei" <laborkeiNOSPAM@hotmail.com> wrote in message
> news:3c5882db$1_1@nopics.sjc...
> > If you think this antenna is interesting..
> > How about an Amplifier to go with it !
> >
> > http://www.davemade.com/base.htm
> >
> >
> >
> > --
> >
> >
> > "ve3tmt" <ve3tmt@rac.ca> wrote in message
> > news:reZ58.17385$yi5.2438864@news20.bellglobal.com...

> > >
> > > "Charles Johnston" <ctj92@cableone.net> wrote in message
> > > news:3c58596a$1@news.bnb-lp.com...
> > > > This has got to be the epitome of ignorance....a 15,000W (15KW)
> rated
> > > > > antenna....
> > > > >
> > > > > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
> > > > >
> > > > > ofcourse (in true CB fashion) it is "guaranteed" to "increase
> your
> > > > > range"
> > > >
> > > >
> > > > at an unbeatable price no less!
> > > >
> > > >
> > >
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>

2138. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 00:13:32 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3a27cbvm4@quark.scn.rain.com>
Source record: 149623
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.antenna John P Vassel <john@vassel.net> wrote:

> What I find interesting is the 'stinger' matching piece on top. I'd bet
> money that even at 1Kw, it'd become a bright orange piece of flaming
> metal. 15kw?.. I suppose that's a safe bet, since who's going to try it at
> that power??...

There are people that run that kind of power, although generally not on
a day to day basis.

A standard whip handles 1 KW without getting hot. No idea what would
happen if you fed it with 15 KW.

--
Bill Nelson (billn@peak.org)

2139. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 00:21:16 UTC
From: pgardella@yahoo.com
Message-ID: <57d04feb.0201301621.5217aa7f@posting.google.com>
Source record: 149625

What is an autotransforming function? The purpose of the coil is to
inductively shorten the dipole.

I just got back from the antenna and found that the center conductor
had snapped off. After soldering everything back together and making
sure there were no shorts, I checked the receiver again, and I only
get a signal if I attach the center conductor. If I attach the shield
to ground, I get no signal.

Patrick

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C58030F.F9678337@IEEE.org>...
> Patrick Gardella wrote:
> >
> > CAM <Cecil.A.Moore@IEEE.org> wrote:
> > > Have you checked your coax for shorts?
> >
> > Well, that was another question. Since the shield and the center wire
> > are attached to the coil only 3 turns apart, isn't it shorted there?
>
> That would be a DC short but not an RF short. What I am asking is: have
> you checked your coax for shorts with the coil disconnected? Is the coil
> performing an autotransforming function at the antenna?

2140. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 00:44:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C589385.9D2CC022@eznec.com>
Source record: 149626

"J. Harvey" wrote:
>
> I've been asked (off-line) how one might approach the problem of obtaining
> (complete) elevation pattern data for such an antenna. The purpose being to
> enable the complete picture to be gathered and sanity-checked against 0 dBi
> (100%).
>
> Ah, step 1: Why not follow the industry standard and make the first model
> scaled to a frequency such that it would fit through the door of your local
> anechoic chamber. Making the 'first' prototype (if that can be said of an
> EH antena...) suitable for operation in the HF frequency range is just
> silliness.

I've seen a setup to get full hemispherical radiation patterns. It was at the Naval Research and Development Center (NRaD, formerly Naval Ocean Systems Center NOSC) in San Diego. They had a rotating platform about 50-100' in diameter covered with hardware cloth. There was an arch overhead that the detector could move along. The model was put at the center of the platform, and the feed cable went through a hole and back under the platform to the test building. Between rotating the platform and moving the detector along the arch, they could get a full pattern. They had wonderful hand-built brass covered scale wood models of every class of ship in the U.S. Navy, which they would put their model antennas onto for testing. Quite a setup. Incidentally, they also extensively used NEC for modeling the same antennas, and compared results, I believe with generally good agreement.

I don't think it's possible to get a decent 3D pattern like this with much less of a setup. In an anechoic chamber, you'd have to use a physically small detector with a fiber optic link (such things do exist) to avoid interconnecting cables interfering with the pattern. And you'd have to devise some way of positioning the detector without introducing any conductive materials in the field. It would be possible but pretty tricky. Anyone attempting to do something like this would have to first carefully measure one or more reference antennas with known patterns (and would likely be disappointed by the first results). Outside, you'd just about have to use a helicopter. But it wouldn't be easy to keep the helicopter itself from modifying the pattern.

> As far as the dual E+H feed and/or matching network is concerned - eliminate
> that part of the equation. Beg, borrow, rent two individual signal
> generators that can be phase locked. This way you could vary the amplitudes
> and relative phases till the cows come home. Assuming that you account for
> the double input (ah... x2), it should eliminate that unknown part of the
> system.

I think the difficulty here is in, as you say, accounting for the double input. With the very highly reactive loads, it won't be easy to make a good determination of just how much power you're feeding into the thing.

The claims for the EH antenna's performance presumably include "phasing" network losses. So I suggest letting the EH promoters provide the network along with the antenna, and test the whole thing as a system. If the EH antenna can't provide good performance using a network that can actually be constructed, it's of no real use regardless of any possible theoretical capabilities. After all, the only reason a teeny tiny short dipole or monopole isn't just as good as a full sized one is because of the losses in the wire and the matching network you need in order to get power to it.

Roy Lewallen, W7EL

2141. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 00:47:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C589408.603EF49C@eznec.com>
Source record: 149627

I won't comment on the antenna, but a balun is very important for this application. It prevents the feedline from picking up some of the signal and feeding it to your receiver. For direction finding, you want to be using the antenna, not the feedline, to figure out where the signal's coming from.

Roy Lewallen, W7EL

Arrow146 wrote:
>
> I would like to get the Opinion from some of the Experts here.
> If you have the time, would you please look at this antenna, and give me your
> Opinion.
>
> One Question: Does a direct feed (Receive Only) antenna
> really need a balun?
> <A HREF="http://Arrowantennas.com/adf1.html">Arrow Antenna ADF1</A>
> Thank You for your Time.
> 73 Al Lowe N0IMW

2142. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 00:52:03 UTC
From: Harold <hsnyder@houston.flightlessbird.com>
Message-ID: <Ty068.42031$Ar5.2091528@typhoon.austin.rr.com>
Source record: 149628
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

You also need a meter on it labeled "Bird Watts"

WD5KCA

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c588769@news.bnb-lp.com...
> Oh yeah..the pre-amp light..what was I thinking! Thanks for the
> chuckle....
>
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
> "John P Vassel" <john@vassel.net> wrote in message
> news:3c5880e4$0$35618$2c3e98f8@news.voyager.net...
> > "Charles Johnston" <ctj92@cableone.net> wrote in
> news:3c58675c@news.bnb-
> > lp.com:
> >
> > > Oh Yeah! I am convinced one could really clean-up by selling an
> empty
> > > box with an so-239 on each end and a coax jumper inside connecting
> the
> > > two as long as it was advertised as....
> > >
> > > " Citizen's Band Power Booster " and sold for at least $99.99
> > >
> > >
> >
> > Not without an on/off switch and a pre-amp light ;)
> >
> > --
> > John Vassel
> > KC8SKE

> > RTFD Volunteer Firefighter
>
>

2143. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 00:58:06 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <3C5896A7.B9040BC@earthlink.net>
Source record: 149629
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

The problem is CORONA not power per se.

W1MCE

Bill Nelson wrote:
>
> In rec.radio.amateur.antenna John P Vassel <john@vassel.net> wrote:
>
> > What I find interesting is the 'stinger' matching piece on top. I'd bet
> > money that even at 1Kw, it'd become a bright orange piece of flaming
> > metal. 15kw?.. I suppose that's a safe bet, since who's going to try it at
> > that power??...
>
> There are people that run that kind of power, although generally not on
> a day to day basis.
>
> A standard whip handles 1 KW without getting hot. No idea what would
> happen if you fed it with 15 KW.
>
> --
> Bill Nelson (billn@peak.org)

2144. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 01:05:55 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <TL068.2303$mR5.65175@news2.east.cox.net>
Source record: 149630
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I wonder what the chrome does for RF skin losses? I also remember someone (W8JI ?) doing an analysis of what is wrong with using a large center mounted
coil.

Pete

"Charles Johnston" <ctj92@cableone.net> wrote in message news:3c58596a$1@news.bnb-lp.com...
> This has got to be the epitome of ignorance....a 15,000W (15KW) rated
> antenna....
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
>
> ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> range"
>
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

2145. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 01:11:54 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <uR068.1092$9d5.582493@paloalto-snr1.gtei.net>
Source record: 149631
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c588799$1@news.bnb-lp.com...
> Hasn't Riley put this criminal out-of-business and behind bars yet?

BWAAAAA-HAAAAA-AAaaaaa!

Riley *WHO*!

The FCC, and Riley can't find their asses with both hands - how in hell can they ever HOPE to find a
blatant CB outlaw, when all they have to go on is a 8 element CB beam in full view up 80 feet or so,
and an amplilier that dims the lights of the entire east coast every time he keys up...

I mean, after all, the FCC and Riley AREN'T magicians ya know... :-(

>
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
> "laborkei" <laborkeiNOSPAM@hotmail.com> wrote in message
> news:3c5882db$1_1@nopics.sjc...
> > If you think this antenna is interesting..
> > How about an Amplifier to go with it !
> >
> > http://www.davemade.com/base.htm
> >
> >
> >
> > --
> >
> >
> > "ve3tmt" <ve3tmt@rac.ca> wrote in message
> > news:reZ58.17385$yi5.2438864@news20.bellglobal.com...

> > >
> > > "Charles Johnston" <ctj92@cableone.net> wrote in message
> > > news:3c58596a$1@news.bnb-lp.com...
> > > > This has got to be the epitome of ignorance....a 15,000W (15KW)
> rated
> > > > antenna....
> > > >
> > > > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
> > > >
> > > > ofcourse (in true CB fashion) it is "guaranteed" to "increase
> your
> > > > range"
> > >
> > >
> > > at an unbeatable price no less!
> > >
> > >
> >
> >
>
>

2146. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 01:27:08 UTC
From: ToolTime <middlefinger4@home.comspam>
Message-ID: <M3168.13399$X64.4726208@news1.rdc2.pa.home.com>
Source record: 149632

John, ohh I am so offended by that. get a life
"John P Vassel" <john@vassel.net> wrote in message
news:3c588058$0$35618$2c3e98f8@news.voyager.net...
> "ToolTime" <middlefinger4@home.comspam> wrote in
> news:Wb_58.13225$X64.4578857@news1.rdc2.pa.home.com:
>
> > James, we don't follow these rules in the States It is loike the
> > freebanders there are no rules. Now go play in traffic.
>
> >
> >
> >
>
> Welcome to the *Plonk* file.
>
> --
> John Vassel
> KC8SKE
> RTFD Volunteer Firefighter

2147. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 01:52:37 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C58A344.4A42E3E9@icok.net>
Source record: 149633
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Pete,
The 'problem' with using a center mounted loading coil are
the resistive losses of the coil (common to any loaded antenna),
and the mechanical problem of mounting the coil. Depending on
the frequency used, you end up 'eating' the resistive losses,
that will happen with ~any~ loaded antenna no matter if it's
base/center/top loaded.
The 'chrome' shouldn't make any appreciable difference to
'skin affect', unless the metal is heated to the point of the
chrome loosing it's contact with the steel core. Of course,
the corona discharge will probably 'chew' the antenna down to
the coil before that happens.
The 15 KW claim is pure 'horse-hocky' (to put it politely),
but there are people stupid enough to do what's necessary to
run that much power mobile. You can tell who they are on the
highway, they're the ones who drive the 20 ton alternator with
wheels on it...
'Doc

2148. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 01:55:29 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C58A401.350071E9@icok.net>
Source record: 149634
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

!! Your right, gotta have 'Bird watts...
'Doc

2149. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 02:23:26 UTC
From: cdn <dnorris@k7no.com>
Message-ID: <2cah5usqn8m3c87t0q0fckb3odj8ehieuj@4ax.com>
Source record: 149635
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Wed, 30 Jan 2002 14:36:27 -0700, "Charles Johnston"
<ctj92@cableone.net> wrote:

>Oh Yeah! I am convinced one could really clean-up by selling an empty
>box with an so-239 on each end and a coax jumper inside connecting the
>two as long as it was advertised as....
>
>" Citizen's Band Power Booster " and sold for at least $99.99
>
>Thanks for your comment VE3TMT

I had a friend who was working at a trucker/bd stop in Arizona. He
was putting amps together, mobile and SB200's, and altering the meter
shunts to reflect high power (KW or so). He would set them to run no
more than 30-40 watts. Made a bundle! Selling them for $1000 plus!!

He also made mirror antennas (phased and high gain ...[20dB???]). He
was getting 300+ for those and paying less than 40!

cdn

2150. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 02:32:49 UTC
From: Landshark <S3Buell@SBCGlobal.Net>
Message-ID: <I1268.4294$zs6.3013073095@newssvr14.news.prodigy.com>
Source record: 149636
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

My My,
I thought it was only me that had a problem with
this fellow. LOL!!!!!!!!!!!
Good Luck, I kill filed him months ago and he still
seems to think I see his posts, not unless someone
quoted him do I.
Landshark

--
Please note that any post that is from
S3Buell_SBCGlobailnet@hotmail.com
is a FORGE. My Addy is always going to
be from SBCGlobal.Net This person has
been a troll on Rec.Radio.CB for a long
time now. If you want to send a complaint,
forward each message complete with headers
to TOSUSENET@AOL.COM. abuse@hotmail.com,
groups-abuse@google.com
Beware of George WA3MO^

"James Follett" <james@marage.demon.co.uk> wrote in message
news:f9OXUJAE+DW8EwIu@james-follett.com...
> In article <cRJ58.12170$X64.4176011@news1.rdc2.pa.home.com>, ToolTime
> <middlefinger4@home.comspam> writes
> >Yes , Maybe you should try it sometime.
>
> (About 200 lines of unnecessary repost trimmed)
>
> Dearest Middlefinger,
>
> Please learn to post correctly to Usenet. I.e. Add your points
> immediately below reposted articles that have been trimmed to salient
> points.
>
> I know Outlook Express users rightly consider themselves exempt from the
> appropriate RFCs because scrolling and snipping is such an
> intellectually challenging exercise that few are equal to, but if you
> could at least give it a try...
>
> It means moving your mouse about. It can be done if you apply yourself
> and I promise that it won't bite!
>
> --
> James Follett Novelist (Callsign G1LXP) http://www.davew.demon.co.uk

Part 1
> audio CD of "Mindwarp" (prelude to Earthsearch) with Colin Baker & Neil
Henry
> now avail from Big Finish Productions http://www.bigfinish.net/earthsearch

2151. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 02:39:16 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <o7268.16559$DE3.2549233@news20.bellglobal.com>
Source record: 149637

"Roy Lewallen" reported:
> I've seen a setup to get full hemispherical radiation patterns.
> It was at the Naval Research and Development Center (NRaD,
> formerly Naval Ocean Systems Center NOSC) in San Diego.
> <snipped only for brevity>

Yes, I have seen some of that very setup along side of the road heading out to Cabrillo National Monument. I knew exactly what they were up to since they had some of those brass models of ships that you mentioned stacked up outside next to the fence. [Coincidently, I'll be back in San Diego next week... ...the temperature was about 42F (=9C) there today. :-(
!]

> I don't think it's possible to get a decent 3D pattern like this
> with much less of a setup.

Perhaps not always true if you think about it. The size of a ship as compared to the wavelengths (both scaled) under investigation mean that it could produce a fairly complicated pattern. The pattern in such a situation could be, in the worst case, as complicated as a porcupine (hedgehog for our UK listeners).

When you're talking about an antenna that is only a small fraction of a wavelength in its maximum dimension, you can only achieve a certain separation of the contributors to the overall field. Therefore, the gain pattern in the case of the EH antenna should be fairly smooth and changing fairly slowly in both azimuth and elevation (perhaps with several nulls to not overlook !). In other words, you don't need to use a complicated arrangement with stepping motors and so forth to test such an antenna (that is DESIGNED to be "small"). One can assume that the rules of basic mathematics still apply.

You should be able to poke and prod to get perhaps 50 to 100 data points, as well as a general check for the overall shape, and then you could simply connect the dots using the appropriate curve (sin^2 ?). Once these data points were in MS-Excel, one could proclaim that the average gain was about -0.33 dBi (or whatever the feed network losses are), and that the forward peak gain was +1.3 dBi (or whatever).

> In an anechoic chamber, you'd have to use a physically small detector
> with a fiber optic link (such things do exist) to avoid interconnecting
> cables interfering with the pattern. <snip>

Such chambers and skills exist in numerous locations around the world. The standard practice is to scale the Unit Under Test to a sensible frequency (~2 GHz) where the RAM (radar absorbent material) is effective. The sensor

and support arm are covered with RAM. It is standard practice.

> Outside, you'd just about have to use a helicopter. But it wouldn't be
> easy to keep the helicopter itself from modifying the pattern.

No, scale the darn thing to (say) 2 GHz and (if they insist) use a remoted controlled model helicopter in the chamber. :-)

> I think the difficulty here is in, as you say, accounting for the double
> input. With the very highly reactive loads, it won't be easy to make a
> good determination of just how much power you're feeding into the thing.

Couldn't one feed such a 'highly reactive' animal through a pair of 20 dB inline attenuators (one for each feed as I mentioned in a previous posting). Obviously, one would have to remember to account for the attenuators, but they would certainly isolate the reactive "chaos" from the generator. Worst case, add a directional coupler and measure the reflected power separately.

Obviously, the selected scale frequency shouldn't be too high such that we humans (in the year 2002) can't measure the actual power in the face of a reactive load.

> If the EH antenna can't provide good performance using a
> network that can actually be constructed, it's of no real use
> regardless of any possible theoretical capabilities. After all,
> the only reason a teeny tiny short dipole or monopole isn't just
> as good as a full sized one is because of the losses in the wire
> and the matching network you need in order to get power to it.

Darn good point. One thing to allow "Them" is that room temperature superconductors may arrive on the scene anytime. There are apparently (new thread ?) actual antenna products on the market now that makes use of superconducting technology to achieve the otherwise impossible.

I don't believe that it is worth the effort to "test" antennas at HF until you have already proven (!) all the theories at a more convenient and trustworthy frequency (like 2 GHz).

J. Harvey
Ottawa
VE1BLL@rac.ca /VE3

2152. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 02:55:13 UTC
From: KU4YP <ku4yp@earthlink.net>
Message-ID: <01c1aa01$c2ff8760$ca44bfa8@ku4yp>
Source record: 149638

> > So, yes, a lot of Scots, Irish and English came here in chains and under worse
> > conditions than did the African slaves.

yes, that is correct. but no one seems to care to remember that.

2153. Best 2/440 Mobile Ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 03:00:44 UTC
From: WB7UCF@webtv.net
Message-ID: <19334-3C58B35C-37@storefull-127.iap.bryant.webtv.net>
Source record: 149640

Hi......I have just perched a FT-7100M Dual Band Mobil rig. I would like any recommendations on a very good mobil ant. I tend to use Magmounts.....
Thanks........Larry

2154. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 03:08:24 UTC
From: Dah Furher <middlefinger4@home.comspam>
Message-ID: <Iy268.13984$X64.4808276@news1.rdc2.pa.home.com>
Source record: 149639

John can you believe these guys one mention of the word freeband the freaks come out. Watch out for Landshark he has been known to forge me in rec.radio.cb.

"John P Vassel" <john@vassel.net> wrote in message news:3c588058$0$35618$2c3e98f8@news.voyager.net...
> "ToolTime" <middlefinger4@home.comspam> wrote in
> news:Wb_58.13225$X64.4578857@news1.rdc2.pa.home.com:
>
> > James, we don't follow these rules in the States It is loike the
> > freebanders there are no rules. Now go play in traffic.
>
> >
> >
> >
>
> Welcome to the *Plonk* file.
>
> --
> John Vassel
> KC8SKE
> RTFD Volunteer Firefighter

2155. FS: Never used 22GHz Andrew Microwave Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 03:23:24 UTC
From: rskup@yahoo.com
Message-ID: <9784beb8.0201301923.24873094@posting.google.com>
Source record: 149641

BRAND NEW, IN ORIGINAL BOX, Andrew Corporation, ValueLine 22 GHz
Microwave Antenna, Model Number VHLP2-220-G01. This is a 2
feet (0.6 m) Diameter LOW PROFILE perfect condition piece. COMES WITH
MOUNTING HARDWARE!!! BAG STILL SEALED!

This item is on ebay:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1328751961

2156. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 03:32:04 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <a3adqa$c7s$1@slb0.atl.mindspring.net>
Source record: 149642

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29372-3C56BE86-58@storefull-114.iap.bryant.webtv.net...
> Roy Lewallen wrote:
> "It looks like we need a course in EE school to teach people how to use
> the web."
>
> Sorry. I was there before computers. There was an elective on slide rule
> but I was self-taught on that one too.
>

I bet you used one of them store-bought slide rules too. Appliance Operator!
Appliance Operator! Appliance Operator!

Slide Rule Universe (http://www.sphere.bc.ca/test/sruniverse.html) is
pretty cool.

I come from a K&E family myself.

Corry

--
It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net

"Rev. Ivan Stang" <stang@subgenius.com> wrote in alt.slack: "Wow! Only the
most PARANOID conspiracy nuts remember THAT historical detail!! COOL!"

2157. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 03:47:12 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C58BDFB.F897C92C@icok.net>
Source record: 149643

Patrick,
In effect, the coil from the connection of the center
conductor
of the coax to the begining of the antenna is to inductively
lengthen
the antenna. From the center conductor connection to ground is
the
part of the coil that 'matches' impedances. Which is all beside
the
point since you found your problem...
'Doc

2158. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 04:08:12 UTC
From: n8blk@aol.com
Message-ID: <20020130230812.00272.00000035@mb-mq.aol.com>
Source record: 149644

In article <3c581d00.3049389@news.uni-koeln.de>, joe.g@nospam.gmx.co.uk (Joe Gern) writes:

>I am looking for a mobile HF antenna suitable for a motorhome. I am
>working with an FT 817 and MFJ945 but do not like the ATAS100 - any
>suggestions what kind of antenna to choose ?
>

Why don't you like the ATAS100? It's not my favorite choice and indeed is very limited, but what do you want to do? Do you want the best all around setup, an unobtrusive setup, one that mounts easily, or just the best bang for your RF output?

For a single band like 75 meters or 40 meters, your best choice option would be a large center loaded whip like a BugCatcher. If you want to be able to move around on HF from band to band without getting out, one of the screwdriver antennas would be a good bet, (this incidentally is also a center loaded whip) assuming you can mount it properly. Unobtrusive is more difficult, it becomes a question of deciding what you want. You can get a lot of HF contacts with 5 watts, but the less your antenna, the less likely you are to be happy, and unobtrusive can be taken as a synonym for doesn't radiate well sadly.
-art clemons-

2159. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 04:18:29 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C58C595.B886FD36@IEEE.org>
Source record: 149645

Unclaimed Mysteries wrote:
> I come from a K&E family myself.

Log, log, duplex, decitrig?
--
cheers, CAM http://www.qsl.net/w5dxp

2160. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 04:20:15 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <3C368.17503$DE3.2623480@news20.bellglobal.com>
Source record: 149647

"Arrow146" asked:
> give me your opinion.
> Arrowantennas.com/adf1.html

Okay.

$139 each ? Ouch. Forget the balun - it should have a nice, tuneable
preamp with a balanced input.

2161. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 04:20:28 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C58C60C.2D2FB8FA@IEEE.org>
Source record: 149646

Patrick Gardella wrote:
> What is an autotransforming function? The purpose of the coil is to
> inductively shorten the dipole.

Can you give us a description or an ASCII schematic?
--
cheers, CAM http://www.qsl.net/w5dxp

2162. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 04:32:43 UTC
From: HB <me@attbi.somewhere>
Message-ID: <s4ih5u001v363pnnhtqj8fcna4gb6aoj8a@4ax.com>
Source record: 149648

So does this mean you are selling your screwdriver antenna for around
$160 (8x20 for hamsticks)?

On Mon, 28 Jan 2002 23:51:25 -0500, "Jerry Oxendine"
<joxendi@bellsouth.net> wrote:

>I missed the original post, but I would have to go with the
>Screwdriver--that is, if you wish to
>operate all bands. Assuming that is the case, you can buy some versions of
>screwdrivers for
>no more than it would cost to buy, either the Hustler mast and resonators,
>or the Hamsticks.
>The hamsticks, IMO, are the absolutely WORST choice although they work
>fairly well up on
>20 meters and above. The truth is, you just aren't going to get a "sooper"
>signal with a pleasant,
>skinny, unobtrusive mobile antenna. Because I know that a mobile antenna is
>only about 18%
>efficient (if that much) when referenced to a half wave dipole; after all,
>you are taking 120+ feet
>of antenna and squeezing it down into 9 feet or less--I tend to go for the
>Biggest, Ugliest antenna I can get!
>
>For single band work, I'd go for Henry Allen's Texas Bugcatcher. For
>multi-band, it's the
>screwdriver because it IS flexible and is extremely adaptable. By that, I
>mean that, since the
>antenna's environment is usually fluid and changing, the antenna can be
>resonated to take into
>account the changes--often with just a bump of the control switch, whereas,
>the HI efficiency
>(Q), fixed-tuned antenna cannot be changed. In spite of the higher
>efficiency, the fixed tap antenna's performance degrades while the
>screwdriver can correct for such. And again, by
>the time you buy a Hustler fold-over and 7-8 resonators, you can buy a
>screwdriver. Same thing with the hamsticks. They are simply more BANG for
>the buck.
>
>
>73
>
>Jerry
>K4KWH
>www.qsl.net/k4kwh
>

>
>Dick Carroll <dickc58@worldnet.att.net> wrote in message
>news:3C571FF4.3949EABC@worldnet.att.net...
>>
>>
>> Michael J Talkington wrote:
>>
>> > Hello,
>> > What is the best antenna for HF.
>> > A)Hustler
>> > B)Comet
>> > C)Alpha Delta
>> > D)Hamstick
>> > E)Other please specify.
>> > What I am Looking for is best performance on 10 thru 80
>> > whether they have to be put up each time I change bands
>> > or what they dont have to be Multiband.ButI want best performance
>> > and or bandwidth.Thanks Mike
>
>>
>
>

2163. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 04:38:10 UTC
From: chantey <gael.cridhe@verizon.net>
Message-ID: <SS368.1698$9d5.723673@paloalto-snr1.gtei.net>
Source record: 149650

Engineering is continuous learning plus a mix of theory and practice.
Sometimes the ham radio experience helps, sometimes it hinders.
The theory helps design things, the practice helps debug them.
Good use of theory makes designs repeatable...

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a38rll$1662om$1@ID-124126.news.dfncis.de...
> Peter said -
> > the overall requirements to become a ham have been watered down over the
> > years, I am not saying that this was/is a bad thing, since ham radio is
> > amateur not professional, but do you suppose the same thing is happening
> to
> > Engineering?
> ==========
>
> Pete, you hit the nail right on the head.
>
> It HAS happened !
>
>

2164. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 04:50:19 UTC
From: Bill <bill@hovac.com>
Message-ID: <02468.63691$8b.2730482@atlpnn01.usenetserver.com>
Source record: 149649
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

That's nothing! Check this link out:

http://www.davemade.com/forsale.htm

This antenna is rated at 50,000 watts

HiHi

Bill

2165. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 05:04:20 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c58d054@news.bnb-lp.com>
Source record: 149651
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Thanks for the link Bill.....
I suppose I would need two in co-phase for my 18-wheeler running
100kw!

" breaker 19 good-buddy! "

....kinda funny but really too sad to laugh at.....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

"Bill" <bill@hovac.com> wrote in message
news:02468.63691$8b.2730482@atlpnn01.usenetserver.com...
> That's nothing! Check this link out:
>
> http://www.davemade.com/forsale.htm
>
> This antenna is rated at 50,000 watts
>
> HiHi
>
> Bill
>
>
>

2166. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 05:05:56 UTC
From: Landshark <S3Buell@SBCGlobal.Net>
Message-ID: <Ug468.4359$Nw7.3050398865@newssvr14.news.prodigy.com>
Source record: 149652

Whew, that's gotta hurt..... LOL!!!!

Landshark

--
Please note that any post that is from
S3Buell_SBCGlobailnet@hotmail.com
is a FORGE. My Addy is always going to
be from SBCGlobal.Net This person has
been a troll on Rec.Radio.CB for a long
time now. If you want to send a complaint,
forward each message complete with headers
to TOSUSENET@AOL.COM. abuse@hotmail.com,
groups-abuse@google.com
Beware of George WA3MO^

"John P Vassel" <john@vassel.net> wrote in message
news:3c588058$0$35618$2c3e98f8@news.voyager.net...
> "ToolTime" <middlefinger4@home.comspam> wrote in
> news:Wb_58.13225$X64.4578857@news1.rdc2.pa.home.com:
>
> > James, we don't follow these rules in the States It is loike the
> > freebanders there are no rules. Now go play in traffic.
>
> >
> >
> >
>
> Welcome to the *Plonk* file.
>
> --
> John Vassel
> KC8SKE
> RTFD Volunteer Firefighter

2167. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 05:16:48 UTC
From: Tom Nelson <nelsonca@stormnet.com>
Message-ID: <3C58D340.BCF2F48D@stormnet.com>
Source record: 149654
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

The chrome IS nice. Nice looking. I think that heavy chrome plating resonates in the American psyche with the strength and purity of the 1950's when chrome was thick and cars were heavy and power was POWER. It looks like it could handle 15,000W with chrome to spare. I can just see that baby on a dark night glowing orange and blue blowing out neon lights as it cruises down Main. WOOWEE! HOT DAMN! We're smokin' now!

I think it's worth $150 just for decoration. I'll take two. One for each mirror. That means 30,000 Flaming Watts of ....GREAT BALLS OF FIRE!

Doc, if you supply the alternator, I'll supply the pickup and together we'll make internet history. You drive and I'll take the video.

Tom

'Doc wrote:

> Pete,
> The 'problem' with using a center mounted loading coil are
> the resistive losses of the coil (common to any loaded antenna),
> and the mechanical problem of mounting the coil. Depending on
> the frequency used, you end up 'eating' the resistive losses,
> that will happen with ~any~ loaded antenna no matter if it's
> base/center/top loaded.
> The 'chrome' shouldn't make any appreciable difference to
> 'skin affect', unless the metal is heated to the point of the
> chrome loosing it's contact with the steel core. Of course,
> the corona discharge will probably 'chew' the antenna down to
> the coil before that happens.
> The 15 KW claim is pure 'horse-hocky' (to put it politely),
> but there are people stupid enough to do what's necessary to
> run that much power mobile. You can tell who they are on the
> highway, they're the ones who drive the 20 ton alternator with
> wheels on it...
> 'Doc

2168. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 05:22:26 UTC
From: Radio Ham <no.spam@no.spam>
Message-ID: <3c58d824_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 149653
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna

Monitoring this thread for some time, you're clearly
discussing yourself here. Your childish and abusive outburst
was completely out of place and did more to kill the
reputation of Radio Hams than any other contribution.

You weren't insulted, no abuse was directed at you
personally, and yet you responded in a way that
can only suggest - paranoia.

Dave D <Dave_d@default.com> wrote in message
news:a36nl2kmc1@helle.btinternet.com...
>..... There are some very decent
> people in AR but the bad ones are the loudest, unfortunately.....

2169. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 06:51:51 UTC
From: googlyelmo@earthlink.net
Message-ID: <3C58E97B.253A5A04@earthlink.net>
Source record: 149655

When I posted the query that started this thread, I had just installed my antenna system here, and enjoyed an unusual string of half a dozen days of real live sunshine (not the norm in late december in Seattle. . .). Since then, it has rained, and snowed, and rained, quite a bit, maybe 6-7 inches total. What I am finding is that the moisture doesn't seem to have much of an effect on matching, or on received signal strength. This antenna, almost identical to one I had when I lived in Arizona, but for the climate (and *slight* difference in ground conductivity, hi!), and it is performing better, in spite of the rain. I can only guess that while it rains often and for extended periods here, it doesn't usually rain very hard. Commonly our precipitation at this time of year resembles an extremely heavy mist more than anything else. Perhaps the caveat about wet ladderline applies more typically to summer storms in the Midwest and Northeast? So I am keeping my fingers crossed. So far so good. Thanks to all who replied, I learned something, as usually I do amid this group.

Will, KD7BFX

Reg Edwards wrote:

> With the high dielectric constant (80) of water it is likely the decrease in
> line Zo has as great an effect on tuner settings in heavy rain as does an
> increase in line dB. It may even be the dominant factor.
>
> Things may not be so bad as is generally thought. When it rains I just
> readjust the tuner a little to return to 1-to-1 SWR.
>
> Only when steam can be seen rising from 300-ohm ribbon line should anyone
> start worrying about loss in signal strength.
> ---
> **********
> Regards, Reg G4FGQ
> Free Radio Modelling Programs
> Http://www.g4fgq.com
> **********
> Wes Stewart <n7ws@yahoo.com> wrote in message
> news:3c5572a9.63806527@news.triconet.org...
> > On Mon, 28 Jan 2002 06:07:22 GMT, Dick Carroll <dickc58@worldnet.att.net>
> wrote:
> >
> > |
> > |
> > |googlyelmo@earthlink.net wrote:
> > |
> > |>I'd like to hear any suggestions and comments, and especially

> > |
> > |> like to hear from anyone who has successfully used ladderline in a wet
> > |> and rainy climate. Gratefully,
> > |
> > | I haven't tried it, but plan to. Since authorities here say that the
> area
> > |between the
> > |conductors is what causes the problem when wet it seems that running the
> > |ladder
> > |line through a plastic tubing or pipe should solve most of it. Any
> version
> > |that the
> > |ladderline will fit inside should do it.
> >
> > This seems like a heroic effort for little payback. It seems to me that
> some of
> > the advantages of window line (lower cost and weight) are defeated by
> going this
> > route.
> >
> > Furthermore, I believe that it is the presence of water in the electric
> field
> > that exists between the conductors that causes the increased loss. The
> fields
> > are not totally confined to the space directly between the conductors; if
> they
> > were, we could bury the line or strap it to the side of the tower.
> > Consequently, water on the surface of the PVC tubing (unless it is very
> large)
> > will have a similar, albeit reduced, affect on the line attenuation.
> >
> > Furthermore, I believe that those of you living in swamps will have a
> problem
> > with condensation inside the pipe anyway. This will give you the balanced
> line
> > equivalent of the "water-in-the-coax" syndrome.
> >
> > Wes Stewart, N7WS
> > (In sunny, dry Arizona)

2170. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 07:01:07 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5A2F47.462264ED@worldnet.att.net>
Source record: 149656

Richard Harrison wrote:

> Jake, AB3A wrote:
> "You`re falling into exactly the same trap that I outlined before. If
> you know nothing else, go for the certificate."
>
> The record is important.
>
> Who would your choice be as a military defender, George A. Custer, who
> said: "My career as a cadet had but little to recommend it to those who
> came after me, unless as an example to be carefully avoided." Or,
> Douglas C. McArthur who collected the highest grades ever awarded at
> West Point?

Custer graduated last in his class, McArthur graduated first. That's
not the type of comparison being made here.

Dick

2171. Re: Do EE majors make better Hams?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 07:04:17 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u5hr3k8p5qtbf2@corp.supernews.com>
Source record: 149657

My freshman physics teacher had us make one out of cardboard and hand-inked scales (C & D scales only) just to show us what the real basis behind the thing was.

My last rule is in a glass case, given to me by my wife on my retirement...,"In case of emergency, break glass".

Jim

> I bet you used one of them store-bought slide rules too. Appliance Operator!
> Appliance Operator! Appliance Operator!
>

2172. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 07:08:10 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u5hrb0ap0k3746@corp.supernews.com>
Source record: 149658

>
> Memorizing a list of facts is education.

That is absolutely positively the antithesis of education. I can have a monkey memorize a list of facts and push a button to get a banana pellet on command.

Jim

2173. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 07:26:35 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5A353E.9DB62693@worldnet.att.net>
Source record: 149659
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

CAM wrote:

> Dick Carroll wrote:
> >
> > CAM wrote:
> > > Contribute something of value to the Amateur Radio Service?
> >
> > ???? And that will get an Extra advanced to what?
>
> To a position of respect within the Amateur Radio Service. If an
> Extra chooses to rest on his laurels, i.e. contribute nothing of
> value after obtaining his ticket, he doesn't deserve respect.
> What is important is what one accomplishes *after* obtaining
> one's license. The same concept applies to a EE degree.

"Contribute" What? To whom? By whose mandate?
If I laid out a five page list of what I've done
since passing the Extra class exam 32 years ago, you'd just troll
right past it and declare if to be of no "value". If you think I laid
down and expired after passing the Extra class license test you're
even more obtse than you're shown yourself to be in the past.

Seems you haven't exactly loaded up ham radio with contributions
yourself, despite claiming all sorts of expertise in "new mode"
development. I guess you don't deserve any respect.

2174. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 07:28:16 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5A35A5.5683ACD4@worldnet.att.net>
Source record: 149660
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Jake Brodsky wrote:

> On Tue, 29 Jan 2002 05:23:08 GMT, Dick Carroll
> <dickc58@worldnet.att.net> wrote:
>
> > ???? And that will get an Extra advanced to what? The context was amateur
> >radio
> >licensing. Of course your Troll light came on and off you went, as always.
> >
> > Sure is a shame you still feel inadequate because you never could do 20wpm.
>
> Dick, Ham Radio licenses are not scouting merit badges.

Yeah, Jake, I know that. I knew it 45 years ago as a new Novice.

2175. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 07:38:11 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5A37F7.3A73F5A4@worldnet.att.net>
Source record: 149661
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

CAM wrote:

> KC8PMX wrote:
> >
> > I think that what Cecil was trying to say is that even though a person may
> > achieve passing an extra class license test, there is no reason why a person
> > cannot further their individual education. You cannot show me one Extra
> > Class licensee, (regardless of year of license) that absolutely knows
> > EVERYTHING about radio and electronics/electricity. There is so much to
> > learn, that not one person could ever amass all the knowledge about the
> > above subjects in two lifetimes. Plus there is the experimental factor. A
> > licensee, regardless of license class, is encouraged (at least by me) to
> > experiment, come up with something new. After all, had other not have done
> > this, alot of the technology we appreciate now would have never been.
>
> Yep, an Extra class licensee doesn't have any laurels to rest upon until
> he has contributed something of value to the Amateur Radio Service.

And of course, to you that means dreaming up some new digital
mode etc. ad nausum. You're a clone of Karl Stevenson, as though
we needed another one.

If I had never done anything else, when the VE testing system
started I started and ran a VE team for eight years, and there are
hundreds of hams who would have not had the opportunity for
licensing if not for that team. We licensed so many new hams
during that time we put ourselves out of business since several other teams in
adjoining areas started from those hams. Meanwhile you had so mild an interest in
ham radio you didn't bother with an Extra ticket at all util it became a freebee.
When you can top that for "contributing to the ARS" get back to us.

2176. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 07:39:43 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5A3854.B0E1367@worldnet.att.net>
Source record: 149662
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

" .Your Friend Bill" wrote:

Geez, what a tirade, Michael. Does this mean I supposed to be

> embarrassed about having a ham ticket?
> -Bill

More likely he's justifying his own lack of initiative.

2177. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 07:45:55 UTC
From: joe.g@nospam.gmx.co.uk
Message-ID: <3c58f4f1.2630013@news.uni-koeln.de>
Source record: 149663

OK maybe the ATAs 100 is a good antenna as long as its RF capabilities
are concerned - but mechanically ? I worked with one - after 6 weeks
the auto adjusting gear broke - got a replacement antenna, 8 weeks
later the same thing happened. So I decided to give it back. What I
would like to know if there is something similar but not ATAS 100....
at the moment I am working with a G5RV but this does only make sense
when staying at a place for a longer time.
I am thinking of a XR-100 mini portable dipole - any comments to that
one ?

Regards, Joe

On 31 Jan 2002 04:08:12 GMT, n8blk@aol.com (Art Clemons) wrote:

>In article <3c581d00.3049389@news.uni-koeln.de>, joe.g@nospam.gmx.co.uk (Joe
>Gern) writes:
>
>>I am looking for a mobile HF antenna suitable for a motorhome. I am
>>working with an FT 817 and MFJ945 but do not like the ATAS100 - any
>>suggestions what kind of antenna to choose ?
>>
>
>Why don't you like the ATAS100? It's not my favorite choice and indeed is very
>limited, but what do you want to do? Do you want the best all around setup, an
>unobtrusive setup, one that mounts easily, or just the best bang for your RF
>output?
>
>For a single band like 75 meters or 40 meters, your best choice option would be
>a large center loaded whip like a BugCatcher. If you want to be able to move
>around on HF from band to band without getting out, one of the screwdriver
>antennas would be a good bet, (this incidentally is also a center loaded whip)
>assuming you can mount it properly. Unobtrusive is more difficult, it becomes
>a question of deciding what you want. You can get a lot of HF contacts with 5
>watts, but the less your antenna, the less likely you are to be happy, and
>unobtrusive can be taken as a synonym for doesn't radiate well sadly.
>-art clemons-

2178. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 07:47:09 UTC
From: joe.g@nospam.gmx.co.uk
Message-ID: <3c58f645.2970257@news.uni-koeln.de>
Source record: 149664

It's not the whip - the mechanical parts did not convince me working
with it - auto adjust gear broke twice.

Regards, Joe

On Wed, 30 Jan 2002 16:10:26 -0500, "ve3tmt" <ve3tmt@rac.ca> wrote:

>
>"Joe Gern" <joe.g@nospam.gmx.co.uk> wrote in message
>news:3c581d00.3049389@news.uni-koeln.de...
>> I am looking for a mobile HF antenna suitable for a motorhome. I am
>> working with an FT 817 and MFJ945 but do not like the ATAS100 - any
>> suggestions what kind of antenna to choose ?
>>
>> Regards, Joe
>
>Tell you what Joe, I'll trade you a 102" whip for your ATAS100. We will
>both probably do better than we are now.
>
>

2179. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 07:49:25 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5A3A9B.2A327693@worldnet.att.net>
Source record: 149665

Looks like engineering schools graduate engineers who mostly don't know they aren't engineers yet!
Dick

2180. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 08:28:59 UTC
From: Cougercat <felix1063@attbi.com>
Message-ID: <ff768.3570$rV.19185@rwcrnsc53>
Source record: 149666
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Lets see ... on a 13.6 volt system that would be approx 2205.88 amps using a 50% efficiency for the final class C power amp. Anyone have a trailer mounted gen set to load up this antenna?

heh heh!!

"Charles Johnston" <ctj92@cableone.net> wrote in message news:3c58596a$1@news.bnb-lp.com...
> This has got to be the epitome of ignorance....a 15,000W (15KW) rated
> antenna....
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
>
> ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> range"
>
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

2181. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 09:38:21 UTC
From: Val <val_a20@hotmail.com>
Message-ID: <3C59108D.E5CF1E4F@hotmail.com>
Source record: 149667

No he has not found the problem AFAI understand.

Quote:
"If I attach the shield to ground, I get no signal."

He must again remove the centre conductor at the
antenna end. And than, by using an ohm-meter check
the resistance between the centre conductor and the
shield of the coax.

Then, there is this messing around with autotransformer:

Antenna -------X
X
X---------- Shield
X---------- Centre conductor
Antenna -------X

Note that the coax SHIELD is supposed be connected to the tap
in the CENTRE of the coil, otherwise this device will NOT work
correct! The drawing at
http://www.flashwebhost.com/circuit/shortant.php
is WRONG!
However, You should detect a signal, also if the antenna
is made according to the link. And You should be able to
transmit power, but Your coax will radiate, too (which is
not the purpouse of a koax), and this might produce TVI
and other unwanted phenomenons (RF ewerywhere in the
shack...)

The autotransformer thingamajig in the middle of Your antenna
has TWO purpouses (correctly connected) it this particular
case:

1) Shortening the dipole inductively
2) Act as a BALUN- transformer

73 de V.

'Doc wrote:
>
> Patrick,
> In effect, the coil from the connection of the center
> conductor
> of the coax to the begining of the antenna is to inductively
> lengthen
> the antenna. From the center conductor connection to ground is

> the
> part of the coil that 'matches' impedances. Which is all beside
> the
> point since you found your problem...
> 'Doc

2182. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 09:41:35 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a3b3gf$353$1@serra.unipi.it>
Source record: 149668

Richard Clark <kb7qhc@attbi.com> wrote:

> In short, there is no reason to proceed before you get the sign-off
> from the proponents that your test grid will cover all characteristics
> that are important and meaningful. You might be surprised how
> difficult this last requirement may be.

Well, maybe I'm totally wrong here, but simply I think that comparing
this EH to a half wave vertical and to a short vertical having the same
height of the EH, in the same position would suffice. If the results
are as many of us think they should be, and the test is perfectly repetable,
what else they could argue?

73
Francesco IZ5DWF

2183. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 09:55:18 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a3b4a6$5bs$1@serra.unipi.it>
Source record: 149569

J. Harvey <JM001.Harvey@sympatico.ca> wrote:

> Ah, step 1: Why not follow the industry standard and make the first model
> scaled to a frequency such that it would fit through the door of your local
> anechoic chamber. Making the 'first' prototype (if that can be said of an
> EH antena...) suitable for operation in the HF frequency range is just
> silliness.

Ask the "inventors". As far as I remember they say there're "lossess" in
the matching network. Recently an italian HAM said he successfully made
a 50 MHz EH prototipe, which could be tested in a local military anechoic
chamber which is surely big enough (they make EM tests on elicopters there...);
I suggested this approach but I haven't seen any reply so far...

> As far as the dual E+H feed and/or matching network is concerned - eliminate
> that part of the equation. Beg, borrow, rent two individual signal
> generators that can be phase locked. This way you could vary the amplitudes
> and relative phases till the cows come home. Assuming that you account for
> the double input (ah... x2), it should eliminate that unknown part of the
> system.

As far as I know, the inventors say they have put current and voltage
in phase on a capacitor. I don't know how could I obtain this with any
number of signal generators. But maybe it's just me, and all those professors
I had at university....

73

Francesco IZ5DWF

2184. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 09:56:13 UTC
From: Val <val_a20@hotmail.com>
Message-ID: <3C5914BD.6E3C3355@hotmail.com>
Source record: 149570

139 dollars. Not cheap.... You can make a nice one Yourself
for about 1/10 of that price.

And, for HEAVENS SAKE use a BALUN (if used for ADF).
Well, it's nice if you get max. signal strength when You
aim at the target. Without a balun You'll get a declination
-as with a magnetic compass, at least here in Scandinavia
NOT pointing straight North

(If You succeed in obtaining a balanced input preamp or a
RX with balanced input front-end, You do not need a balun)

Arrow146 wrote:
>
> I would like to get the Opinion from some of the Experts here.
> If you have the time, would you please look at this antenna, and give me your
> Opinion.
>
> One Question: Does a direct feed (Receive Only) antenna
> really need a balun?
> <A HREF="http://Arrowantennas.com/adf1.html">Arrow Antenna ADF1</A>
> Thank You for your Time.
> 73 Al Lowe N0IMW

2185. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 10:40:57 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a3b72orft1@newsserver.cilea.it>
Source record: 149571

I agree with Francesco; let's keep things simple in the first place. Tests in an anechoic chamber can be done when the high-frequency prototype will be available; but please keep in mind that losses due to conductors DO NOT scale properly with size, unless you "scale" also the conductivity of the material. I mean, if you measure an efficiency of, say, 70% at 144 MHz, you won't find the same efficiency if you work at 7 MHz with an antenna properly scaled in size.

Anyway, I shall be happy for now with a test like the one that Francesco is proposing. In fact, being almost a point source, I don't expect a high directivity from the EH antenna - the directivity function shall be pretty much like that of a dipole; but we must be most sure that the feedline is not radiating, and this can be achived quite easily by using ferrites.

If the antenna works like a dipole, that's fine for me ! It is very compact... I just regret that I am too stupid to understand the theory behind it.

Michele IZ2EAS

>
> Well, maybe I'm totally wrong here, but simply I think that comparing
> this EH to a half wave vertical and to a short vertical having the same
> height of the EH, in the same position would suffice.

2186. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 10:54:49 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C592268.A55674AB@icok.net>
Source record: 149572

Your right, I mis-read it.
'Doc

2187. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 12:17:42 UTC
From: John P Vassel <john@vassel.net>
Message-ID: <3c5935e5$0$1590$2c3e98f8@news.voyager.net>
Source record: 149573
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

'Doc <w5lz@icok.net> wrote in news:3C58A344.4A42E3E9@icok.net:

> The 15 KW claim is pure 'horse-hocky' (to put it politely),
> but there are people stupid enough to do what's necessary to
> run that much power mobile. You can tell who they are on the
> highway, they're the ones who drive the 20 ton alternator with
> wheels on it...
> 'Doc
>

Good thing them CB'ers dont know about RF exposure eh?.. ;)

--
John Vassel
KC8SKE
RTFD Volunteer Firefighter

2188. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 12:20:09 UTC
From: John P Vassel <john@vassel.net>
Message-ID: <3c593679$0$1590$2c3e98f8@news.voyager.net>
Source record: 149574
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Bill" <bill@hovac.com> wrote in
news:02468.63691$8b.2730482@atlpnn01.usenetserver.com:

> That's nothing! Check this link out:
>
> http://www.davemade.com/forsale.htm
>
> This antenna is rated at 50,000 watts
>
> HiHi
>
> Bill
>
>
>

Man, I'm beating the commercial radio stations are just kicking themselves
about all the money they've spent for 50kw antennas, when they could have
just bought Davemade...

--
John Vassel
KC8SKE
RTFD Volunteer Firefighter

2189. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 12:27:35 UTC
From: pgardella@yahoo.com
Message-ID: <57d04feb.0201310427.4b12f316@posting.google.com>
Source record: 149575

Sure.

It is a compact 40 meter dipole for limited space application by Jact Sobel W5VM. It is a center loaded antenna with a loading coil at the center. The two arms are 18 feet 6 inches long connected to the two ends of an inductor at the middle. The inductor consists of 30 turns of 12 SWG enamelled copper wire wound on 2.5 inch diameter PVC tube 5 inches long at six turns per inch.

The shield of 50 ohms coaxial cable is connected to the center of the coil. The center conductor is connected to 2 or 3 turns away from the center, to a point which gives the lowest SWR. (right now at 2 turns)

So:
<- 18'6" -> <- 18'6" ->
------------\\\\\\\\\--------------
| |
^ |
shield |
^ center conductor

On the receiver side (MRX-40), the center conductor is connected to the antenna input to the receiver. The shield is connected to the ground of the receiver which is connected to the negative terminal of the battery (9 volt).

Patrick
KD4LOX

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C58C60C.2D2FB8FA@IEEE.org>...
> Patrick Gardella wrote:
> > What is an autotransforming function? The purpose of the coil is to
> > inductively shorten the dipole.
>
> Can you give us a description or an ASCII schematic?

2190. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 12:29:07 UTC
From: pgardella@yahoo.com
Message-ID: <57d04feb.0201310429.43119ca1@posting.google.com>
Source record: 149576

An drawing of the antenna can be found at:
http://www.flashwebhost.com/circuit/shortant.gif

Patrick

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C58C60C.2D2FB8FA@IEEE.org>...
> Patrick Gardella wrote:
> > What is an autotransforming function? The purpose of the coil is to
> > inductively shorten the dipole.
>
> Can you give us a description or an ASCII schematic?

2191. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 12:34:26 UTC
From: paul harris <paul@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC80C42AFE2@www.premiersi.com>
Source record: 149578
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Ah, the perfect antenna for that "nuclear powered CB" walkie-talkie from a couple weeks ago (also on Ebay).

"Charles Johnston" <ctj92@cableone.net> wrote in message news:3c58596a$1@news.bnb-lp.com...
> This has got to be the epitome of ignorance....a 15,000W (15KW) rated
> antenna....
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1327032028
>
> ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> range"
>
> --
>
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>

2192. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 12:59:30 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201310459.1c4ebe84@posting.google.com>
Source record: 149577

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<1731-3C580465-15@storefull-118.iap.bryant.webtv.net>...
> Jim, N8EE wrote:
> "As it turns out, commercial tower companies, cell phone companies,
> power companies, etc. have been using galvanized steel for several years
> now. Copper may be better to start, but after several years the
> galvanized holds up better.'
>
> There is more to the story or the companies named are all wrong.
>
> Galvanized coating is zinc. Its virtue is that it is at the opposite end
> of the electromotive series from steel, which it protects by eroding
> instead of the steel rusting away.
>
> The electromotive series lists metals in "decreasing order of their
> tendencies to pass into ionic form by losing electrons" (CRC Handbook).
>
> The sacrificial anode protecting ship hulls and other metals around the
> woprld is called a "zinc". The zinc is eaten away instead of the steel.
>
> Two common metals are more active in eroding in an electrolyte. They are
> aluminum and magnesium. But, zinc is the metal of choice for most
> protective anodes.
>
> A pretty good primary cell can be made by copper and zinc in a saline
> solution. When current flows, the zinc erodes, not the copper.
>
> Best regards, Richard Harrison, KB5WZI

I used to work for a major Cell Phone company, as an RF engineer. I
don't ever recall seeing a copper ground system. They were all
galvanized, and what I read was that they last longer.

I don't know what the reason is (if its longevity or cost), but that
is what is being used nowdays for commercial installations.

Jim
N8EE

2193. Quit! (was Re: Radio Items)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 13:51:04 UTC
From: OldBiker <vito@crosslink.net>
Message-ID: <3C594BC8.F2D02A36@crosslink.net>
Source record: 149579
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

mr hand wrote:
>
> you shut the fuck up fuck face.....

Please take your personal beef off line before someone reports your
usenet abuses to your ISP. All of you, not just mr hand.

2194. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 13:53:33 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <x%b68.2560$I5.205300@bgtnsc05-news.ops.worldnet.att.net>
Source record: 149580

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C589385.9D2CC022@eznec.com...
> "J. Harvey" wrote:
> >
>
> I've seen a setup to get full hemispherical radiation patterns. It was
> at the Naval Research and Development Center (NRaD, formerly Naval Ocean
> Systems Center NOSC) in San Diego. They had a rotating platform about
> 50-100' in diameter covered with hardware cloth. There was an arch
> overhead that the detector could move along. The model was put at the
> center of the platform, and the feed cable went through a hole and back
> under the platform to the test building. Between rotating the platform
> and moving the detector along the arch, they could get a full pattern.
> They had wonderful hand-built brass covered scale wood models of every
> class of ship in the U.S. Navy, which they would put their model
> antennas onto for testing. Quite a setup. Incidentally, they also
> extensively used NEC for modeling the same antennas, and compared
> results, I believe with generally good agreement.
>

This brings back some found memories. In addition to the San Diego setup (I think its now called Space and Naval Warfare Systems Center San Diego SSC SD), the Navy also had one on the east coast (NRL) that closed sometime during the early 80s. Several commercial companies also had similar setups, built scale brass models at 1/48th or 1/50th (convenient for metric) scale and performed full hemispheric pattern measurements. The rotating turntable was approximately 22+ feet in diameter to accommodate the aircraft carrier models. At the early San Diego setup (NEL at the time), conductivity between the turntable and the rest of the ground plane was maintained by filling a circular trough with mercury (no MSDS sheets back then).

Wood was only used in the model to construct the basic hull frame for the ship. Everything beyond the hull structure and above deck level was all brass with no wood support. These highly detailed models would take some 8 - 12+ weeks to build by hand. This was really an art.

Enough digression ...

Steve VE9SRB

2195. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 13:58:37 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <h8ji5us7hmo1nvuest97ii5throo546m1l@4ax.com>
Source record: 149581

Just buy a regular screwdriver antenna Joe, like a BB3 or High Sierra.
They are very reliable. I used a BB3 on our motorhome until we sold
it and now it is installed on our Jeep. About 7 years old now and
still going.

Dick - W6CCD

On Thu, 31 Jan 2002 07:45:55 GMT, joe.g@nospam.gmx.co.uk (Joe Gern)
wrote:

>OK maybe the ATAs 100 is a good antenna as long as its RF capabilities
>are concerned - but mechanically ? I worked with one - after 6 weeks
>the auto adjusting gear broke - got a replacement antenna, 8 weeks
>later the same thing happened. So I decided to give it back. What I
>would like to know if there is something similar but not ATAS 100....
>at the moment I am working with a G5RV but this does only make sense
>when staying at a place for a longer time.
>I am thinking of a XR-100 mini portable dipole - any comments to that
>one ?
>
>Regards, Joe

2196. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 13:59:51 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3C594DD7.3171DB9F@hiwaay.net>
Source record: 149582

I'm afraid that this aproach misses one important point.- ANY departure
from the set-up and configuration the proponents have made is grounds
for them to say that the tests were not of the system they are pushing.
This has been true of the CFA, and of most of the other systems that
claim new physics.
It does not matter that your approach is tried and proven, and nearly a
standard. If such a test proves them right- they will grab at it, but if
it proves them wrong- it'all your fault, not the fault of their antenna.
I suspect that even the use of a common-mode current block will be
claimed to be a violation.

Bill-W4BSG

"J. Harvey" wrote:
>
> I've been asked (off-line) how one might approach the problem of obtaining
> (complete) elevation pattern data for such an antenna. The purpose being to
> enable the complete picture to be gathered and sanity-checked against 0 dBi
> (100%).
>
> Ah, step 1: Why not follow the industry standard and make the first model
> scaled to a frequency such that it would fit through the door of your local
> anechoic chamber. Making the 'first' prototype (if that can be said of an
> EH antena...) suitable for operation in the HF frequency range is just
> silliness.
>
> As far as the dual E+H feed and/or matching network is concerned - eliminate
> that part of the equation. Beg, borrow, rent two individual signal
> generators that can be phase locked. This way you could vary the amplitudes
> and relative phases till the cows come home. Assuming that you account for
> the double input (ah... x2), it should eliminate that unknown part of the
> system.

2197. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:03:53 UTC
From: on4bam@yahoo.com
Message-ID: <3c594eb1.17193778@212.100.160.123>
Source record: 149583
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Thu, 31 Jan 2002 07:34:26 -0500, "paul harris" <paul@sandwitch.org>
wrote:

>Ah, the perfect antenna for that "nuclear powered CB" walkie-talkie from a
>couple weeks ago (also on Ebay).

Is that the one that glows in the dark??

Bye Maurice
--
Hamradio: ON4BAM / M0CIL http://www.qsl.net/on4bam
Pix and travelstories from Alaska, Scotland
South Africa, Iceland, Faroe Isl. and IOTA activations
webmaster http://www.f-tguesthousehuahin.com/ thailand

2198. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:15:56 UTC
From: Kent K9EZ <kwinrich@wi.rr.com>
Message-ID: <wkc68.342535$8w3.80758977@typhoon.kc.rr.com>
Source record: 149584
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Sheesh, I would BUY a few of these and GIVE them to these CBers. What them fry their brains and everything else within a 1 block area.

Can you imagine 50kW into these coils??

"Bill" <bill@hovac.com> wrote in message news:02468.63691$8b.2730482@atlpnn01.usenetserver.com...
> That's nothing! Check this link out:
>
> http://www.davemade.com/forsale.htm
>
> This antenna is rated at 50,000 watts
>
> HiHi
>
> Bill
>
>
>

2199. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:17:28 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5951F8.78D68BBC@IEEE.org>
Source record: 149585
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Dick Carroll wrote:
>
> CAM wrote:
> > To a position of respect within the Amateur Radio Service. If an
> > Extra chooses to rest on his laurels, i.e. contribute nothing of
> > value after obtaining his ticket, he doesn't deserve respect.
> > What is important is what one accomplishes *after* obtaining
> > one's license. The same concept applies to a EE degree.
>
> "Contribute" What? To whom? By whose mandate?
> If I laid out a five page list of what I've done
> since passing the Extra class exam 32 years ago, you'd just troll
> right past it and declare if to be of no "value".

If you rested on your laurels after passing the Extra exam, your list
will be empty. If your list is not empty, you didn't rest on your laurels.

> Seems you haven't exactly loaded up ham radio with contributions
> yourself, despite claiming all sorts of expertise in "new mode"
> development. I guess you don't deserve any respect.

My thing is antennas, not new modes. For years I have maintained
antenna web pages and written magazine articles on antennas. As
far as I know, my binary ladder-line length selector is an original
contribution.
--
cheers, CAM http://www.qsl.net/w5dxp

2200. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:19:31 UTC
From: richardharrison@webtv.net
Message-ID: <1732-3C595273-47@storefull-118.iap.bryant.webtv.net>
Source record: 149590

Jason Hsu wrote:
I would expect to see that EE hams, as a group, earn better GPAs---."

Later someone asked:"Were there any EEs in 1920?"

There were hams then. The ARRL was formed in 1914.

There were alse EEs, long before 1914.

Nikola Tesla may have been the most important EE who ever lived. He invented the a-c power system.

Tesla graduated from the Higher Real Schule in Carstatt, Croatia in 1873, then weent on to the Polytechnic School in Gratz with the intention of becoming a professor of mathematics and physics. But, Tesla switched majors after tinkering with a Gramme dynamo in the physics lab. Inspiration for the a-c power system had already struck him. Tesla switched to the engineering curriculm.

On graduation, Tesla continued his education in Prague and Buda-Pesth to learn languages so he could read widely and work almost anywhere.

Tesla got a job in Paris as an EE with a electric lighting company.

In 1888, Tesla began serious experiments with his rotating field (polyphase) a-c machines.

Tesla decided the US would offer him the best opportunity to exploit new ideas.Tesla had an introduction and letter of recommendation to Edison. When Tesla arrived, Edison said there was one of his machines broken on a boat and if Tesla could fix it, Tesla had a job.Tesla made short work of the repairs.

Tesla and Edison soon parted company. Edison hated Tesla`s a-c power ideas. Edison`s investment was completely in d-c machinery and he wanted to keep it that way.Tesla eventually found a backer in George Westinghouse.

Tesla`s first publication beyond his patents was a paper presented to the AIEE in New York in May 1888, in which Tesla showed how to throw away the commutator in electrical machines. He wowed them.

So, there were certainly EEs in 1920.

Best regards, Richard Harrison, KB5WZI

2201. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:21:40 UTC
From: OldBiker <vito@crosslink.net>
Message-ID: <3C5952F4.A5FEAAF3@crosslink.net>
Source record: 149586

> "Joe Gern" <joe.g@nospam.gmx.co.uk> wrote ..
> > I am looking for a mobile HF antenna suitable for a motorhome.

OK, Y'all gurus fire off them infernal Babbidge Engines! Dunno about Joe's but my motorhome is made of a nonmetalic "sandwich" and is big enough that I could run a 20m dipole horizontally across the roof. As an alternative to "car" solutions, how about a random wire (for lack of a better description) on standoffs in a loop around the roof?? Ground side would be the metal frame under the vehicle? Predictions??? Advice???
TIA KA3DWW

2202. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:21:55 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C595303.9F59EA57@IEEE.org>
Source record: 149587
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Dick Carroll wrote:
> If I had never done anything else, when the VE testing system
> started I started and ran a VE team for eight years, and there are
> hundreds of hams who would have not had the opportunity for
> licensing if not for that team. We licensed so many new hams
> during that time we put ourselves out of business since several other teams in
> adjoining areas started from those hams.

Dick, if you really did that, then you did NOT rest on your laurels
after obtaining your Extra license. A few of us are ragging on hams
who contribute nothing after obtaining a license. Why do you think
you are in that catagory and have to defend yourself? Is your
conscience bothering you?
--
cheers, CAM http://www.qsl.net/w5dxp

2203. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:29:43 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5954D7.BC02BE4D@IEEE.org>
Source record: 149588

Patrick Gardella wrote:
> <- 18'6" -> <- 18'6" ->
> ------------\\\\\\\\\-------------
> | |
> ^ |
> shield |
> ^ center conductor

FYI, Patrick, that's an autotransformer in the center. See Val's posting drawn a little differently. Disconnect the center conductor and check for a short between the center conductor and the shield. Also check for continuity between the two ends of the antenna. Check for shorted turns on the coil.
--
cheers, CAM http://www.qsl.net/w5dxp

2204. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:38:37 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3bkt9$3rd$1@slb6.atl.mindspring.net>
Source record: 149589

Dick:

[snip]
"Dick Carroll" <dickc58@worldnet.att.net> wrote in message
news:3C5A3A9B.2A327693@worldnet.att.net...
> Looks like engineering schools graduate engineers who mostly don't know
they
> aren't engineers yet!
> Dick
[snip]

It has been my experience that your comment is very often true. Don't know for sure that you can really blame the students though...

Unfortunately for the students, since it is not always in their best interest, the academics who teach them at engineering schools do not often abuse the students of that idea.

The four year academic program in engineering is nothing more than preparation in the analysis of engineering problems. Certainly that is *one* of the skills required of a design Engineer, but only *one*! The graduates of such programs are only so much "putty" ready to be moulded into an Engineer in the fire of the workplace, and as some on this thread have noted, a large percentage of them never make it. Much more training, learning, and a long practical apprenticeship is needed to complete the process of creating a great Engineer.

Academics need students to stay in business, "headcount" is king in US Universities at least. "Headcount" is what drives budgets, etc...And telling beginning students *explicitly* that the academic four year program they are taking does *NOT* qualify them to be an engineer is not encouraged. Hence some/many will graduate thinking that they are Engineers, when they are only wannabe engineers, and still have a long path to become a real Engineer.

Some/many, I might add, never do!

2205. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:41:34 UTC
From: "Michael A. Terrell" <michaelaterrell@netscape.net>
Message-ID: <3C59572A.FA721C95@netscape.net>
Source record: 149593
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Dick Carroll wrote:
>
> " .Your Friend Bill" wrote:
>
> > Geez, what a tirade, Michael. Does this mean I supposed to be
> > embarrassed about having a ham ticket?
> > -Bill
>
> More likely he's justifying his own lack of initiative.

Think what you want. I quickly realized it was more interesting to design, build, and troubleshoot equipment than to sit there playing with it. My interests were elsewhere. Over the last 35 years I've helped a number of hams either get on the air, or stay on the air. I've done the same for three TV stations and about a dozen AM radio stations. Right now i am looking into the chief engineer's job at another TV station.

If you enjoy using the equipment that's great, but I would rather spend the time studying a new computer language, or work on a new receiver design. I was part of the team that built a custom telemetry receiver based KU band uplink system used for video and data transmission that is on the space station. I worked with the embedded controller, power and data distribution system, and the video system that allowed recovery of signals from 10 KHz to 20 Mhz. Not everyone has the same interests or hobbies.

Find an area you enjoy, and have some fun.

Take care, and God bless.
Michael A. Terrell

2206. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:47:33 UTC
From: OldBiker <vito@crosslink.net>
Message-ID: <3C595905.E4BE3400@crosslink.net>
Source record: 149591

KU4YP wrote:
>
> > > So, yes, a lot of Scots, Irish and English came here in chains and
> under worse
> > > conditions than did the African slaves.
>
> yes, that is correct. but no one seems to care to remember that.

Or that the first English colony (Roanoke Island) disappeared entirely,
every man woman and child lost, or that 4 in 5 died in the next
(Jamestown), or that there were more slaves in N.Y.C. than in Richmond
circa 1800 or that ... etc.

That's not PC!

OTOH, but for the movement led by Dr King, we wouldn't have people like
Colin Powell today.
KA3DWW

2207. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:53:33 UTC
From: richardharrison@webtv.net
Message-ID: <1731-3C595A6D-143@storefull-118.iap.bryant.webtv.net>
Source record: 149595

Jim, N8EE wrote:
I used to work for a major Cell Phone company, as an RF engineer. I don`t recall seeing a copper ground system. They were all galvanized, and what I read was that they last longer."

You can`t beat mother nature in the long run. The nature of things is that zinc readily rots in the earth. Copper does not.

Look at the ground rod at your electric power meter carefully. Is it zinc, or copper?

Best regards, Richard Harrison, KB6WZI

2208. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 14:55:11 UTC
From: KC8PMX <kc8pmx@tm.net>
Message-ID: <jVc68.380$fc.348621@monger.newsread.com>
Source record: 149592

Righto on the watering down technique. Thats what we used in the cemetery I had worked in for about 2 years. Had to still come back and refill/top off each grave a couple of times to keep the ground even. The mentioning in regards to cement was along the similar lines of why guy wire anchors and even the bases of the towers. This is assuming that there is now intent of moving the telephone pole.

enter fantasy mode
What I though would be a cool antenna support structure, provided the acreage was available, would be to have 2 of those huge metal high-tension electrical wire support structures. Think of all the dipoles, verticals and beams that could be affixed to those if you had the space and of course the money!!
exit fantasy mode

Ryan KC8PMX

"dan" <danlx@execpc.com> wrote in message
news:3c585f37$0$35575$272ea4a1@news.execpc.com...
> On Wed, 30 Jan 2002 13:52:22 GMT, "KC8PMX" <kc8pmx@tm.net> wrote:
>
> >
> >"David Robbins" <k1ttt@arrl.net> wrote in message
> >news:a376v8029cc@enews1.newsguy.com...
> >> i would recommend checking with the local utility company, they are
very
> >> experienced in such things and have the right equipment.
> >>
> >> If you do ending up digging a ditch like that to lever it up, and are
> >lucky
> >> enough to get it vertical, be very sure that when you backfill that you
> >> compact the earth very well, and i don't mean by foot, rent a real
tamper
> >> and use it every 6" or so. If you don't you will have a weak side on
the
> >> hole that is holding up the pole.
> >>
> >
> >My sentiments exactly. Having worked in excavation in the past, plenty
of
> >tamping would be prudent, and also including extra dirt on the surface to
> >fill in around the pole as it will still "settle" a bit. One thing he
may
> >consider is setting the thing up with concrete at the base.
> >It may be worthwile to do this if the cost permits. 8 feet deep by

however
> >wide may help assure that this pole would stay put. Just some
> >thoughts........
> >
> >
> >Ryan KC8PMX
> >
> >
> Hi all,
> Tamping is great if you are going to put something onto the tamped
> down surface and don't want it to move, like a wall foundation or a
> concrete slab. As far as keeping the pole from moving, I would
> suggest it would only be marginal at best. Once the earth is
> disturbed the best way to get it to settle back into a condition
> anything like it was pre excavation is to backfill and water it down
> as you go. Then just to be sure use a pipe on the hose to insert into
> the disturbed sections and see how much more it settles. The best
> method is to have a hole drilled and set the pole into the hole, then
> backfill with dirt or concrete. Safety first. BTW does anyone out
> here know of a company (construction) looking for a Safety specialist,
> OSHA Outreach Trainer, preferably in WI or North/South Carolina? I
> know, It's of topic, but a guy has to get money for radio and fishing
> stuff somehow!!!
> Dan
> N9JBF
>
> I've rambled enough, back to the rocking chair. ZZZZZZZZZ
>
> Remove left x for a direct reply.

2209. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 15:05:33 UTC
From: richardharrison@webtv.net
Message-ID: <1731-3C595D3D-146@storefull-118.iap.bryant.webtv.net>
Source record: 149594

Tesla switched to the engineering curriculum.

Sorry I left "u" out in curriculum.

Best regards, Richard Harrison, KB5WZI

2210. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 15:18:19 UTC
From: richardharrison@webtv.net
Message-ID: <1731-3C59603B-148@storefull-118.iap.bryant.webtv.net>
Source record: 149597

Jim Weir wrote:
"I can have a monkey memorize a list of facts and push a button to get a banana on command."

You then have a trained monkey.

Best regards, Richard Harrison, KB5WZI

2211. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 15:32:24 UTC
From: n7ws@yahoo.com
Message-ID: <3c5960d8.319788700@news.triconet.org>
Source record: 149596

On Thu, 31 Jan 2002 06:51:51 GMT, googlyelmo@earthlink.net wrote:

|When I posted the query that started this thread, I had just installed my
|antenna system here, and enjoyed an unusual string of half a dozen days of real
|live sunshine (not the norm in late december in Seattle. . .). Since then, it
|has rained, and snowed, and rained, quite a bit, maybe 6-7 inches total.
[snip]

|> Wes Stewart <n7ws@yahoo.com> wrote in message
[snip]

|> > Wes Stewart, N7WS
|> > (In sunny, dry Arizona)

Well, it's sunny and dry today (although it's 25F as I write and the high temp
yesterday was 45F at midnight). However, yesterday I drove across Tucson in a
snow shower.

We do this once in awhile to make the flocks of "snow birds" feel at home <g>.

Wes N7WS
So many snow birds, so little freezer space.

2212. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 15:46:48 UTC
From: pgardella@yahoo.com
Message-ID: <57d04feb.0201310746.5149b9a4@posting.google.com>
Source record: 149598

Interesting! Then the image that's in the ARRL antenna book is wrong
as well. I ignored the text of that web page, since it was opposite
of what the image showed, as well as what was in the ARRL book.

Should the shield be connected to the coil (after I remove the center
conductor), while I'm testing the resistance?

While I'm at it, any other pointers on this kind of antenna?

Patrick

Val <val_a20@hotmail.com> wrote in message news:<3C59108D.E5CF1E4F@hotmail.com>...
> No he has not found the problem AFAI understand.
>
> Quote:
> "If I attach the shield to ground, I get no signal."
>
> He must again remove the centre conductor at the
> antenna end. And than, by using an ohm-meter check
> the resistance between the centre conductor and the
> shield of the coax.
>
> Then, there is this messing around with autotransformer:
>
> Antenna -------X
> X
> X---------- Shield
> X---------- Centre conductor
> Antenna -------X
>
> Note that the coax SHIELD is supposed be connected to the tap
> in the CENTRE of the coil, otherwise this device will NOT work
> correct! The drawing at
> http://www.flashwebhost.com/circuit/shortant.php
> is WRONG!
> However, You should detect a signal, also if the antenna
> is made according to the link. And You should be able to
> transmit power, but Your coax will radiate, too (which is
> not the purpouse of a koax), and this might produce TVI
> and other unwanted phenomenons (RF ewerywhere in the
> shack...)
>
> The autotransformer thingamajig in the middle of Your antenna
> has TWO purpouses (correctly connected) it this particular
> case:

>
> 1) Shortening the dipole inductively
> 2) Act as a BALUN- transformer
>
> 73 de V.
>
>
> 'Doc wrote:
> >
> > Patrick,
> > In effect, the coil from the connection of the center
> > conductor
> > of the coax to the begining of the antenna is to inductively
> > lengthen
> > the antenna. From the center conductor connection to ground is
> > the
> > part of the coil that 'matches' impedances. Which is all beside
> > the
> > point since you found your problem...
> > 'Doc

2213. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 15:51:34 UTC
From: richardharrison@webtv.net
Message-ID: <1732-3C596806-55@storefull-118.iap.bryant.webtv.net>
Source record: 149599

In 1882, Tesla began serious experiments with his rotating field (polyphase) a-c machines. Perhaps I should have said the rotating field was produced in a stator by phase rotation. The rotor chases the phases in the stator.

My real boo-boo was fat-fingering the keys and typing 1888 as the date. It was actually 1882 while Tesla was still in Paris that he started making polyphase machines that equalled or exceeded the efficiency of the d-c machines of the time.

Best regards, Richard Harrison, KB5WZI

2214. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 16:22:26 UTC
From: richardharrison@webtv.net
Message-ID: <1733-3C596F42-11@storefull-118.iap.bryant.webtv.net>
Source record: 149600

Googlyelmo wrote:
"What I am finding is that the moisture doesn`t seem to have much of an effect on matching, or on received strength."

I`ve been curious about this thread because I live in a damp climate and when TV was new I was in the fringe. Pictures had snow at times but it usually seemed unrelated to the weather outside where the antenna and twinlead resided.

Best regards, Richard Harrison, KB5WZI

2215. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 16:29:23 UTC
From: paul harris <paul@sandwitch.org>
Message-ID: <4A8A59F2BDCDD311BFC800508BA36AC80C431574@www.premiersi.com>
Source record: 149606

I just purchased a High Sierra. While I think I'm going to be happy with it (it's not even installed yet), I was surprised by the warning that I'll need to replace the fingerstock annually (they say it might last 3 years, but that violates the warrantee), and you must disassemble the base and clean the brass (or likewise violate the warrantee).

So, just bear in mind screwdrivers are not maintenance-free.

"Dick Hughes" <rhughes33@cableone.net> wrote in message news:h8ji5us7hmo1nvuest97ii5throo546m1l@4ax.com...
> Just buy a regular screwdriver antenna Joe, like a BB3 or High Sierra.
> They are very reliable. I used a BB3 on our motorhome until we sold
> it and now it is installed on our Jeep. About 7 years old now and
> still going.
>
> Dick - W6CCD
>
> On Thu, 31 Jan 2002 07:45:55 GMT, joe.g@nospam.gmx.co.uk (Joe Gern)
> wrote:
>
> >OK maybe the ATAs 100 is a good antenna as long as its RF capabilities
> >are concerned - but mechanically ? I worked with one - after 6 weeks
> >the auto adjusting gear broke - got a replacement antenna, 8 weeks
> >later the same thing happened. So I decided to give it back. What I
> >would like to know if there is something similar but not ATAS 100....
> >at the moment I am working with a G5RV but this does only make sense
> >when staying at a place for a longer time.
> >I am thinking of a XR-100 mini portable dipole - any comments to that
> >one ?
> >
> >Regards, Joe

2216. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 16:47:56 UTC
From: n7ws@yahoo.com
Message-ID: <3c597369.2998887@news.triconet.org>
Source record: 149601
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Thu, 31 Jan 2002 08:28:59 GMT, "Cougercat" <felix1063@attbi.com> wrote:
|Anyone have a trailer
|mounted gen set to load up this antenna?

I haven't really followed this thread but I must respond here.

There isn't a link to it on my home page but if you look at:

http://users.triconet.org/wesandlinda/w7uvr.jpg

you can see the old QSL card of my former neighbor and Elmer (gave me my Novice and Conditional exams), the late Lee Smith, W7UVR.

This is circa 1958-59 so the equipment dates from that era and was "state-of-the-art."

The vehicle was a 1955 Mercury with a 1956 Lincoln engine and truck springs and tires under the rear. (There was an extra leaf in the spring on the side where the HV power transformer resided)

Initially, the amplifier ran a 4-1000A, high level plate-modulated using push-pull-parallel 813's for modulators. Later it was converted to a linear for SSB.

The small beam on the top of the car could be elevated to a height of 30' using a pneumatic mast (visible in the middle photo inside the car). The beam was later replaced with a three-element tribander that was folded for travel using custom machined tubular hinges.

There were two whip antennas on the rear using motor-tuned edge-wound silver-plated inductors and vacuum variable capacitors. These were housed in the large Plexiglas boxes visible in the top photo. These were of course tunable from the driver's seat.

The generator in the photo is a 5KW Kohler, which was later replaced with a 15KW in a larger trailer. The equipment was also continually upgraded as the state of the art changed. (Even in these photos, the equipment is different)

So, 15KW mobile? I doubt it (corona problems) but not too farfetched if you put your mind and money to it.

I believe this mobile was on the cover of CQ magazine once but I never saw it. At some hamfests of the day they had mobile judging contests. When he pulled in, everyone else went home.

Wes Stewart N7WS

2217. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 17:06:16 UTC
From: arrow146@aol.com
Message-ID: <20020131120616.06718.00000279@mb-ct.aol.com>
Source record: 149603

>139 dollars. Not cheap.... You can make a nice one Yourself
>for about 1/10 of that price.
>
>And, for HEAVENS SAKE use a BALUN (if used for ADF).

Ok, Thanks guys.

Two points,
1. Price is too high. Not sure I can do much about that,
a lot of labor in making this antenna.

2. Needs a balun, I was afraid of that.
Seems everyone agrees on it needing a balun.

Well I guess I have some studying to do. (about baluns)

Thanks for your help.

73 Al Lowe N0IMW
<A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>

2218. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 17:08:26 UTC
From: SideBand <ab8lr@csotbs.org>
Message-ID: <3C597A0A.9020202@csotbs.org>
Source record: 149602
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

It musta been nice to have money...

de AB8LR

-SSB

Wes Stewart wrote:

> On Thu, 31 Jan 2002 08:28:59 GMT, "Cougercat" <felix1063@attbi.com> wrote:
> |Anyone have a trailer
> |mounted gen set to load up this antenna?
>
>
> I haven't really followed this thread but I must respond here.
>
> There isn't a link to it on my home page but if you look at:
>
> http://users.triconet.org/wesandlinda/w7uvr.jpg
>
> you can see the old QSL card of my former neighbor and Elmer (gave me my Novice
> and Conditional exams), the late Lee Smith, W7UVR.
>
> This is circa 1958-59 so the equipment dates from that era and was
> "state-of-the-art."
>
> The vehicle was a 1955 Mercury with a 1956 Lincoln engine and truck springs and
> tires under the rear. (There was an extra leaf in the spring on the side where
> the HV power transformer resided)
>
> Initially, the amplifier ran a 4-1000A, high level plate-modulated using
> push-pull-parallel 813's for modulators. Later it was converted to a linear for
> SSB.
>
> The small beam on the top of the car could be elevated to a height of 30' using
> a pneumatic mast (visible in the middle photo inside the car). The beam was
> later replaced with a three-element tribander that was folded for travel using
> custom machined tubular hinges.
>
> There were two whip antennas on the rear using motor-tuned edge-wound
> silver-plated inductors and vacuum variable capacitors. These were housed in
> the large Plexiglas boxes visible in the top photo. These were of course
> tunable from the driver's seat.
>
> The generator in the photo is a 5KW Kohler, which was later replaced with a 15KW

> in a larger trailer. The equipment was also continually upgraded as the state
> of the art changed. (Even in these photos, the equipment is different)
>
> So, 15KW mobile? I doubt it (corona problems) but not too farfetched if you put
> your mind and money to it.
>
> I believe this mobile was on the cover of CQ magazine once but I never saw it.
> At some hamfests of the day they had mobile judging contests. When he pulled
> in, everyone else went home.
>
> Wes Stewart N7WS
>
>

--
73 de AB8LR, Chris

http://csotbs.shopiwon.com/ for great deals on computer products.

2219. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 17:12:55 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <qWe68.5526$E4.421037@e3500-atl2.usenetserver.com>
Source record: 149604

No! I believe, however, that the Hustler resonators, plus foldover mast do
cost around $200.
Some screwdrivers that I know of sell for around $179, but these are the
ones made of PVC
and "skinny" #16 wire. It's like anything else; you get what you pay for.
If you want a "basic"
screwdriver, you will STILL get more performance out of the SC than the
hamsticks--especially down on 40-80 meters--they SUCK big time down there.
If you want more performance, then my Carolina Cyclone is targeted to that
market and is still a bargain com-
pared to the "big" names!~

73

Jerry
K4KWH
HB <me@attbi.somewhere> wrote in message
news:s4ih5u001v363pnnhtqj8fcna4gb6aoj8a@4ax.com...
> So does this mean you are selling your screwdriver antenna for around
> $160 (8x20 for hamsticks)?
>
> On Mon, 28 Jan 2002 23:51:25 -0500, "Jerry Oxendine"
> <joxendi@bellsouth.net> wrote:
>
> >I missed the original post, but I would have to go with the
> >Screwdriver--that is, if you wish to
> >operate all bands. Assuming that is the case, you can buy some versions
of
> >screwdrivers for
> >no more than it would cost to buy, either the Hustler mast and
resonators,
> >or the Hamsticks.
> >The hamsticks, IMO, are the absolutely WORST choice although they work
> >fairly well up on
> >20 meters and above. The truth is, you just aren't going to get a
"sooper"
> >signal with a pleasant,
> >skinny, unobtrusive mobile antenna. Because I know that a mobile antenna
is
> >only about 18%
> >efficient (if that much) when referenced to a half wave dipole; after
all,
> >you are taking 120+ feet
> >of antenna and squeezing it down into 9 feet or less--I tend to go for
the

> >Biggest, Ugliest antenna I can get!
> >
> >For single band work, I'd go for Henry Allen's Texas Bugcatcher. For
> >multi-band, it's the
> >screwdriver because it IS flexible and is extremely adaptable. By that,
I
> >mean that, since the
> >antenna's environment is usually fluid and changing, the antenna can be
> >resonated to take into
> >account the changes--often with just a bump of the control switch,
whereas,
> >the HI efficiency
> >(Q), fixed-tuned antenna cannot be changed. In spite of the higher
> >efficiency, the fixed tap antenna's performance degrades while the
> >screwdriver can correct for such. And again, by
> >the time you buy a Hustler fold-over and 7-8 resonators, you can buy a
> >screwdriver. Same thing with the hamsticks. They are simply more BANG
for
> >the buck.
> >
> >
> >73
> >
> >Jerry
> >K4KWH
> >www.qsl.net/k4kwh
> >
> >
> >Dick Carroll <dickc58@worldnet.att.net> wrote in message
> >news:3C571FF4.3949EABC@worldnet.att.net...
> >>
> >>
> >> Michael J Talkington wrote:
> >>
> >> > Hello,
> >> > What is the best antenna for HF.
> >> > A)Hustler
> >> > B)Comet
> >> > C)Alpha Delta
> >> > D)Hamstick
> >> > E)Other please specify.
> >> > What I am Looking for is best performance on 10 thru 80
> >> > whether they have to be put up each time I change bands
> >> > or what they dont have to be Multiband.ButI want best performance
> >> > and or bandwidth.Thanks Mike
> >
> >>
> >
> >
>

2220. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 17:15:40 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <8eui5u8r574dhpmv443tbp4j4f4ne143hp@4ax.com>
Source record: 149605

On Thu, 31 Jan 2002 09:41:35 +0000 (UTC), Francesco Messineo
<frank@ares.ccii.unipi.it> wrote:

>Richard Clark <kb7qhc@attbi.com> wrote:
>
>> In short, there is no reason to proceed before you get the sign-off
>> from the proponents that your test grid will cover all characteristics
>> that are important and meaningful. You might be surprised how
>> difficult this last requirement may be.
>
>Well, maybe I'm totally wrong here, but simply I think that comparing
>this EH to a half wave vertical and to a short vertical having the same
>height of the EH, in the same position would suffice. If the results
>are as many of us think they should be, and the test is perfectly repetable,
>what else they could argue?
>
>73
>Francesco IZ5DWF

Hi Francesco,

This is the surprise I speak of: what they choose to argue about.
This is a standard ploy of school of fractal electromagnetics: ask the
wrong question and demand exact answers before defending the bogus
design. CFA and EH debates have shared this same prostitution of
argument.

73's
Richard Clark, KB7QHC

2221. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 17:43:54 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <snf68.6588$E4.432072@e3500-atl2.usenetserver.com>
Source record: 149608

So, that means you have to replace that "springy thingy" every year? Hmm,
that's interesting.
I never knew that. I make screwdrivers, too, but about the only thing I
tell people is that it
might need oiling after a couple years. If the drive shaft dries out, it
might start screeching or
making a howling sound. The fingerstock I use is VERY heavy duty (each
finger is 1/4" wide)
and extra springy. I replaced the fs on my own Cyclone antenna just
recently and the old
stuff had been on there for over 4 years. I know that fingerstock *can*
last a lot longer, but
it depends on how much one QSY's; some folks tend to hang around on the same
frequencies,
others jump around a lot.
73

Jerry
www.qsl.net/k4kwh

paul harris <paul@sandwitch.org> wrote in message
news:4A8A59F2BDCDD311BFC800508BA36AC80C431574@www.premiersi.com...
> I just purchased a High Sierra. While I think I'm going to be happy with
it
> (it's not even installed yet), I was surprised by the warning that I'll
need
> to replace the fingerstock annually (they say it might last 3 years, but
> that violates the warrantee), and you must disassemble the base and clean
> the brass (or likewise violate the warrantee).
>
> So, just bear in mind screwdrivers are not maintenance-free.
>
> "Dick Hughes" <rhughes33@cableone.net> wrote in message
> news:h8ji5us7hmo1nvuest97ii5throo546m1l@4ax.com...
> > Just buy a regular screwdriver antenna Joe, like a BB3 or High Sierra.
> > They are very reliable. I used a BB3 on our motorhome until we sold
> > it and now it is installed on our Jeep. About 7 years old now and
> > still going.
> >
> > Dick - W6CCD
> >
> > On Thu, 31 Jan 2002 07:45:55 GMT, joe.g@nospam.gmx.co.uk (Joe Gern)
> > wrote:
> >
> > >OK maybe the ATAs 100 is a good antenna as long as its RF capabilities

> > >are concerned - but mechanically ? I worked with one - after 6 weeks
> > >the auto adjusting gear broke - got a replacement antenna, 8 weeks
> > >later the same thing happened. So I decided to give it back. What I
> > >would like to know if there is something similar but not ATAS 100....
> > >at the moment I am working with a G5RV but this does only make sense
> > >when staying at a place for a longer time.
> > >I am thinking of a XR-100 mini portable dipole - any comments to that
> > >one ?
> > >
> > >Regards, Joe
>
>

2222. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 17:44:43 UTC
From: peter@strg-alt-entf.org
Message-ID: <a3bvqa$175moh$2@ID-31.news.dfncis.de>
Source record: 149607
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.dx Charles Johnston <ctj92@cableone.net> wrote:
>
> ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> range"

Increase your range of people who enjoy your postings and stick to the
rec.radio.cb.* groups.

Peter lemken
DF5JT
Berlin

--
Yes, it works!

2223. Re: Mobile antenna installations - question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 17:46:35 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <Zpf68.6820$E4.435114@e3500-atl2.usenetserver.com>
Source record: 149609

The ideal situation is to have the "hot" part of the antenna above the roof;
i.e., loading coil and
whip. I've seen CB folks with those K40 base loaded antennas on the back
bumper of a van
(ouch), and I wonder how they get it to work at all.

Jerry
K4KWH
JG in NY <n1aep@yahoo.com> wrote in message
news:PLF48.14873$Ki1.1494934@typhoon.nyroc.rr.com...
> I guess what I meant was that the radiator is running vertically parallel
to
> the vehicle body up to the point where it clears the top of the car
> .
> So the radiator ends up parallel to and close to the "ground plane" for
some
> distance.
>
> If it is a bumper mounted 8' whip, say, on the back of a van, this
parallel
> condition is present along most of the antenna!
>
> I hope this might clarify my question...
>
> thanks
> jg
> "'Doc" <w5lz@icok.net> wrote in message news:3C525FCD.8B19C346@icok.net...
> > JG,
> > The feed point impedance is lowered to something on
> > the order of 15-35 ohms.
> > Instead of saying a dipole's legs are folded back so
> > they are parallel, it's more 'correct' to say that the
> > dipole's legs are at right angles to each other. The
> > resulting radiation pattern tends to be in the direction
> > of the body of the vehicle. The pattern isn't what I
> > would call 'directional', as in a beam antenna, but more
> > of a 'lop-sided' omnidirectional pattern. This 'trend'
> > in direction doesn't seem all that desirable in a mobile
> > antenna system, but that's what you end up with when you
> > have to adapt to 'practical' places to mount an antenna.
> > 'Doc
>
>

2224. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 17:54:19 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c5984cc$1@news.bnb-lp.com>
Source record: 149610
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Peter,

It has been some time since I heard from you. I Thank you so much
for sharing your own perverted sense of sarcasm and " True Ham Spirit "

I remain as always your friend and Ham Radio Pal...

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

"Peter Lemken" <peter@strg-alt-entf.org> wrote in message
news:a3bvqa$175moh$2@ID-31.news.dfncis.de...
> In rec.radio.amateur.dx Charles Johnston <ctj92@cableone.net> wrote:
> >
> > ofcourse (in true CB fashion) it is "guaranteed" to "increase your
> > range"
>
> Increase your range of people who enjoy your postings and stick to the
> rec.radio.cb.* groups.
>
> Peter lemken
> DF5JT
> Berlin
>
> --
> Yes, it works!

2225. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 17:55:56 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0201310955.36fb5f6@posting.google.com>
Source record: 149611

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<1731-3C595A6D-143@storefull-118.iap.bryant.webtv.net>...
> Jim, N8EE wrote:
> I used to work for a major Cell Phone company, as an RF engineer. I
> don`t recall seeing a copper ground system. They were all galvanized,
> and what I read was that they last longer."
>
> You can`t beat mother nature in the long run. The nature of things is
> that zinc readily rots in the earth. Copper does not.
>
> Look at the ground rod at your electric power meter carefully. Is it
> zinc, or copper?
>
> Best regards, Richard Harrison, KB6WZI

Still, there's the article I once read in a trade journal, it said
that companies are using galvanized because it lasts longer and is
cheaper. Note that I did not say that it lasts for ever.

My comparison was between copper clad steel and galvanized steel.

According to "Reference Data for Radio Engineers" (Howard Sams & Co,
2nd edition, 1977), page 4-14, in the galvanic series Zinc, Galvanized
steel, steel, iron, etc. are relatively close to each other. Copper
is farther away. So if a copper clad steel rod gets a scratch
galvanic corrosion action starts.

Besides I can go to Lowes and pick up an 8 ft galvanized steel pipe
for a few bucks. How much are copper clad ground rods now days?

Jim
N8EE

2226. Re: Mobile antenna installations - question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 18:03:51 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C598707.32DF12A0@crosslink.net>
Source record: 149612

Jerry Oxendine wrote:
> ... I've seen CB folks with those K40 base loaded antennas on the back
> bumper of a van (ouch), and I wonder how they get it to work at all.
>

Well, ya know with 15 KW .....

2227. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 18:05:59 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <alf68.7471$E4.445379@e3500-atl2.usenetserver.com>
Source record: 149613

Jason,

The tax deductions offset these other expenses. Trust me, you will be FAR better off in a house--even if you have to move--than you are in an apartment. Even if you start out with a modest frame 2 bedroom, you are STILL better off. An apartment is a money sinkhole; a house is an investment. Traditionally, home values always go UP. I know there is no guarantee of this, but it has held true. Example--my own house: I bought it in 1986 for $59,000. I did a few things to it (added a large deck and carport underneath, finished and waterproofed the basement, etc). Now the house is valued at $89,900. I owe less than $40,000. S0! That means that if I should sell it, I have an equity of almost $50,000! Had I rented an apartment all those years, I would have ZIP, 0, NADA! The younger you are when you buy real estate, the better off you are! Even if you start out with a small fixer-upper, you will MAKE money. The longer you stay in a house, the more equity you will build. After a couple years, or as you are forced to move, try to move up into a little more expensive house each time. Each time you will build equity. Yes, it is a bit more trouble to buy, sell, move, buy again. But overall, you will be MUCH better off. When tax time comes, and you take that deduction for $4-8000 in mortgage interest, you will appreciate the difference it makes.

AND, if you find a house that doesn't have those damned CC & Rs, you can have the radio shack you want AND all the dipoles/towers you want! My radio room is in a corner of my basement. There are 2 picture windows in that corner where I can look out on the back yard and the flowers, etc. I can watch the full moon rise (like it did last night) while relaxing down here...I LOVE my basement!

Best 73

Jerry
K4KWH

(Homeowner and loving it and there ain't NO CC & Rs or blue haired old ladies telling me

what I can do on my own property!)
Jason Hsu <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0201231222.147664cc@posting.google.com...
> Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
news:<3C4EC421.69E419DD@tampabay.rr.com>...
> > jason
> > what i would do is save what ya can for a downpayment then go buy a
house
> > somewhere with an acher of land most times you can buy a house for what
> > you can rent an apartment for then as long as you buy a place that is
not
> > deed restricted you can put up what ever you wish
> >
> I agree that a house is MUCH better than an apartment. However, I am
> not ready to buy a house yet. And the mortgage excludes many expenses
> that rent does include (property taxes, maintenance, etc.) and is thus
> misleadingly cheap. Then there are the issues of the debt, the
> possibility I could move again, and the risk that the property value
> will go down. (I know financial history - rising asset prices are NOT
> a constitutional right upheld by the Supreme Court.)
>
> I know that if I follow my own suggestions and those provided by
> others in this thread, I can have a vastly better QTH, even in an
> apartment. I'm not saying that an apartment is a good QTH - I'm just
> saying that my current QTH is a MISERABLE one, and simply insisting on
> a few key characteristics in my next apartment will be a VAST
> improvement.
>
> Now, if you're willing to lend me a few hundred thousand dollars with
> no fees and a 1% interest rate, I will buy a house and enjoy QSOs on
> the air with you. :)
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

2228. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 18:06:25 UTC
From: Sylvan Butler <Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna5j1un.7rn.Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 149615

On Thu, 31 Jan 2002 08:53:33 -0600 (CST), Richard Harrison <richardharrison@webtv.net> wrote:
> Look at the ground rod at your electric power meter carefully. Is it
> zinc, or copper?

Here at the electrical wholesale, they sell 3x as many zinc dipped steel as copper coated steel. Why? zinc is less than 1/2 the price. ($4 vs $9 for an 8ft(?) rod)

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

2229. Re: As a ham, what should I look for in an apartment next time?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 18:07:26 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <vJf68.7474$E4.446152@e3500-atl2.usenetserver.com>
Source record: 149614

DOC!

Down, boy! STAY! STAY! LOL!

73

Jerry

'Doc <w5lz@icok.net> wrote in message news:3C527941.13EC619@icok.net...
>
>
> Jason,
> Ham radio is a hobby that I really enjoy. But it isn't
> my only hobby, and some 'hobbies' are more enjoyable than
> others...
> 'Doc

2230. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 18:24:05 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <zSf68.7402$Up4.608451@e3500-atl1.usenetserver.com>
Source record: 149616
Cross-posted to: rec.radio.amateur.antenna,sci.electronics

No insults, but have you ever tried to convince an EE, or anyone with any
engineering degree
how something works in the REAL world? It's like talking to a brick wall!!
Example: I was
talking to an Electronics Engineer about the merits of certain types of
antennas over others in
a mobile environment. For a national group of people in search and rescue
work, he and his
engineer cohorts (the powers that be) are set on coupler/whip combinations
over antennas that
are resonant on every frequency (screwdrivers). Now I have no degree, hey,
I'm retired, but
I don't care how many EE degrees he holds, those coupler things are "smoke
and mirrors" gadgets that will fall on their faces down on 4 MHZ--they are
just as sucky as hamsticks on
low bands (below 20 meters). What he and his friends have done is evaluate
the couplers in
the "lab", found that they exhibit low SWR, good "phase angle", and decided
on that basis that
they will work fine! Hell, I can load up a 50 ohm resistor, but it won't
radiate worth a darn!
These guys feel that the people in the field are dumb, so they need a
push-button solution to
"tune" the antenna (there AIN'T no such thing as an antenna "tuner").
Nevermind that the traffic
might not get thru, never mind that vital information may be "stuck" inside
that "tuner/coupler"
gadget--just so the operator has convenience at the expense of reliability.
Bottom line according to the EEs? Throw money at it!

Sorry, I just had to vent--no insults meant.

73

Jerry
K4KWH

Milesnz <milesnz@hotmail.com> wrote in message
news:pkq48.2993$Lv.384724@news.xtra.co.nz...
> As an EE who was involved in electrical and electronic stuff prior to
going
> to engineering school, I have to say the previous experience probably
makes
> you a *worse* student, not a better one. The plain and simple reason is

> that with "a little knowledge" you tend to assume you know more than you
> really do and that is definitely a bad thing when entering a field such as
> electrical engineering. Yes it's easier to learn stuff because you
already
> know *some* of it, but it's also even easier to *assume* you know stuff
that
> you don't.
>
> In addition, not all of the training associated with something like ham
> radio (or any other hobby fields) is kosher, so some of what was learned
> before studying engineering may well be wrong, or incomplete.
>
> If I was the head of the EE department I'd take people on their merits and
> not favour them on such inappropriate grounds as whether they've got a
radio
> ham license. If anything it would work against them on the basis that "a
> little knowledge is dangerous".
>
> My thoughts fwiw.
> --------------------------------
> Jason Hsu <jason_hsu@my-deja.com> wrote in message
> news:f7d9a152.0201251937.16da6ee5@posting.google.com...
> > Have any study been done on this? I'm surprised that the ARRL hasn't
> > researched this. (Or have they?)
> >
> > I am willing to bet that electrical engineering majors who operate ham
> > radio (or who participate in other EE-related hobbies) tend to do
> > better than their nonham counterparts. I know I would have been a
> > MUCH better student if I had been a ham radio operator when I entered
> > college as an electrical engineering major. Without ham radio (or any
> > other practical experience), SWR, Smith Charts, matching networks, and
> > other concepts were just mumbo jumbo I had to plow through in order to
> > get through classes. It took ham radio to enable me to truly grasp
> > what I studied.
> >
> > I would expect to see that EE hams, as a group, earn better GPAs, are
> > less likely to drop out or change majors, are more likely to be
> > actively involved in EE-related extracurricular activities (like IEEE
> > and various contests), get better jobs, and are more likely to earn
> > graduate degrees in EE.
> >
> > I'm also willing to bet that even after one adjusts for differences in
> > SAT scores, high school class rank, and other admission criteria, EE
> > hams still earn better GPAs than their nonham counterparts.
> >
> > If I were the head of a college or university EE department, I would
> > pull out all stops to recruit ham radio operators into the student
> > body and faculty. I would also work with the school ham radio club to
> > recruit new hams on campus and in the surrounding community.
> >

> > Jason Hsu, AG4DG
> > jason_hsu_802701@@@@@yahoo.com
> > http://www.jasonhsu.com/ham_radio-technical.html
>
>

2231. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 18:49:30 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <lc4j5u0kia8gc6es8vrh8obn192o3bbcpt@4ax.com>
Source record: 149617

Hmmm. Looks like you should have purchased a BB3. :-)

Dick

On Thu, 31 Jan 2002 11:29:23 -0500, "paul harris" <paul@sandwitch.org>
wrote:

>I just purchased a High Sierra. While I think I'm going to be happy with it
>(it's not even installed yet), I was surprised by the warning that I'll need
>to replace the fingerstock annually (they say it might last 3 years, but
>that violates the warrantee), and you must disassemble the base and clean
>the brass (or likewise violate the warrantee).
>
>So, just bear in mind screwdrivers are not maintenance-free.
>
>"Dick Hughes" <rhughes33@cableone.net> wrote in message
>news:h8ji5us7hmo1nvuest97ii5throo546m1l@4ax.com...
>> Just buy a regular screwdriver antenna Joe, like a BB3 or High Sierra.
>> They are very reliable. I used a BB3 on our motorhome until we sold
>> it and now it is installed on our Jeep. About 7 years old now and
>> still going.
>>
>> Dick - W6CCD

2232. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 18:55:12 UTC
From: richardharrison@webtv.net
Message-ID: <25876-3C599310-4@storefull-111.iap.bryant.webtv.net>
Source record: 149618

Sylvan Butler wrote:
"Here at the electrical wholesale, they sell 3x as many zinc dipped steel as copper coated steel."

That is reasonable. The conductivity of zinc is good enough.

Zinc is fairly durable in most soils. After 50 years, I had to replaced the galvanized water pipe buried between the meter and the house. The original copper coated steel ground rod is likely good for at least another 50 years.

I don`t accept the assertion that galvanized outlasts copper. It ain`t so.

Best regards, Richard Harrison, KB5WZI

2233. Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 19:39:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3cegu$16m58r$1@ID-124126.news.dfncis.de>
Source record: 149524

Do women make as good engineers as men ?

2234. Increase life with 0.1 uF capacitors.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 19:55:06 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3ceh0$16m58r$2@ID-124126.news.dfncis.de>
Source record: 149525

The life of ground rods and buried radials depends on the magnitude and
polarity of DC current flowing from electrode to soil.

So would a series 0.1 uF capacitor increase life expectancy. It would have
no effect at HF?

Why not save capacitors by using insulated rods and radials ?

Reg

2235. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 20:11:28 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <Tuh68.32171$9y2.3148145@news20.bellglobal.com>
Source record: 149519
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"'Doc" <w5lz@icok.net> wrote in message news:3C58A344.4A42E3E9@icok.net...
> Pete,
> The 'problem' with using a center mounted loading coil are
> the resistive losses of the coil (common to any loaded antenna),
> and the mechanical problem of mounting the coil. Depending on
> the frequency used, you end up 'eating' the resistive losses,
> that will happen with ~any~ loaded antenna no matter if it's
> base/center/top loaded.
> The 'chrome' shouldn't make any appreciable difference to
> 'skin affect', unless the metal is heated to the point of the
> chrome loosing it's contact with the steel core. Of course,
> the corona discharge will probably 'chew' the antenna down to
> the coil before that happens.
> The 15 KW claim is pure 'horse-hocky' (to put it politely),
> but there are people stupid enough to do what's necessary to
> run that much power mobile. You can tell who they are on the
> highway, they're the ones who drive the 20 ton alternator with
> wheels on it...
> 'Doc

Good one Doc,

Once again your humour shines through. It is unbelievable what length CB'ers will go to in order to outdo the next guy. And whats even worse is the price they pay to do it.

2236. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 20:12:50 UTC
From: richardharrison@webtv.net
Message-ID: <24017-3C59A542-193@storefull-114.iap.bryant.webtv.net>
Source record: 149521

Jerry Oxendine wrote:
"No insults, but have you ever tried to convince an EE with any
engineering degree how something works in the REAL world?"

Don`t you think the engineers at Boeing know exactly what they are doing and how the real world is challinging them? They are overcoming gravity.

How about the engineers that built the Golden Gate Bridge or Hoover dam? How about NASA? You think these only required technicians?

I related some of the Tesla story. Edison, a genius without education who got almost 1100 patents, couldn`t understand Tesla`s explanations of a-c power systems because he lacked sufficient background and didn`t want to believe they were real.

But Tesla`s fellow EEs in the New York AIEE Section, got it in an instant and lionized Tesla for his discoveries.

The more you know, the better off you are.

Best regards, Richard Harrison, KB5WZI

2237. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 20:17:03 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <4Ah68.36887$f53.2855434@news20.bellglobal.com>
Source record: 149520
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Wes Stewart" <n7ws@yahoo.com> wrote in message
news:3c597369.2998887@news.triconet.org...
> On Thu, 31 Jan 2002 08:28:59 GMT, "Cougercat" <felix1063@attbi.com> wrote:
> |Anyone have a trailer
> |mounted gen set to load up this antenna?
>
>
> I haven't really followed this thread but I must respond here.
>
> There isn't a link to it on my home page but if you look at:
>
> http://users.triconet.org/wesandlinda/w7uvr.jpg
>
> you can see the old QSL card of my former neighbor and Elmer (gave me my
Novice
> and Conditional exams), the late Lee Smith, W7UVR.
>
> This is circa 1958-59 so the equipment dates from that era and was
> "state-of-the-art."
>
> The vehicle was a 1955 Mercury with a 1956 Lincoln engine and truck
springs and
> tires under the rear. (There was an extra leaf in the spring on the side
where
> the HV power transformer resided)
>
> Initially, the amplifier ran a 4-1000A, high level plate-modulated using
> push-pull-parallel 813's for modulators. Later it was converted to a
linear for
> SSB.
>
> The small beam on the top of the car could be elevated to a height of 30'
using
> a pneumatic mast (visible in the middle photo inside the car). The beam
was
> later replaced with a three-element tribander that was folded for travel
using
> custom machined tubular hinges.
>
> There were two whip antennas on the rear using motor-tuned edge-wound
> silver-plated inductors and vacuum variable capacitors. These were housed
in
> the large Plexiglas boxes visible in the top photo. These were of course

> tunable from the driver's seat.
>
> The generator in the photo is a 5KW Kohler, which was later replaced with
a 15KW
> in a larger trailer. The equipment was also continually upgraded as the
state
> of the art changed. (Even in these photos, the equipment is different)
>
> So, 15KW mobile? I doubt it (corona problems) but not too farfetched if
you put
> your mind and money to it.
>
> I believe this mobile was on the cover of CQ magazine once but I never saw
it.
> At some hamfests of the day they had mobile judging contests. When he
pulled
> in, everyone else went home.
>
> Wes Stewart N7WS
>

Can you say "divorce attorney"!!

2238. Re: EH / Crossfield Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 20:57:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C59AFC0.3A98FF74@eznec.com>
Source record: 149522

Again, you might consider doing what Trainotti did -- using the EH
itself as a short dipole to compare with, by disconnecting or shorting
the "D plate" and discarding the "phasing" network.

Roy Lewallen, W7EL

Francesco Messineo wrote:
>
> Richard Clark <kb7qhc@attbi.com> wrote:
>
> Well, maybe I'm totally wrong here, but simply I think that comparing
> this EH to a half wave vertical and to a short vertical having the same
> height of the EH, in the same position would suffice. If the results
> are as many of us think they should be, and the test is perfectly repetable,
> what else they could argue?
>
> 73
> Francesco IZ5DWF

2239. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 21:23:20 UTC
From: Sylvan Butler <Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna5jdfu.7rn.Znospam+noZs_0201@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 149523

On Thu, 31 Jan 2002 12:55:12 -0600 (CST), Richard Harrison <richardharrison@webtv.net>
wrote:
> Zinc is fairly durable in most soils. After 50 years, I had to replaced
> the galvanized water pipe buried between the meter and the house. The
> original copper coated steel ground rod is likely good for at least
> another 50 years.

I've been told the PH of the soil makes a difference. Alkaline soil
the zinc will last longer but copper in acidic soil? Or was it the
other way around...

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

2240. Re: Utility pole erection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 22:08:36 UTC
From: brokebob@aol.com
Message-ID: <20020131170836.06683.00000377@mb-ct.aol.com>
Source record: 149526

Thanks for all the good info! This was a project for a small church parking lot and three poles were required. A good friend heard about the problem, talked to his next door neighbor who was a contractor for the local power company. The poles got set today at no charge. Ain't God great!

Bob
brokebob@aol.com (broke=not working, retired=not working, retired=broke)

2241. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 23:18:53 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3cjcp$do9$1@nntp9.atl.mindspring.net>
Source record: 149527

Reg:

By observing my wife's activities over the past --umpty ump-- years...

I have come to the conclusion that most women are far to intelligent to take on such menial and demeaning tasks as Engineering, especially when there are so many anxious men hanging around, who are willing to do those jobs for them!

On the other hand, the [few] women Engineers whom I have had the pleasure to call workmates have invariably stood head and shoulder above the average male Engineers within the same workgroups. I have found the same to be true among the YLs that I have encountered.

I wonder, does anyone here know? What are the statistics for the % of females in the ham population?

I personally believe that, for various reasons that could be elaborated ad infinitum, we [Society] need a great many more women Engineers amongst the ranks of Engineers.

Thoughts, comments...

--Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:a3cegu$16m58r$1@ID-124126.news.dfncis.de...
> Do women make as good engineers as men ?
>
>

2242. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 23:21:41 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <bkk68.8093$E4.551654@e3500-atl2.usenetserver.com>
Source record: 149528

Go to www.qsl.net/k4kwh

73

Jerry

Joe Gern <joe.g@nospam.gmx.co.uk> wrote in message
news:3c581d00.3049389@news.uni-koeln.de...
> I am looking for a mobile HF antenna suitable for a motorhome. I am
> working with an FT 817 and MFJ945 but do not like the ATAS100 - any
> suggestions what kind of antenna to choose ?
>
> Regards, Joe

2243. Re: Increase life with 0.1 uF capacitors.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 23:25:36 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C59D26D.9365A247@icok.net>
Source record: 149529

Reg,
A 0.1 uf capacitor is much too large for that application,
you would actually do 'better' with a 0.001 uf.
An insulated ground rod will only work, as you suggest, if
the color of the insulation matches the color of the surrounding
soil.
'Doc

2244. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-01-31 23:29:20 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <Nkk68.9041$Up4.732028@e3500-atl1.usenetserver.com>
Source record: 149530

I don't deny that EE's are a necessary thing, but have you ever tried to explain something to
one of them based on how their "idea" or product actually WORKED in practice? Many of the ones I dealt with simply won't listen to anyone who doesn't happen to have the same education
they do. Experience still counts for sumpin', at least to me.

73

Jerry
Richard Harrison <richardharrison@webtv.net> wrote in message news:24017-3C59A542-193@storefull-114.iap.bryant.webtv.net...
> Jerry Oxendine wrote:
> "No insults, but have you ever tried to convince an EE with any
> engineering degree how something works in the REAL world?"
>
> Don`t you think the engineers at Boeing know exactly what they are doing
> and how the real world is challinging them? They are overcoming gravity.
>
> How about the engineers that built the Golden Gate Bridge or Hoover dam?
> How about NASA? You think these only required technicians?
>
> I related some of the Tesla story. Edison, a genius without education
> who got almost 1100 patents, couldn`t understand Tesla`s explanations of
> a-c power systems because he lacked sufficient background and didn`t
> want to believe they were real.
>
> But Tesla`s fellow EEs in the New York AIEE Section, got it in an
> instant and lionized Tesla for his discoveries.
>
> The more you know, the better off you are.
>
> Best regards, Richard Harrison, KB5WZI
>

2245. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 01:00:27 UTC
From: WebRat@wehackz.org
Message-ID: <n4qj5uo4mpc5a5ft2qf15aniisbulfavrj@4ax.com>
Source record: 149531

Why wouldn't they?

On Thu, 31 Jan 2002 19:39:22 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Do women make as good engineers as men ?
>

2246. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 01:18:59 UTC
From: richardharrison@webtv.net
Message-ID: <24019-3C59ED03-20@storefull-114.iap.bryant.webtv.net>
Source record: 149534

Sylvan Butler wrote:
"I`ve been told the PH of the soil makes a difference. Alkaline soil the zinc will last longer but copper in acidic soil?"

Could be. Seems reasonable as carbon-zinc cells use an acid electrolyte. Alkaline cells use nikel and cadmium as electrodes.

If memory serves, soils where things grow are usually acidic.

I know that zinc is a donor to an acidic electrolyte because I remember the carbon-zinc primary battery cell. When it is discharged, the zinc case (zinc anode cylinder) has been largely consumed, and the leaking acid destroys your equipment. The carbon cathode is still intact. Yes, I know the cathode is positive and the anode is negative, but that is the way battery cells are described.

I don`t have any chemical reference that gives me comfort, and I`ve never kept up with chemistry, so I`m prone to error.

Best regards, Richard Harrison, KB5WZI

2247. Re: Increase life with 0.1 uF capacitors.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 01:28:41 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <dbm68.23057$yi5.3367221@news20.bellglobal.com>
Source record: 149532

"Rhetorical Edwards" asked:
> The life of ground rods and buried radials depends
> on the magnitude and polarity of DC current flowing
> from electrode to soil.
> So would a series 0.1 uF capacitor increase life expectancy.
> It would have no effect at HF?
> Why not save capacitors by using insulated rods and radials ?

If there is DC flowing into or out of the ground, do we want to block it ?
I s'pose one could have an RF ground and a (disposable) DC ground.

2248. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 01:41:40 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3d7im$174n9l$1@ID-124126.news.dfncis.de>
Source record: 149546

> >Do women make as good engineers as men ?
> Why wouldn't they?
Why should they?

2249. Has anyone homebrewed an antenna for an HT with an SMA connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 01:43:31 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0201311743.25bb5e9@posting.google.com>
Source record: 149533
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have a Yaesu FT-50R HT transceiver, and I use the ADI/Premier RD-98 antenna with it when walking around.

The pros of the RD-98 antenna:
1. It is small enough to easily and quickly attach it to my radio.
2. It is dual-band (2m and 70 cm).
3. It has MUCH better performance than the rubber duck.
4. It is flexible enough to avoid breakage even when I bend it. This allows it to withstand MUCH rougher treatment than a rigid telescoping antenna can handle.

The cons of the RD-98 antenna:
1. It lacks a ground plane, and this causes the antenna to vastly underperform my J-Pole antenna and my mag-mount mobile antenna (assuming there is a ground plane). These other two antennas have their merits, but they aren't as convenient to use as the RD-98. (In case you are wondering, the J-pole has an SMA connector. I have a piece of coax with an SMA connector at one end for the radio and a PL-259 at the other end.)
2. I have to use a BNC-SMA adapter with it. This does add stress to the connector on the radio (but thankfully, nothing like the strain that a rigid telescoping antenna would cause). I know that there is now an SMA version of the antenna (which was not available when I first bought my RD-98), but a homebrew version would be cheaper AND be more conducive to the addition of radials.

Has anyone here homebrewed a 2m/70cm HT antenna with an SMA connector? I think QST had an article on this once, but the antenna used PL-259s or SO-239s.

The RF issues seem pretty easy. The vertical element can be a piece of metal wire that is 1/4 wavelength on 147 MHz, which would also be 3/4 wavelength on 441 MHz. This would be about 20 inches before making a slight adjustment for the velocity factor. I would then solder this to the inner part of the connector (I'm not sure what this is called, but it's analogous to the PL-259 at the end of a piece of coax). I would solder to the outer part of the connector one or more radials in order to provide a good ground plane. Then PRESTO! I have a REAL antenna that I can screw onto my Yaesu FT-50R.

The mechanical issues are much more challenging. What do I need at the feedpoint to hold the entire antenna together? What does it take to prevent moisture from leaking inside if I'm out in the rain? What does it take to keep the vertical element and the radials flexible enough (to avoid breaking the antenna or radio and make it more

compact for storage) and firm enough (so they retain their shape)?
16-guage solid wire, perhaps?

The RD-98 antenna seems to be made out of a flexible piece of wire
covered with a black plastic or rubber coating. There is plastic
cone-like object attached to the top of the BNC connector. I assume
it is there to mechanically shield the antenna feedpoint so it doesn't
fall apart.

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

2250. Re: Increase life with 0.1 uF capacitors.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 01:50:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3d7io$174n9l$2@ID-124126.news.dfncis.de>
Source record: 149547

> If there is DC flowing into or out of the ground, do we want to block it ?
==========
Well I would. Its a sure sign electroysis is occurring. Cells last much
longer when the're left open circuit.

2251. Request for comment: Antenna Plan

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 01:52:44 UTC
From: Robert Fulton <robfult@carolina.rr.com>
Message-ID: <Mxm68.67245$a07.12730121@typhoon.southeast.rr.com>
Source record: 149541

After researching our by-laws, it appears that I CAN put antennas outside the house as long as the mast is not free standing. I have a shed approximately 50 + feet away from the house and would like comments on the following plan.

Starting from the TS2000x radio, I'm going to use a manual coax switch to switch between the two inputs needed on the radio. From the 2 position coax switch, it will go to an Ameritron RCS-4 switch which is a control cable-less system. One coax out the 2nd story, down next to the down spout, under the deck 50+ feet (using RG213/U) to the shed. Inside the shed it breaks out to the four connections.

Here's the antenna plan:

Isotron 40/80 on Ant 1
Isotron 20/15/10 on Ant 2
6M PAR antenna on Ant 3
Cushcraft 2m/440 on Ant 4

Since the TS2000 has separate 2m/440 inputs, I'll use a duplexer off one of the ANT1/2 connection of the two position switch.

Concerns:
Cable type appropriate?
1) I'm using the Coax switch to switch between radio ports instead of coax leads, would this be a problem?
2) I'm currently using all of the antennas with separate feeds INSIDE of my attic, will, in your opinion, the above plan provide better reception/performance?
3) The antennas will be mounted under the eaves of the shed (1 story) since the by-laws will not allow placement above the roof line. I'm sure there will be some attenuation on the side that the building is located, but would this be better (although lower than the attic (2 story house)) than current attic placement?

Thank you VERY much in advance for the time in reading and commenting!

73's, take care!
- Rob Fulton
KG4RAG
robfult@carolina.rr.com

2252. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 02:08:05 UTC
From: richardharrison@webtv.net
Message-ID: <1731-3C59F885-219@storefull-118.iap.bryant.webtv.net>
Source record: 149537

Jerry Oxendine wrote:
"---have you ever tried to explain something to one of them (an engineer) based on how their "idea" or product actually WORKED in practice?"

Yes I have. Engineers resist change, just as others do. I think Jerry may mistake apprehension for arrogance. Every design change is fraught with unintended consequences. This reluctance to change is an impediment to progress but has often proved prudent.

Best regards, Richard Harrison, KB5WZI

2253. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 02:14:11 UTC
From: davemade1@aol.com
Message-ID: <20020131211411.29451.00000111@mb-fo.aol.com>
Source record: 149535

The problem is they are not doing it the DC way they are running large AC tube amps in mobiles.

They are running 6+/ 250 amp Leece Neville Alternators. They run 3 phase to step up transformers, and are able to put over 10,000 plate volts on these tubes (4cx10,000, 3cx3000a7, 3cx15,000,3-500z etc) albeit not for too many keys but they do achieve some massive watts, the corona is aleviated with a corona Ball on the top of the antenna.If you search the davemade web site he has a 1/2 wave base loaded mobile antenna, that has 2 giant fixed value 30kv capacitors at the bottom to load the thing. You know the watts are real when they key up and lite a 4' flourecent tube not attached to nothing but your hand and keep it lit as they walk away from the antenna for 50-100 feet. Makes a good field strength meter. But thats what they do for fun illegal or not. They spend tens of thousands on suburbans cruisin the USA going to Keydowns(Coffee Breaks).

2254. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 02:46:50 UTC
From: "Harold E. Johnson" <W4ZCB@Home.com>
Message-ID: <ukn68.19642$gd.4222498@news2.nash1.tn.home.com>
Source record: 149536

> > Do women make as good engineers as men ?

SOMEBODY, doesn't understant the basics. Women make ALL the engineers.
That's what they do best.

W4ZCB

2255. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 03:08:01 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C5A0739.5F9D0140@home.com>
Source record: 149538

Make a 2 element beam without the balun, use a gamma match. or no
match. look for the null off the back side. Much sharper than the peak
on the front side.
Les, AA4F

Val wrote:
>
> 139 dollars. Not cheap.... You can make a nice one Yourself
> for about 1/10 of that price.
>
> And, for HEAVENS SAKE use a BALUN (if used for ADF).
> Well, it's nice if you get max. signal strength when You
> aim at the target. Without a balun You'll get a declination
> -as with a magnetic compass, at least here in Scandinavia
> NOT pointing straight North
>
> (If You succeed in obtaining a balanced input preamp or a
> RX with balanced input front-end, You do not need a balun)
>
> Arrow146 wrote:
> >
> > I would like to get the Opinion from some of the Experts here.
> > If you have the time, would you please look at this antenna, and give me your
> > Opinion.
> >
> > One Question: Does a direct feed (Receive Only) antenna
> > really need a balun?
> > <A HREF="http://Arrowantennas.com/adf1.html">Arrow Antenna ADF1</A>
> > Thank You for your Time.
> > 73 Al Lowe N0IMW

2256. Re: Increase life with 0.1 uF capacitors.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 03:50:39 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c5a1513_2@news1.prserv.net>
Source record: 149540

Reg:

In some of the more aggressive soils, broadcast stations are forced to impress a controlled level of DC on their radials and guy anchors (called cathodic protection) to make them survive longer. Buried pipelines, and especially metallic electrical conduits of any significance are also protected the same way, even though an insulating coating is applied first. One of the reasons why non-metallic conduit is preferred for many direct burial power applications. Your capacitor idea would work for an RF connection, but it might be difficult to find one which would survive in that location on a lightning protection ground. Better to control the polarity and magnitude of the DC. Corrosion protection handbooks detail the why and how. I never got very good at it, as I had several expert cathodic protection experts available, and always turned the requirements over to one or both of them.

--
Crazy George
Remove NO and SPAM from return address
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:a3ceh0$16m58r$2@ID-124126.news.dfncis.de...
> The life of ground rods and buried radials depends on the magnitude and
> polarity of DC current flowing from electrode to soil.
>
> So would a series 0.1 uF capacitor increase life expectancy. It would have
> no effect at HF?
>
> Why not save capacitors by using insulated rods and radials ?
> ---
> Reg
>
>

2257. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 03:55:29 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C5A1188.670FEA4A@shaw.ca>
Source record: 149539

"Harold E. Johnson" wrote:
>
> > > Do women make as good engineers as men ?
>
> SOMEBODY, doesn't understant the basics. Women make ALL the engineers.
> That's what they do best.
>
> W4ZCB

I know a few engineers who made quite a few women too! :-)
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2258. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 04:45:45 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C5A1DE8.F8E1792@bellatlantic.net>
Source record: 149542

Dan Richardson wrote:

> A brillo pad is not ferrite.

Yeah, but a brillo pad has soap in it, so it gives you a clean signal.

>
>
> Danny
>
> On Sat, 05 Jan 2002 16:48:08 GMT, Mark Hall
> <vze2mhvc@bellatlantic.net> wrote:
>
> >Hmmm.. The brillo pad is interesting, although I've seen way too many of those
> >rusting on side of the sink to try it. Ferrite Choke Baluns don't work??
> >
> >'73 KI4Z, mark

2259. Abuse of the newsgroups

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 04:50:34 UTC
From: Landshark <S3Buell@SBCGlobal.Net>
Message-ID: <u8p68.5802$bQ5.3305835562@newssvr14.news.prodigy.com>
Source record: 149543
Cross-posted to: rec.radio.cb,rec.radio.amateur.antenna,rec.radio.amateur.equipmen,rec.radio.swap

Hello & Good Evening,
For the past 2 plus months the following individual
has been plaguing Rec.Radio.Cb and numerous other
groups with harassing troll like posts. He has used all these
alias below just to circumvent newsreader filters, so even
if you kill file him, he will do this to make the posts appear
on your newsreader. He has done just that at least 4 times
tonight alone.
Please do as I have if you have a problem with this:
Report to Abuse@Home.com , abuse@comcast.com
express your displeasure with what he has been doing to circumvent
newsreader filters.

nofear@home.comm
majorplaya3@home.comspam
itsallgood1@home.comspam
pipedreams@hotmail.com
middlefinger4@home.coms
pipedreams@hotmail.comspam
pipedream@hotmail.comspam
PipeDreams@hotmail.coms
middlefinger4@home.comms

middlefinger4@home.com

pipedream@hotmail.comspa

silverbullet325@aol.comspam

pipedream@hotmail.comsp

pipedreams@hotmail.comsp

pipedreams@hotmail.comp

middlefinnger4@home.com

middlefinnger4@home.moc

middlefinnger4@home.mo

middlefinger4@home.comsk

middlefinger4@home.comski

middlefinger4@home.nospam.com

whoisgeorge@home.comspam

middlfinger4@home.comspam

snotrag@home.comspam

middlefinger4@home.comspam

steelgangsta@msn.com

steelgangsta@msn.commie

middlefinger4@home.compton

scrambledeggs@home.com

Landshark

--
Please note that any post that is from
S3Buell_SBCGlobailnet@hotmail.com
is a FORGE. My Addy is always going to
be from SBCGlobal.Net This person has
been a troll on Rec.Radio.CB for a long
time now. If you want to send a complaint,
forward each message complete with headers
to TOSUSENET@AOL.COM. abuse@hotmail.com,
groups-abuse@google.com
Beware of George WA3MO

2260. Re: Quit! (was Re: Radio Items)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 04:50:35 UTC
From: Landshark <S3Buell@SBCGlobal.Net>
Message-ID: <v8p68.5806$fP5.3305778316@newssvr14.news.prodigy.com>
Source record: 149544
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

Well good luck :^) If they start getting
reported they cry that you are trying to silence
them, pretty funny.

Landshark
P.S. Like your screen nic

--
"Any day riding, is better than
being a newsgroupie

98 Buell S3 Thunderbolt
02 Honda VTX 1800
99 Ford F-150 (antenna platform)

"OldBiker" <vito@crosslink.net> wrote in message
news:3C594BC8.F2D02A36@crosslink.net...
> mr hand wrote:
> >
> > you shut the fuck up fuck face.....
>
> Please take your personal beef off line before someone reports your
> usenet abuses to your ISP. All of you, not just mr hand.

2261. Re: LDG AT-11 MP Automatic Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 05:00:13 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C5A214D.6DC9C27A@bellatlantic.net>
Source record: 149545

When I power mine from a cheap power supply, the RF shuts
down the supply! So - maybe - RF gets into your supply and
causes the problem you see? (Somehow confusing the
processor in the tuner because of low voltage, and the
processor staying confused even though the voltage comes
back to normal when you go to receive mode.)

I haven't used my AT-11 enough to say it is definitely trouble
free. I got a 746 to replace my 745 shortly after I completed
the AT-11 build. The 746 internal tuner works great, so I have
no need for for the AT-11. For the short time I did use it (with
the same supply that powered the 745) I had no problems.

Diablo wrote:

> Does anybody have any experience with the LDG AT-11 MP Auto Antenna Tuner?
> I just got one, and after the first attempt at tuning the antenna, it fails
> to give the proper power up indication. When I press the tune button, it
> seems to find a match, but when I go back to receive, both needles
> continuously bounce to full scale and back to zero. I'm not sure if it's
> something I did or if it has a problem from the factory. I can load and
> tune the antenna using a manual tuner.
>
> Thanks,
>
> Bob WA7VKF

2262. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 05:44:22 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <F7773EAF5612BE98.58BF85BCCF6A8475.94F3D02749FD7E0F@lp.airnews.net>
Source record: 149548

On 01 Feb 2002 02:14:11 GMT, davemade1@aol.com (DaveMade1) wrote:

>If you search the davemade web site he
>has a 1/2 wave base loaded mobile antenna, that has 2 giant fixed value 30kv
>capacitors at the bottom to load the thing.

A penis compensator, complete with testicle compensators.

Is the corona ball shaped like the pope's hat, too?

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net

2263. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 06:31:56 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5B79F8.C69B9A9F@worldnet.att.net>
Source record: 149549

Richard Harrison wrote:

> Jim Weir wrote:
> "I can have a monkey memorize a list of facts and push a button to get a
> banana on command."
>
> You then have a trained monkey.

But is he an educated monkey?

2264. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 06:49:03 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5B7DFB.B5CF0919@worldnet.att.net>
Source record: 149550
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

"Michael A. Terrell" wrote:

> Dick Carroll wrote:
> >
> > " .Your Friend Bill" wrote:
> >
> > > Geez, what a tirade, Michael. Does this mean I supposed to be
> > > embarrassed about having a ham ticket?
> > > -Bill
> >
> > More likely he's justifying his own lack of initiative.
>
> Think what you want. I quickly realized it was more interesting to
> design, build, and troubleshoot equipment than to sit there playing with
> it. My interests were elsewhere. Over the last 35 years I've helped a
> number of hams either get on the air, or stay on the air. I've done the
> same for three TV stations and about a dozen AM radio stations. Right
> now i am looking into the chief engineer's job at another TV station.
>
> If you enjoy using the equipment that's great, but I would rather
> spend the time studying a new computer language, or work on a new
> receiver design. I was part of the team that built a custom telemetry
> receiver based KU band uplink system used for video and data
> transmission that is on the space station. I worked with the embedded
> controller, power and data distribution system, and the video system
> that allowed recovery of signals from 10 KHz to 20 Mhz. Not everyone
> has the same interests or hobbies.
>
> Find an area you enjoy, and have some fun.
>
> Take care, and God bless.
> Michael A. Terrell

OK, Mike, I buy that entirely. I've always known that ham radio
isn't for everyone.

2265. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 06:51:16 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5B7E81.17359C2B@worldnet.att.net>
Source record: 149551
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

CAM wrote:

> Dick Carroll wrote:
> > If I had never done anything else, when the VE testing system
> > started I started and ran a VE team for eight years, and there are
> > hundreds of hams who would have not had the opportunity for
> > licensing if not for that team. We licensed so many new hams
> > during that time we put ourselves out of business since several other teams in
> > adjoining areas started from those hams.
>
> Dick, if you really did that, then you did NOT rest on your laurels
> after obtaining your Extra license. A few of us are ragging on hams
> who contribute nothing after obtaining a license. Why do you think
> you are in that catagory and have to defend yourself? Is your
> conscience bothering you?

So mow you divert to your usual game of dodge ball, now that you've been trumped.
No surprise.

2266. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 06:51:20 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3ddt3$2r3$1@slb6.atl.mindspring.net>
Source record: 149552

Richard, Jerry:

There is an old saying in Engineering, attributed mainly to aeronautical and civil fields, and in my observation, one that is very strongly espoused by *all* ECO [ECN] control boards/committees...

"No change is a small change!".

Hence the resistance to trying new things within the Engineering community.

As Richard has observed, following this approach is very often the prudent thing to do however, it does little to encourage inovation, and improvement.

How do you balance innovation, with security and safety?

Carefully or recklessly?

Is the status quo, "proven technology" or "obselete junk"?

That argument is, and has been, around for millenia.

Thoughts, comments?

--Peter K1PO

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:1731-3C59F885-219@storefull-118.iap.bryant.webtv.net...
> Jerry Oxendine wrote:
> "---have you ever tried to explain something to one of them (an
> engineer) based on how their "idea" or product actually WORKED in
> practice?"
>
> Yes I have. Engineers resist change, just as others do. I think Jerry
> may mistake apprehension for arrogance. Every design change is fraught
> with unintended consequences. This reluctance to change is an impediment
> to progress but has often proved prudent.
>
> Best regards, Richard Harrison, KB5WZI
>

2267. Re: Has anyone homebrewed an antenna for an HT with an SMA connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 08:17:17 UTC
From: post_to_usenet@hotmail.com
Message-ID: <b6b4e772.0202010017.32110d46@posting.google.com>
Source record: 149553
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

jason_hsu@my-deja.com (Jason Hsu) wrote
--8<--
> Has anyone here homebrewed a 2m/70cm HT antenna with an SMA connector?
> I think QST had an article on this once, but the antenna used PL-259s
> or SO-239s.
>
> The RF issues seem pretty easy. The vertical element can be a piece
> of metal wire that is 1/4 wavelength on 147 MHz, which would also be
> 3/4 wavelength on 441 MHz. This would be about 20 inches before
> making a slight adjustment for the velocity factor. I would then
> solder this to the inner part of the connector (I'm not sure what this
> is called, but it's analogous to the PL-259 at the end of a piece of
> coax). I would solder to the outer part of the connector one or more
> radials in order to provide a good ground plane. Then PRESTO! I have
> a REAL antenna that I can screw onto my Yaesu FT-50R.
>
> The mechanical issues are much more challenging. What do I need at
> the feedpoint to hold the entire antenna together? What does it take
> to prevent moisture from leaking inside if I'm out in the rain? What
> does it take to keep the vertical element and the radials flexible
> enough (to avoid breaking the antenna or radio and make it more
> compact for storage) and firm enough (so they retain their shape)?
> 16-guage solid wire, perhaps?
--8<--
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

Hi Jason,

I don't know if this is exactly what you are looking for, but I have homebrewed an antena for my TH-D7 that I regularly use for the outdoor events in my club and works reasonably well (much better than the supplied one):

(I hope my less than perfect english allows you to understand what I am explaining)

Just get a thin wire of flexible steel from a model toy shop; they use it in radio controlled planes and similar. Here they call it piano wire, because aparently it is similar to the wires used to make pianos. Well, cut it to about .27 wavelength (don't know why .27 instead of 1/4, but most references I found recomended it). Solder it to the inner pin of the SMA and put it in place. Fill the inside of

the SMA with two component epoxy or other heavy-duty glue. Put something at the other end of the wire to prevent it from harming you or others. You have it. You can bent it, allow rain to fall on it, ... Most important, if the wire is thin enought it acts as a "mechanincal fuse" for your SMA. It will bent before your SMA breaks.

Just another thing: Cut a 1/4 w. thin wire and put and 'eyelet?' on it, so that you can put it in the SMA before screwing the antenna on it. It will kind of work as a radial. It DOES make a difference with _any_ antena you are using!

Toni

2268. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 09:31:16 UTC
From: richardharrison@webtv.net
Message-ID: <3742-3C5A6064-4@storefull-112.iap.bryant.webtv.net>
Source record: 149554

My ARRL Handbook (1998) has some information on batteries and charging. It describes discharge of the carbon-zinc battery, mentions the Lithium, silver oxide, mercury, and rechargeables, but I see nothing on standard alkaline-manganese batteries such as those bearing a "copper top", or those that keep the "Energizer Bunny" going. I wish I knew something about these, which are really rechargeable primary batteries, I believe.

Best regards, Richard Harrison, KB5WZI

2269. Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 10:53:22 UTC
From: Keith Powell <keith@keithg4jvx.force9.co.uk>
Message-ID: <ovu68.3306$k91.146421@wards>
Source record: 149555

I am trying to locate an antenna which consists of a long wire with a matching unit at one end in a "black box". I thought it was/is called a Penetrator, but may be wrong as it is several years since I heard of it.

I have been on the web sites of all the UK dealers but can't find it listed. Does anyone please know if it is still available, and if so the URL of a site for it?

I need an antenna which is *completely* invisible, and from what I remember of this antenna, it should be suitable as it could presumably be fastened to the eaves of the house and the box placed inside the loft. Dummy drainpipes with verticals inside, etc, are out of the question. A wire antenna with no visible coax or twin balanced is the only solution in my case.

Any information on the Penetrator(?) will be very gratefully received.

Many thanks in anticipation.

Keith G4JVX

2270. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 12:34:01 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <ZWv68.62291$A66.3264638096@newssvr15.news.prodigy.com>
Source record: 149556

heheh. Yes, wife here wonders if I am having an affair with my HF6V-X. More time with it than her.
"OldBiker" <vito@crosslink.net> wrote in message news:3C555F5A.BCDB7AA3@crosslink.net...
> Good observation. I'm beginning to wonder if all the efforts we put into
> resonating antennae are worth the bother. I installed a used ($80) HF6
> on our roof for easy access to the shack, driving it with the proscribed
> 75 ohm section cut per the manual and another 10 feet of 50 ohm coax. I
> started out using 4 TV twinlead radials also cut per the book and have
> since added many more wires cur to length, trying to lower the SWR to no
> avail. OTOH, the XYL has worked everything from the Urals, Antarctica
> and Oz on 100 watts using an antenna tuner. I keep thinking I can
> "improve" the SWR but she's began threatening to kick the ladder over if
> I try on the theory "Don't fix what t'aint broke".
> 73 KA3DWW
>

2271. Re: Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 13:16:24 UTC
From: Andy M <andrew.markham@virgin.net>
Message-ID: <_xw68.7984$IY1.1485195@news2-win.server.ntlworld.com>
Source record: 149559

If my memory serves me right the 'Penetrator' is sold by Nevada in Essex,
they don't have a web site, but if you want I'll get the address for you, or
look in PW or Rad Comm they advertise there.

Andy

"Keith Powell" <keith@keithg4jvx.force9.co.uk> wrote in message
news:ovu68.3306$k91.146421@wards...
> I am trying to locate an antenna which consists of a long wire with a
> matching unit at one end in a "black box". I thought it was/is called a
> Penetrator, but may be wrong as it is several years since I heard of it.
>
> I have been on the web sites of all the UK dealers but can't find it
listed.
> Does anyone please know if it is still available, and if so the URL of a
> site for it?
>
> I need an antenna which is *completely* invisible, and from what I
remember
> of this antenna, it should be suitable as it could presumably be fastened
to
> the eaves of the house and the box placed inside the loft. Dummy
drainpipes
> with verticals inside, etc, are out of the question. A wire antenna with
no
> visible coax or twin balanced is the only solution in my case.
>
> Any information on the Penetrator(?) will be very gratefully received.
>
> Many thanks in anticipation.
>
> Keith G4JVX
>
>

2272. Impressions on the D&K KH-640 screwdriver?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 13:30:51 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <fJw68.38438$f53.3334201@news20.bellglobal.com>
Source record: 149560

Might be what I"m looking for. Don't really need 80m coverage, and the height is perfect. Anybody used any of their antennas? Looking for likes & dislikes.

TIA,

Max ve3tmt@rac.ca

2273. Re: Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 13:56:39 UTC
From: Andy M <andrew.markham@virgin.net>
Message-ID: <r7x68.8278$IY1.1514903@news2-win.server.ntlworld.com>
Source record: 149561

Hi Again

I remember now, not Nevada, it was Haydon. Again no web site but look in PW and Rad Comm.

Andy

"Keith Powell" <keith@keithg4jvx.force9.co.uk> wrote in message news:ovu68.3306$k91.146421@wards...
> I am trying to locate an antenna which consists of a long wire with a
> matching unit at one end in a "black box". I thought it was/is called a
> Penetrator, but may be wrong as it is several years since I heard of it.
>
> I have been on the web sites of all the UK dealers but can't find it listed.
> Does anyone please know if it is still available, and if so the URL of a
> site for it?
>
> I need an antenna which is *completely* invisible, and from what I remember
> of this antenna, it should be suitable as it could presumably be fastened to
> the eaves of the house and the box placed inside the loft. Dummy drainpipes
> with verticals inside, etc, are out of the question. A wire antenna with no
> visible coax or twin balanced is the only solution in my case.
>
> Any information on the Penetrator(?) will be very gratefully received.
>
> Many thanks in anticipation.
>
> Keith G4JVX
>
>

2274. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 14:14:17 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <Zox68.4662$I5.348862@bgtnsc05-news.ops.worldnet.att.net>
Source record: 149562

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:Nkk68.9041$Up4.732028@e3500-atl1.usenetserver.com...
> I don't deny that EE's are a necessary thing, but have you ever tried to
> explain something to
> one of them based on how their "idea" or product actually WORKED in
> practice? Many of the ones I dealt with simply won't listen to anyone who
> doesn't happen to have the same education
> they do. Experience still counts for sumpin', at least to me.
>
>

So, your telling us that all engineers have no idea of how their products really work? Jerry, your posts really sound like some engineer burned you at one time or you unfortunately worked with a few bad engineers. Stereotyping all engineers or all technicians or all hams is ridiculous. There are some good engineers, good technicians and good hams. At the same time there are some poor engineers, poor technicians and poor hams. No one can judge the capabilities (practical or theoretical) of an engineer or a technician from their formal education. I know some engineers that are as or more practical than a lot of technicians. I also know some technicians that are better at designing antennas than some EEs. This varies with each individual regardless of their formal education.

An EE degree is evidence that an individual has some formal theoretical background (and practical if their fortunate) in a variety of subjects. It is a valuable foundation on which to build one's capabilities further. The EE won't really be a good engineer until he has several years of real world practical and theoretical experience behind him. A technician is in exactly the same boat. A technician won't be a good technician until he has several years of real world practical and theoretical experience behind him. Good engineers and good technicians will both have some level of practical and theoretical training.

Steve VE9SRB

2275. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 14:22:17 UTC
From: fractenna@aol.com
Message-ID: <20020201092217.16534.00000756@mb-cu.aol.com>
Source record: 149563

>An EE degree is evidence that an individual has some formal theoretical
>background (and practical if their fortunate) in a variety of subjects. It
>is a valuable foundation on which to build one's capabilities further. The
>EE won't really be a good engineer until he has several years of real world
>practical and theoretical experience behind him. A technician is in exactly
>the same boat. A technician won't be a good technician until he has several
>years of real world practical and theoretical experience behind him. Good
>engineers and good technicians will both have some level of practical and
>theoretical training.
>
>Steve VE9SRB
>

Of course Steve is right on this, but the basis for the concern is factual.
Until the last few years, ECE departments did not put enough (or often any)
emphasis on design and hands on efforts, let alone 'real world', out-the-door
prototypes or products. That has changed dramatically in recent years, however,
and most ECE departments now have a strong emphasis on 'mainstreaming' their
students, and actively have industrial partners in that process.

73
Chip N1IR

2276. Wire material for a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 15:08:42 UTC
From: DL7JSK <truckdrivingman@hotmail.com>
Message-ID: <a3eb31ckm02$1@news.t-online.com>
Source record: 149564

Hi OMs
I want to build a 1:1-balun with a ring ferrite core.Which wire should I take for it ? I think,wall plug cable ain't suitable for that.

73
Tom

2277. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 15:14:09 UTC
From: k5yy@arrl.net
Message-ID: <e3df0110.0202010714.4835be36@posting.google.com>
Source record: 149565
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I think the guy made an honest mistake and meant to say 1500 watts ,
NOT 15K watts... Still don't l like CB items on ham websites. 73

2278. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 15:14:11 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5AB0C3.9EC8D71E@IEEE.org>
Source record: 149567
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,sci.electronics

Dick Carroll wrote:
> So mow you divert to your usual game of dodge ball, now that you've been trumped.
> No surprise.

Dick, either you did something for the ARS after you got your license
or you did nothing for the ARS after you got your license. If you did
something for the ARS after you got your license, we haven't been
talking about you. The fact that you responded to a posting ragging
on hams who do nothing makes me wonder if you feel guilty about your
accomplishments or lack thereof.
--
cheers, CAM, W5DXP

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
Check out our new Unlimited Server. No Download or Time Limits!
-----== Over 80,000 Newsgroups - 19 Different Servers! ==-----

2279. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 15:14:51 UTC
From: Landshark
Message-ID: <Lhy68.41476$fo6.61995222@newssvr21.news.prodigy.com>
Source record: 149566
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap

well James you have been introduced to
our resident troll. In case you missed my other post
concerning him:
Hello & Good Evening,
For the past 2 plus months the following individual
has been plaguing Rec.Radio.Cb and numerous other
groups with harassing troll like posts. He has used all these
alias below just to circumvent newsreader filters, so even
if you kill file him, he will do this to make the posts appear
on your newsreader. He has done just that at least 4 times
tonight alone.
Please do as I have if you have a problem with this:
Report to Abuse@Home.com , abuse@comcast.com
express your displeasure with what he has been doing to circumvent
newsreader filters.

nofear@home.comm

majorplaya3@home.comspam

itsallgood1@home.comspam

pipedreams@hotmail.com

middlefinger4@home.coms

pipedreams@hotmail.comspam

pipedream@hotmail.comspam

PipeDreams@hotmail.coms

middlefinger4@home.comms

middlefinger4@home.com

pipedream@hotmail.comspa

silverbullet325@aol.comspam

pipedream@hotmail.comsp

pipedreams@hotmail.comsp

pipedreams@hotmail.comp

middlefinnger4@home.com

middlefinnger4@home.moc

middlefinnger4@home.mo

middlefinger4@home.comsk

middlefinger4@home.comski

middlefinger4@home.nospam.com

whoisgeorge@home.comspam

middlfinger4@home.comspam

snotrag@home.comspam

middlefinger4@home.comspam

steelgangsta@msn.com

steelgangsta@msn.commie

middlefinger4@home.compton

scrambledeggs@home.com

Landshark

--
Please note that any post that is from
S3Buell_SBCGlobailnet@hotmail.com
is a FORGE. My Addy is always going to
be from SBCGlobal.Net This person has
been a troll on Rec.Radio.CB for a long
time now. If you want to send a complaint,
forward each message complete with headers
to TOSUSENET@AOL.COM. abuse@hotmail.com,
groups-abuse@google.com
Beware of George WA3MO

"James Follett" <james@marage.demon.co.uk> wrote in message
news:4G3uKLAjZIW8EweQ@james-follett.com...
> In article <Wb_58.13225$X64.4578857@news1.rdc2.pa.home.com>, ToolTime
> <middlefinger4@home.comspam> writes
>
> >James, we don't follow these rules in the States It is loike the
freebanders
> >there are no rules. Now go play in traffic.
>
> At the risk of shocking our colonial cousins, Usenet is a global
> community with one set of common sense, easy-to-follow conventions,
> designed to ensure that its essential forum nature is preserved
> for people to freely exchange views and comments in a manner
> understandable to the majority. Without conventions in communication we
> would never be able to communicate. Usnet's conventions were evolved
> primarily in America.
>

2280. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 15:26:39 UTC
From: Charlie <ham@aol.com>
Message-ID: <Psy68.13329$By6.1483273@newsread2.prod.itd.earthlink.net>
Source record: 149419

I had a BB3 and the fingerstock kept breaking off. I love my High Sierra. If the stainless steel spring does wear out it takes just 5 minutes to replace. With the BB3, I had to ship it back to them three times. Stick with the HS. Their recommended maintenance is good advice. Do it, and the antenna will last for many years.

73, Robert

2281. Re: Radio Items

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 15:29:07 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C5AB443.361FAB2D@coqui.net>
Source record: 149568

Landshark wrote:
>
> well James you have been introduced to
> our resident troll. In case you missed my other post
> concerning him:

Mr. Shark.

Please stop cross-posting this mess to rec.radio.amateur.antenna

Thank you,

Ham

2282. Re: Impressions on the D&K KH-640 screwdriver?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 15:29:51 UTC
From: Robert <Robert2002@aol.com>
Message-ID: <Pvy68.13348$By6.1484020@newsread2.prod.itd.earthlink.net>
Source record: 149420

Don't waste your time. It is very poorly made and falls apart in less than a year.

73, Charlie

2283. Re: Has anyone homebrewed an antenna for an HT with an SMA connector?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 15:56:58 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <74B9E96E6F5E9393.95590A9EB86954E4.316ACD42375503C5@lp.airnews.net>
Source record: 149421
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On 1 Feb 2002 00:17:17 -0800, post_to_usenet@hotmail.com (Toni) wrote:

>I don't know if this is exactly what you are looking for, but I have
>homebrewed an antena for my TH-D7 that I regularly use for the outdoor
>events in my club and works reasonably well (much better than the
>supplied one):
<SNIP>
>Just another thing: Cut a 1/4 w. thin wire and put and 'eyelet?' on
>it, so that you can put it in the SMA before screwing the antenna on
>it. It will kind of work as a radial. It DOES make a difference with
>_any_ antena you are using!

I'm thinking about trying to add two radials to my D7A. I'm using a
flexible 19" whip, so what I'm considering is just soldering a couple
pieces of piano wire to a washer that just fits over the SMA stud.

Experimentation with copper wire formed into an eyelet got noticeable
improvements with only one radial.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net

2284. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 16:00:00 UTC
From: Robert Spooner <rls19@psu.edu>
Message-ID: <3C5ABB80.88BCA42A@psu.edu>
Source record: 149422

Al,

I'm not sure the commenters were considering the range of frequencies that your antenna can be used for. Compared to a simple antenna designed to be tuned and then fixed in the resulting configuration, the price is expensive. However, what you have put together is something that provides flexibility without the user expending a lot of time to design the antenna and put it together. There is always a tension between spending time and spending money, and where a ham comes down between the end points depends on what things give him the most enjoyment in the hobby - in this case design and construction or operating.

The questions in my mind are:
1) How large is the market for a direction finding antenna with that range of coverage? Most fox hunts take place on the ham bands, but on occasion a source of interference on another frequency needs to be found.
2) For the indended use, is the frequency selectivity produced by tuning the antenna necessary or could the same result be gotten with a log periodic antenna covering the same range and using the receiver for the frequency selectivity. Would a non tunable log periodic antenna be less expensive?
3) Is there a reason why even low-power transmitting is unsuitable? Being able to transmit even at a low power level would broaden the market.

I agree with the comments about a balun being necessary. If the antenna impedance is close to 50 ohms, a ferrite bead choke balun that covers the frequency range shouldn't be hard to construct, but will add to the cost.

You have come up with an interesting idea. I hope it works out as a product for you.

73,
Bob AD3K

Arrow146 wrote:
>
> >139 dollars. Not cheap.... You can make a nice one Yourself
> >for about 1/10 of that price.
> >
> >And, for HEAVENS SAKE use a BALUN (if used for ADF).
>
> Ok, Thanks guys.

>
> Two points,
> 1. Price is too high. Not sure I can do much about that,
> a lot of labor in making this antenna.
>
> 2. Needs a balun, I was afraid of that.
> Seems everyone agrees on it needing a balun.
>
> Well I guess I have some studying to do. (about baluns)
>
> Thanks for your help.
>
> 73 Al Lowe N0IMW
> <A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>

--
Robert L. Spooner
Registered Professional Engineer
Associate Research Engineer
Intelligent Control Systems Department

Applied Research Laboratory Phone: (814) 863-4120
The Pennsylvania State University FAX: (814) 863-7841
P. O. Box 30
State College, PA 16804-0030 rls19@psu.edu

2285. Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 16:54:54 UTC
From: Mark Tetrault <tetrault@mv.mv.com>
Message-ID: <6rhl5ucv3j1t0m5msfoo33jku936ee4j4g@4ax.com>
Source record: 149423

OK, So I have a presently broken TJ (BB3) screwdriver and would like to replace it with another screwdriver.

Is there a consensus in the newsgroup due to experience which is the best made, best performing screwdriver antenna. My needs are 6m to 80m, and rugged long lasting, minimum maintenance construction and good screwdriver performance.
It will be used with an FT847 in an RV.

While I have an ATAS100 in my car for my FT100 and it works quite well, I really want the 80m in the RV.

All comments and experiences are more than welcome.

Mark

2286. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 17:48:18 UTC
From: Gus <w6gus@aol.com>
Message-ID: <CxA68.13624$By6.1509666@newsread2.prod.itd.earthlink.net>
Source record: 149424

I bought the High Sierra Platinum and love it. They claim to have sold about 8000 antennas. No fingerstock and no PVC.

73, Gus

"Mark Tetrault" <tetrault@mv.mv.com> wrote in message news:6rhl5ucv3j1t0m5msfoo33jku936ee4j4g@4ax.com...
> OK, So I have a presently broken TJ (BB3) screwdriver and would like
> to replace it with another screwdriver.
>
> Is there a consensus in the newsgroup due to experience which is the
> best made, best performing screwdriver antenna. My needs are 6m to
> 80m, and rugged long lasting, minimum maintenance construction and
> good screwdriver performance.
> It will be used with an FT847 in an RV.
>
> While I have an ATAS100 in my car for my FT100 and it works quite
> well, I really want the 80m in the RV.
>
> All comments and experiences are more than welcome.
>
> Mark
>

2287. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 17:53:25 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <pCA68.726$lv1.513334@paloalto-snr2.gtei.net>
Source record: 149427
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I tend to agree about CB stuff in ham groups - but in THIS case, *I* won the bid on the item, and
intend to incorporate the antenna into some ham mobile antenna experimentation - in fact, I have
arranged to take *2* of them at the bid price of $19.99... How can you beat that price, as compared
to a Hamstick or Hustler that's built MUCH lighter and cheaper?

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

"hamman" <k5yy@arrl.net> wrote in message
news:e3df0110.0202010714.4835be36@posting.google.com...
> I think the guy made an honest mistake and meant to say 1500 watts ,
> NOT 15K watts... Still don't l like CB items on ham websites. 73

2288. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 18:04:29 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3elb9kql1@nntp9.atl.mindspring.net>
Source record: 149426

Mark:

I have done that in several locations.

That is... tuned radials by first laying them out on top of the ground and then trimming wire off the ends whilst monitoring the antenna current and the remote field strength.

For a stealth back yard inverted L with a few radials (6-7) tuning them that way takes the better part of a Saturday, i.e. it's about 6-8 beer job.

But the results I found were very worthwhile.

Seemed to make about 2- 3 S-units difference in my signal reports when compared to just cutting radials to 1/4 lambda free space wavelength.

For that location, using that particular stealth antenna, in an antenna restricted community, tuning the "hidden" radials by trimming for maximum radial currents made the difference between a workable ham setup and not being on the air.

--Peter K1PO

"M Kolber" <mkolber@bellatlanictNS.net> wrote in message
news:F7M08.16826$Ep1.2561@nwrddc02.gnilink.net...
> +AD4-The velocity factor for the radials buried 0.1 meter is
> +AD4-apparently about 0.2, making them a half wavelength long. By
> +AD4AKg-shortening+ACo- the radials from 8 to 6 meters, the loss was
reduced from
> +AD4-11.9 dB to 5.0 dB, a 6.9 dB improvement.
>
>
> Gee, then it seems like we should +ACI-tune+ACI- the radials to be
electrically 1/4
> wavelength in the particular VF they are in. Maybe by tuning the length
of
> the radials to get the maximum current in the radials.
>
> Mark
> WB2WHC
>
>

2289. Re: Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 19:13:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3epno$181sb2$1@ID-124126.news.dfncis.de>
Source record: 149428

Keith, why bother with coax and black boxes?

Just bring the long wire all the way into the shack. Make it a truly long wire. Keep as much of it as you can on the outside of the house. Use plastic insulated wire. If you have any, make use of PVC rain gutter brackets as supports.

It is quite obvious the arrangement you describe, some sort of transformer at the antenna end of the coax, radiates and receives just as much from the coax as it does from the length of wire the coax replaces.

You are merely feeding the same overall length of long wire at some distance along its length. The adverse effects being a change in the impedances presented to the transceiver and an increase in your credit card debt.

Furthermore, omitting the coax changes the impedance to values which are easier to match to the transceiver.

Without the coax the overall loss is lower. The number of bands available increases. Coax is restrictive.

And your invisibilty requirement will be more easily met. Keep everything except black antenna wire in the dry indoors.

Don't succumb to ignorant antenna salesmen's blurbs and old-wives' fairy tales about long-wire baluns. The money saved on coax and magic black boxes would be far better spent on a decent antenna tuner near to the transceiver. Better still - have fun making one for a fraction of the price. Crocodile clips are cheap enough.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

2290. Re: Wire material for a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 19:33:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3eqs0$17mjjo$1@ID-124126.news.dfncis.de>
Source record: 149429

> I want to build a 1:1-balun with a ring ferrite core.Which wire should I
take for it ?
==========
0.8mm or 1mm, stranded, twin speaker cable. Or similar. Figure-of-8
cross-section.

10 or 15 turns on a 35mm, 40mm or 50mm diameter core will be OK down to 1.8
MHz. OK for 200-300 watts. If it gets too warm on high power, increase ring
diameter.

Use HF grade ferrite, permeabilty in the range 150 to 250 but very
non-critical.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

2291. Re: Wire material for a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 19:47:13 UTC
From: DL7JSK <truckdrivingman@hotmail.com>
Message-ID: <a3erd8vvt00$1@news.t-online.com>
Source record: 149430

Ok,thanx,but I forgot to say that I want to use it for 2m.Max. power 20 W

Tom

"Reg Edwards" <g4fgq.regp@btinternet.com> schrieb im Newsbeitrag
news:a3eqs0$17mjjo$1@ID-124126.news.dfncis.de...
> > I want to build a 1:1-balun with a ring ferrite core.Which wire should I
> take for it ?
> ==========
> 0.8mm or 1mm, stranded, twin speaker cable. Or similar. Figure-of-8
> cross-section.
>
> 10 or 15 turns on a 35mm, 40mm or 50mm diameter core will be OK down to
1.8
> MHz. OK for 200-300 watts. If it gets too warm on high power, increase
ring
> diameter.
>
> Use HF grade ferrite, permeabilty in the range 150 to 250 but very
> non-critical.
> ---
> **********
> Regards, Reg G4FGQ
> Free Radio Modelling Software
> Http://www.g4fgq.com
> **********
>
>

2292. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 19:55:25 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <LIC68.40679$f53.3543812@news20.bellglobal.com>
Source record: 149431

> For a stealth back yard inverted L with a few radials (6-7) tuning them
that
> way takes the better part of a Saturday, i.e. it's about 6-8 beer job.

Do you cut the radials before or after the beer?

2293. Re: Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 20:02:34 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5AF45A.BC366820@IEEE.org>
Source record: 149433

Reg Edwards wrote:
> It is quite obvious the arrangement you describe, some sort of transformer
> at the antenna end of the coax, radiates and receives just as much from the
> coax as it does from the length of wire the coax replaces.

Reg, do you have any idea how efficient a powdered iron core
transformer is on HF frequencies? Does the old 10:1 inductance
to resistive load rule-of-thumb work for powdered iron core
transformers with DC isolated primary/secondary?
--
cheers, CAM, W5DXP

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2294. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 20:03:03 UTC
From: Owen Duffy <owen@oda.com.au>
Message-ID: <3C5AF477.76145BE5@oda.com.au>
Source record: 149432

JLB wrote:
>
> richardharrison@webtv.net (Richard Harrison) wrote in message
news:<16136-3C578FB9-140@storefull-115.iap.bryant.webtv.net>...
> > Craig, K4IA wrote:
> > "Copper is a very reactive metal and will not last any longer than the
> > steel clad rods you used before, maybe less."
> >
> > Reality check! Millions of copper-clad ground rods, millions of radials
> > buried in the earth, copper roofs over countless ancient buildings in
> > the world, millions of copper radiators, millions of buried copper water
> > pipes, would all these be in place if copper were "a very reactive
> > metal"?
> >
> > Best regards, Richard Harrison, KB5WZI
>
> As it turns out, commercial tower companies, cell phone companies,
> power companies, etc, have been using galvanized steel for several
> years now. Copper may be better to start, but after several years the
> galvanized holds up better.

The life of an electrode will depend on local soil composition to an
extent.

A very important factor is whether you encourage galvanic corrosion by
connecting dissimilar metallic electodes.

Whilst everyone is discussing the life of electrodes, I don't see
discussion of their performance. In my area, driven earth electrodes
perform relatively well (at power supply frequencies) as the ground is
substanitially clay. A small scale experiments over some years indicate
that a 25mm dia galvanised pipe electrode driven 2.4m into clay
consistently had an earth resistance of 200% to 300% (depending on
recent weather conditions) of a 12mm copper clad electrode nearby. This
would indicate that one requires a substantially larger earth system in
these conditions if lower cost galvanised steel pipe or star pickets
were used.

More importantly, your choice of electrode material (copper, copper clad
steel, galvanised steel, stainless, stainless clad steel are all readily
available and used for eathing here) should be influenced strongly by
other earthed metal that will be bonded to the system and which might
cause significant galvanic currents (eg premises water service, power
supply earth, power supply earthing system (eg MEN)). It is a mistake to
look at the earth electrode configuration of a cell base standing alone

on a remote rocky hill with HV feed and consider that it is a model for deployment in the suburbs with buried copper water services and MEN earth (though we could learn a lot from the overall earthing system design and implementation for lightning protection on cell sites).

Although in many installations, earth electrodes last a very long time, one should expect to make periodic inspections and measurements to ensure that they continue to be fully effective.

Owen

>
> Jim
> N8EE

2295. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 20:20:06 UTC
From: 2aa7ya@remove4spam.nemontel.net
Message-ID: <3c5af818.16182201@isp-west.usenetserver.com>
Source record: 149434
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

On Fri, 21 Dec 2001 09:52:04 -0500, OldBiker <vito@crosslink.net>
wrote:

>Great! If we could get the rest of them to do the same we'd have mucho
>more political power.
>
>I invite anyone with a wide-band receive rig to listen on the freq's
>just above CB where the "Hi-banders" congregate. I did, and as far as I
>can tell, these are serious CB hobbiests - criminals only because
>they're operating in the wrong bands. So fight crime: convert them to
>hams!
>My $.02
>Merry Christmas to all
>KA3DWW

Now easier than ever, thanks to the license class restructuring.

Stacey, AA7YA

2296. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 20:20:56 UTC
From: k1bqt@aol.com
Message-ID: <20020201152056.17467.00000574@mb-mn.aol.com>
Source record: 149435

Without clear definition of those specific behaviors that enable us to identify
a "good" engineer or a "good" ham, how can there be resolution?

I learned that in school.

Rick K1BQT

2297. Re: Wire material for a balun

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 20:29:59 UTC
From: denton <denton@oregontrail.net>
Message-ID: <a3etuv$8ee$1@news.apaynet.com>
Source record: 149436

Find a motor rewinding establishment...you can procure some no 14 enamelled
wire for your project and it should be sufficient.
DL7JSK <truckdrivingman@hotmail.com> wrote in message
news:a3eb31ckm02$1@news.t-online.com...
> Hi OMs
> I want to build a 1:1-balun with a ring ferrite core.Which wire should I
> take for it ? I think,wall plug cable ain't suitable for that.
>
> 73
> Tom
>
>
>

2298. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 20:42:09 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <B4D68.1084$lv1.707618@paloalto-snr2.gtei.net>
Source record: 149437
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

That's pretty contrary to what *I* hear up on the 10 meter band - it's just more of the same lousy
language and operating going on down on the REAL CB band - and *I personally* don't think we want OR
need them as hams... MORE isn't always "better"...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"S. Hanrahan" <2aa7ya@remove4spam.nemontel.net> wrote in message
news:3c5af818.16182201@isp-west.usenetserver.com...
> On Fri, 21 Dec 2001 09:52:04 -0500, OldBiker <vito@crosslink.net>
> wrote:
>
> >Great! If we could get the rest of them to do the same we'd have mucho
> >more political power.
> >
> >I invite anyone with a wide-band receive rig to listen on the freq's
> >just above CB where the "Hi-banders" congregate. I did, and as far as I
> >can tell, these are serious CB hobbiests - criminals only because
> >they're operating in the wrong bands. So fight crime: convert them to
> >hams!
> >My $.02
> >Merry Christmas to all
> >KA3DWW
>
> Now easier than ever, thanks to the license class restructuring.
>
> Stacey, AA7YA
>

2299. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 20:51:38 UTC
From: George <tronic@boxfrog.com>
Message-ID: <a3ev4ppfa1@helle.btinternet.com>
Source record: 149438
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Is it the 11mtr band you mean, around the 27.555MHz usb.
these people have been using these frequencies for years, and no-one is
going to stop them. most r-hams including myself started of on 27.555, this
led to many of us becoming a r-ham.
have you got nothing better to do.

--
The Sorcerer
remove Spam for reply

"S. Hanrahan" <2aa7ya@remove4spam.nemontel.net> wrote in message
news:3c5af818.16182201@isp-west.usenetserver.com...
> On Fri, 21 Dec 2001 09:52:04 -0500, OldBiker <vito@crosslink.net>
> wrote:
>
> >Great! If we could get the rest of them to do the same we'd have mucho
> >more political power.
> >
> >I invite anyone with a wide-band receive rig to listen on the freq's
> >just above CB where the "Hi-banders" congregate. I did, and as far as I
> >can tell, these are serious CB hobbiests - criminals only because
> >they're operating in the wrong bands. So fight crime: convert them to
> >hams!
> >My $.02
> >Merry Christmas to all
> >KA3DWW
>
> Now easier than ever, thanks to the license class restructuring.
>
> Stacey, AA7YA
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.314 / Virus Database: 175 - Release Date: 11/01/02

2300. RF-613 cable

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 21:04:51 UTC
From: I Z 6 E G K <iz6egk@tin.it>
Message-ID: <TpD68.17688$om6.418150@news1.tin.it>
Source record: 149439

Hi,
I recently got the antenna coupler group RF-615 B Harris.
The mating connectors between the RF-615 B/C (Control Unit) and the RF-615 B/CU (Coupler Unit) are respectively 10-109828-21P and 10-109628-21S (37 pins each).
The instruction manual indicates the RF-613 cable for the fabrication of the multiconductor cable.
Who is selling the RF-613 cable?
Many thanks.
73 de IZ6EGK, Pierluigi

2301. Create 318jr

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 21:18:44 UTC
From: Richard Jones <gw0mhy@ntlworld.com>
Message-ID: <TCD68.9819$sU.1728124@news6-win.server.ntlworld.com>
Source record: 149440

Buying one of these antennas but cannot find any suppliers. Anyone know
where parts can be sourced?
Also would like comments on performance
Thanks
Richard
GW0MHY

2302. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 21:20:26 UTC
From: 2aa7ya@remove4spam.nemontel.net
Message-ID: <3c5b0619.19767484@isp-west.usenetserver.com>
Source record: 149441
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

On Fri, 1 Feb 2002 20:51:38 +0000 (UTC), "George" <tronic@boxfrog.com>
wrote:

>Is it the 11mtr band you mean, around the 27.555MHz usb.
>these people have been using these frequencies for years, and no-one is
>going to stop them. most r-hams including myself started of on 27.555, this
>led to many of us becoming a r-ham.
>have you got nothing better to do.
>
>

Actually, I was referring to the 10, 15, 20, 40 and 80 meter bands.
Give your radio a listen sometime.

AA7YA

2303. Re: Best 2/440 Mobile Ant?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 21:25:27 UTC
From: Chris N <frequent_listener@hotmail.com>
Message-ID: <4yGwvb2qBHA.210@typhoon.i3s.net>
Source record: 149398

Take the radio back while you still can. I had to beg the dealer to take mine back. If your antenna has any gain at all you will have serious intermod problems on VHF. I had intermod so bad it broke squelch with the squelch at maximum setting. My unit had the blue, red, and yellow dots on the box indicating 3rd gen. If you don't live in the city it may not be so bad. Also listen to an active channel and scan with the other and you will hear a motorboat sound on the active one that is loud. Two known defects among others and mine was a very new model.

Sorry for the news,

Chris

"Larry WB7UCF" <WB7UCF@webtv.net> wrote in message
news:19334-3C58B35C-37@storefull-127.iap.bryant.webtv.net...
> Hi......I have just perched a FT-7100M Dual Band Mobil rig. I would like
> any recommendations on a very good mobil ant. I tend to use
> Magmounts.....
> Thanks.....Larry
>

2304. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 21:32:36 UTC
From: 2aa7ya@remove4spam.nemontel.net
Message-ID: <3c5b0707.20005495@isp-west.usenetserver.com>
Source record: 149442
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

On Fri, 01 Feb 2002 20:42:09 GMT, "Gary - KJ6Q" <davison7@gte.net>
wrote:

>That's pretty contrary to what *I* hear up on the 10 meter band - it's just more of the
same lousy
>language and operating going on down on the REAL CB band - and *I personally* don't think
we want OR
>need them as hams... MORE isn't always "better"...
>

Agreed. 10 years ago when I became a ham, 10 meters wasn't as
cluttered with lids who don't know the meaning of "operating split"
when it comes to chasing DX. As an ARRL member, I think it was a
shame the ARRL took the stance on the license restructuring. I've
seen posts on the DX Packetclusters from foreign stations saying "Boy
I bet the ARRL really must be proud of themselves". 10 meters used to
be a really fun band to be on, it still can be, but with lids who
don't know simple procedures and operating practices, radio
manufacturers might as well toss the license paperwork in the box
along with the rig. All in all, the ARRL is a good organization, but
any organization will make mistakes, big or small.

AA7YA

2305. Re: Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 22:15:01 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3f6ih$1891ro$1@ID-124126.news.dfncis.de>
Source record: 149444

> Reg, do you have any idea how efficient a powdered iron core
> transformer is on HF frequencies? Does the old 10:1 inductance
> to resistive load rule-of-thumb work for powdered iron core
> transformers with DC isolated primary/secondary?
> --
> cheers, CAM, W5DXP
==========

If you are referring to the core material, generally, dust-iron cores are more lossy at low HF than HF ferrites. There's not much difference above 25 MHz. Depends on finesess of the iron powder.

Dust-iron is a much more linear material. To minimise harmonic and intermod distortion and for higher Q in power transformers it is to be preferred.

Trouble with dust iron is its low permeability. Roughly only 5% of HF grade ferrites. So many more turns of thinner wire are needed for a given inductance. Many more turns mean higher copper loss and greater parasitic capacitance which again means more loss.

I'm not sure what you mean by the 10 to 1 rule of thumb.

It is a rule of thumb that the reactance of a wideband transformer winding at the lowest working frequency should not be less than 4 or 5 times the load resistance across that winding. But that is to do with flatness of the frequency response at the lower frequencies and very little to do with efficiency.

As you know, when the transformer reactance is equal to the load resistance the frequency response is 3 dB down relative to mid-frequencies. The magnetising current equals load current. But the power dissipated in the transformer as a result of the severe 'mismatch' is far less than in the load and efficiency can remain quite high.

A wideband circuit designer is far more interested in frequency response (it may be of a hi-fi audio amp) than in efficiency.

Reg, G4FGQ

2306. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 22:15:36 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <esE68.53193$DE3.3646335@news20.bellglobal.com>
Source record: 149443

"Robert Spooner"
> I'm not sure the commenters were considering the
> range of frequencies that your antenna can be used for.
> ... However, what you have put together is...

...six $2 telescopic whip antennas with some pipe, some very nice clamps, and a bit of coax. The "design" would be on the accompanying charts - making use of the ruler cleverly hidden in the handle.

Obviously, the prime market is for biologists (etc.) tracking animal radio collars. THAT market will not notice the $139 price.

The ham market will be a bit tougher... ...we all know what telescopic whips actually cost. :-)

2307. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 23:05:24 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <so7m5uotc281crbonhd9vqllie248ehg9s@4ax.com>
Source record: 149445

What broke in your BB3?

Dick

On Fri, 01 Feb 2002 11:54:54 -0500, Mark Tetrault <tetrault@mv.mv.com>
wrote:

>OK, So I have a presently broken TJ (BB3) screwdriver and would like
>to replace it with another screwdriver.
>
>Is there a consensus in the newsgroup due to experience which is the
>best made, best performing screwdriver antenna. My needs are 6m to
>80m, and rugged long lasting, minimum maintenance construction and
>good screwdriver performance.
>It will be used with an FT847 in an RV.
>
>While I have an ATAS100 in my car for my FT100 and it works quite
>well, I really want the 80m in the RV.
>
>All comments and experiences are more than welcome.
>
>Mark

2308. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 23:13:16 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3f7e7$j21$1@slb1.atl.mindspring.net>
Source record: 149446

Victor Echo:

Those were Molson Exports, and so... I simply don't remember... Which ones?

--Peter K1PO [ex VE3DZK]

"ve3tmt" <ve3tmt@rac.ca> wrote in message
news:LlC68.40679$f53.3543812@news20.bellglobal.com...
>
> > For a stealth back yard inverted L with a few radials (6-7) tuning them
> that
> > way takes the better part of a Saturday, i.e. it's about 6-8 beer job.
>
> Do you cut the radials before or after the beer?
>
>

2309. Re: Are hams better electrical engineering students?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 23:21:43 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3f87k$7jo$1@slb3.atl.mindspring.net>
Source record: 149448

Rick:

You can't really judge Engineers, or any other trade or profession, by their behavior... that is far too subjective.

In the end it is only the "track record" that defines them.

You simply gotta define them by their deeds... not their words...

i.e. The acceptance by the marketplace of the products that they have designed and produced.

Nothing else really counts!

i.e. The guy that designed the 75A4 HF reciever was clearly a great Engineer, etc...

--Peter K1PO

"Rick Littlefield" <k1bqt@aol.com> wrote in message news:20020201152056.17467.00000574@mb-mn.aol.com...
> Without clear definition of those specific behaviors that enable us to identify
> a "good" engineer or a "good" ham, how can there be resolution?
>
> I learned that in school.
>
> Rick K1BQT

2310. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-01 23:22:39 UTC
From: Mark Tetrault <tetrault@mv.mv.com>
Message-ID: <bi8m5usmh6efng831491esj351928sbpoc@4ax.com>
Source record: 149447

Dick Hughes <rhughes33@cableone.net> wrote:

>What broke in your BB3?
>
>Dick
Dick,
The BB3 is mounted to a pole behind my stationary RV. The
mounting bolts on the pole broke in a windstorm and the pole with the
BB3 came crashing down.

The BB3 now has a loose something in it, (it rattles), and it doesn't
tune as well as it used to.

The failure is not the fault of the BB3, but the cost of sending it
back and forth etc.............plus repairs........

So if I cannot find a better one, I will have mine repaired, otherwise
I will invest the $$ in a new model from someone else.

>
>On Fri, 01 Feb 2002 11:54:54 -0500, Mark Tetrault <tetrault@mv.mv.com>
>wrote:
>
>>OK, So I have a presently broken TJ (BB3) screwdriver and would like
>>to replace it with another screwdriver.
>>
>>Is there a consensus in the newsgroup due to experience which is the
>>best made, best performing screwdriver antenna. My needs are 6m to
>>80m, and rugged long lasting, minimum maintenance construction and
>>good screwdriver performance.
>>It will be used with an FT847 in an RV.
>>
>>While I have an ATAS100 in my car for my FT100 and it works quite
>>well, I really want the 80m in the RV.
>>
>>All comments and experiences are more than welcome.
>>
>>Mark

2311. Re: Choke Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 00:25:39 UTC
From: "mkelly@powerup.com.au" <mkelly@powerup.com.au>
Message-ID: <3C5B3203.78F790A7@powerup.com.au>
Source record: 149450

2 sugestions.
Try two turns (More is no better) thru either a TV deflection
transformer
or one of the switch mode PSU output choke ferrites. Visit the local
TV doctor or the local PC shop for old 'puter powersupps.

I measured the isolation at 40m and it works fine with
2 turns (or 1, even!)

Just a thot.

Cheers.
Murray
Mark Hall
> > <vze2mhvc@bellatlantic.net> wrote:
> >
> > >Hmmm.. The brillo pad is interesting, although I've seen way too many of those
> > >rusting on side of the sink to try it. Ferrite Choke Baluns don't work??
> > >
> > >'73 KI4Z, mark

--
****
* Murray Kelly vk4aok mailto://mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

2312. Re: Cushcraft A50-5S 6 meter ant

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 00:27:18 UTC
From: Wesser <wesser@hiwaay.net>
Message-ID: <u5m93k7pkvuu70@corp.supernews.com>
Source record: 149449

as has been the practice in the real world for 30-40 years is when
assembeling antennae, pull some nylon "rope" inside the elements.. epoxy
both ends.. they don't "rattle
an rarely metal fatigue<sp>
they make the mechanical resonant freq. of the elements much lower, thus no
whipping..we have had single 6 and pairs of 6's up at 105 feet ,in northern
mich, with lots of winds and iceing,for several years, with no problems,
try it u will like it....

"don" <country@johnstown.net> wrote in message
news:3c5ad683$0$1584$f5f63664@news.tdin.com...
> I have had a Cushcraft A50-5s 5 element 6 meter antenna installed on a 40'
> tower for about 12-14 months...yesterday I noticed the rear director had
> broken off and was laying on the ground. There were no signs of
> bending...looks like metal fatige. It did not snap at the mounting bolt
> location, but rather about a 1/2" past it.
> Has anyone else had this type of problem with Cushcraft antennas???
> Has Cushcrafts quality dipped to this level??
>
> I called Cushcraft and presented the problem...the reponse from the Tech
> Support Dept was..."we have not seen any problems"
>
> Don WB8PJE
> tuffy@johnstown.net
>
>
>

2313. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 00:41:15 UTC
From: Stahr <w6nyc@earthlink.net>
Message-ID: <LAG68.100$Hb6.14339@newsread1.prod.itd.earthlink.net>
Source record: 149451
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Do we really have to go through all this CRAP again????????

Can't there be at least a month between these stupid posts?

Dennis

"S. Hanrahan" <2aa7ya@remove4spam.nemontel.net> wrote in message
news:3c5af818.16182201@isp-west.usenetserver.com...
> On Fri, 21 Dec 2001 09:52:04 -0500, OldBiker <vito@crosslink.net>
> wrote:
>
> >Great! If we could get the rest of them to do the same we'd have mucho
> >more political power.
> >
> >I invite anyone with a wide-band receive rig to listen on the freq's
> >just above CB where the "Hi-banders" congregate. I did, and as far as I
> >can tell, these are serious CB hobbiests - criminals only because
> >they're operating in the wrong bands. So fight crime: convert them to
> >hams!
> >My $.02
> >Merry Christmas to all
> >KA3DWW
>
> Now easier than ever, thanks to the license class restructuring.
>
> Stacey, AA7YA
>
>

2314. Re: South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 01:00:37 UTC
From: Gary <tangogolf15@ntlworld.com>
Message-ID: <W4H68.11244$sU.1924900@news6-win.server.ntlworld.com>
Source record: 149453
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hi all
as someone who served on south georgia after the conflict and and now a keen
SWL any idea what freq/band/mode they may be using
Ex R Signals RTG so no problem on any mode
T I A
Gary

2315. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 01:13:49 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <a3fm5ukqm4k4b7i7q1qqumi5gcbm0mpvhb@4ax.com>
Source record: 149452

A few months ago I took my BB3 to the Nott factory in Farmington, NM
to have it upgraded with the latest motor, drive mechanism, etc. It
cost me $50. That's essentially everything except the outer tube,
coil and cover. That's a lot less than a new one. Of course I was
going that way anyway, but shipping can't be all that much. They are
great people to deal with and will bend over backward to help you.

Dick - W6CCD

On Fri, 01 Feb 2002 18:22:39 -0500, Mark Tetrault <tetrault@mv.mv.com>
wrote:

>Dick Hughes <rhughes33@cableone.net> wrote:
>
>>What broke in your BB3?
>>
>>Dick
>Dick,
> The BB3 is mounted to a pole behind my stationary RV. The
>mounting bolts on the pole broke in a windstorm and the pole with the
>BB3 came crashing down.
>
>The BB3 now has a loose something in it, (it rattles), and it doesn't
>tune as well as it used to.
>
>The failure is not the fault of the BB3, but the cost of sending it
>back and forth etc.............plus repairs........
>
>So if I cannot find a better one, I will have mine repaired, otherwise
>I will invest the $$ in a new model from someone else.

2316. Re: South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 01:45:26 UTC
From: Ace_On_Par3 <pwhelton@hal-pcNOSPAM.org>
Message-ID: <a3fge8$107i$1@news.hal-pc.org>
Source record: 149456
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

They've been on the low end of 20 CW with horrendous pileups. You can't
miss them.

Pat - KZ5J
--
http://u1.netgate.net/~kirby34/rsg/wheltonp.htm

"Gary" <tangogolf15@ntlworld.com> wrote in message
news:W4H68.11244$sU.1924900@news6-win.server.ntlworld.com...
> Hi all
> as someone who served on south georgia after the conflict and and now a
keen
> SWL any idea what freq/band/mode they may be using
> Ex R Signals RTG so no problem on any mode
> T I A
> Gary
>
>

2317. How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 01:53:24 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0202011753.163ed6b9@posting.google.com>
Source record: 149454
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

The transfer function amplitude plot of a Butterworth filter is smooth.

The transfer function amplitude plot of a Chebyshev filter contains ripples in the passband (if it is a bandpass filter) or the stopband (if it is a bandstop filter).

Am I correct that Chebyshev and Butterworth filters are classified by the shape of the plots of their transfer function amplitudes?

Is there a way to tell whether a given filter is a Chebyshev or Butterworth WITHOUT going to the trouble of finding the transfer function?

P.S. I am also looking for a job as an antenna, RF, or microwave engineer and would appreciate any leads. I will be targeting filter companies specifically (and presenting myself accordingly) once I thoroughly understand the basic ins-and-outs.

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

2318. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 01:55:38 UTC
From: 2aa7ya@remove4spam.nemontel.net
Message-ID: <3c5b4437.6834612@isp-west.usenetserver.com>
Source record: 149455

On Sat, 02 Feb 2002 00:41:15 GMT, "Stahr" <w6nyc(remove this to email)@earthlink.net> wrote:

>Do we really have to go through all this CRAP again????????

Now hold on there....

>Can't there be at least a month between these stupid posts?

Actually if you look at the header below, there's a month and a half between posts.

>
>Dennis
>

AA7YA

>
>"S. Hanrahan" <2aa7ya@remove4spam.nemontel.net> wrote in message
>news:3c5af818.16182201@isp-west.usenetserver.com...
>> On Fri, 21 Dec 2001 09:52:04 -0500, OldBiker <vito@crosslink.net>
>> wrote:
>>
>> >Great! If we could get the rest of them to do the same we'd have mucho
>> >more political power.
>> >
>> >I invite anyone with a wide-band receive rig to listen on the freq's
>> >just above CB where the "Hi-banders" congregate. I did, and as far as I
>> >can tell, these are serious CB hobbiests - criminals only because
>> >they're operating in the wrong bands. So fight crime: convert them to
>> >hams!
>> >My $.02
>> >Merry Christmas to all
>> >KA3DWW
>>
>> Now easier than ever, thanks to the license class restructuring.
>>
>> Stacey, AA7YA
>>
>>
>
>

2319. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 02:08:44 UTC
From: Jim Thompson <Jim-T@analog_innovations.com.invalid>
Message-ID: <keim5uoltso540qp9jbn9gfn32kke588r0@4ax.com>
Source record: 149457
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On 1 Feb 2002 17:53:24 -0800,
jason_hsu@my-deja.com (Jason Hsu),
In Newsgroup: sci.electronics.design,
Article: <f7d9a152.0202011753.163ed6b9@posting.google.com>,
Entitled: "How do I classify filters WITHOUT looking at the transfer
function?",
Wrote the following:

|The transfer function amplitude plot of a Butterworth filter is
|smooth.
|
|The transfer function amplitude plot of a Chebyshev filter contains
|ripples in the passband (if it is a bandpass filter) or the stopband
|(if it is a bandstop filter).
|
|Am I correct that Chebyshev and Butterworth filters are classified by
|the shape of the plots of their transfer function amplitudes?
|
|Is there a way to tell whether a given filter is a Chebyshev or
|Butterworth WITHOUT going to the trouble of finding the transfer
|function?
|
|P.S. I am also looking for a job as an antenna, RF, or microwave
|engineer and would appreciate any leads. I will be targeting filter
|companies specifically (and presenting myself accordingly) once I
|thoroughly understand the basic ins-and-outs.
|
|Jason Hsu, AG4DG
|jason_hsu_802701@@@@yahoo.com
|http://www.jasonhsu.com/ham_radio-technical.html

Presenting yourself as a knowledgeable "engineer", when you don't have
a clue ?:-)

...Jim Thompson
--
(If replying by E-mail please observe obscure method of anti-spam.)

James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
Jim-T@analog_innovations.com Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

For proper E-mail replies SWAP "-" and "_", and remove the obvious.

"Things turn out best for those who make the best of how things turn out."

2320. Re: South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 02:48:59 UTC
From: Bob Nielsen <nielsen@remove_this.oz.net>
Message-ID: <a3fk2rdou0@216.39.144.81>
Source record: 149458
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Sat, 2 Feb 2002 01:00:37 -0000, Gary wrote:
> Hi all
> as someone who served on south georgia after the conflict and and now a keen
> SWL any idea what freq/band/mode they may be using
> Ex R Signals RTG so no problem on any mode
> T I A
> Gary

Check the DX summit web site for recent spots on their operation:

http://oh2aq.kolumbus.com/dxs/

Bob, N7XY

2321. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 03:04:13 UTC
From: Phil Allison <bilup@bigpond.com>
Message-ID: <tzl68.85432$HW3.118025@newsfeeds.bigpond.com>
Source record: 149459
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Jim Thompson" <Jim-T@analog_innovations.com.invalid> wrote in message
news:keim5uoltso540qp9jbn9gfn32kke588r0@4ax.com...
>
> Presenting yourself as a knowledgeable "engineer", when you don't have
> a clue ?:-)

Been known to happen before a few times - especially with graduates.

Regards, Phil

2322. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 03:39:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3fnek$17j8ol$2@ID-124126.news.dfncis.de>
Source record: 149460
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

> > Presenting yourself as a knowledgeable "engineer", when you don't have
> > a clue ?:-)
>
>
> Been known to happen before a few times - especially with graduates.
>
==========
It also happens with engineers who are incapable of doing much more than
quoting (or misquoting) Terman, parrot-fashion.

2323. Re: Just a comment on losses in the ground.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 03:51:10 UTC
From: ab528@FreeNet.Carleton.CA
Message-ID: <a3fnne$7iv$1@freenet9.carleton.ca>
Source record: 149461

"Peter O. Brackett" (ab4bc@ix.netcom.com) writes:

> That is... tuned radials by first laying them out on top of the ground and
> then trimming wire off the ends whilst monitoring the antenna current and
> the remote field strength.
>
> For a stealth back yard inverted L with a few radials (6-7) tuning them that
> way takes the better part of a Saturday, i.e. it's about 6-8 beer job.

So let me get this straight - you wind (or unwind) the radials around
empty beer cans until the tuning process ends?
>
> But the results I found were very worthwhile.

Well, you wouldn't have to trudge the cans back for refund, I guess.

2324. Wanted 6 meter antenna advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 04:23:17 UTC
From: Chris N <frequent_listener@hotmail.com>
Message-ID: <NoKoNF6qBHA.157@typhoon.i3s.net>
Source record: 149402

Hello,

I need some design advice on an antenna for 6 meters. I live in a 3rd floor apartment with about 7 by 12 ft of balcony space. I would like to build one, but would consider buying a used halo or loop if anyone would like to get rid of one. If you live in similar circumstances to me tell me what worked for you on the "magic band."

Thanks alot,

Chris N

2325. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 04:31:20 UTC
From: John Larkin <jjlarkin@highlandSNIPTHISTechnology.com>
Message-ID: <iGtbPMqj0t7IE0XneO7r3V6jLZz0@4ax.com>
Source record: 149462
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

How about by color?

John

2326. Re: Cushcraft A50-5S 6 meter ant

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 04:51:49 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3C5B7065.AABC67D3@ipeg.com>
Source record: 149463

don wrote:
>
> I have had a Cushcraft A50-5s 5 element 6 meter antenna installed on a 40'
> tower for about 12-14 months...yesterday I noticed the rear director had
> broken off and was laying on the ground. There were no signs of
> bending...looks like metal fatige. It did not snap at the mounting bolt
> location, but rather about a 1/2" past it.
> Has anyone else had this type of problem with Cushcraft antennas???

Don,

Sounds like you may be the victim of low frequency vibration. All yagis
suffer from it to one degree on another. Usual cure is a length of rope
inserted inside the elements which damps the vibrations caused by
certain (low, I seem to recall) wind conditions. I've seen several
yagis (different manufacturers) start to rain parts at about the one
year mark, so yours is not unique. Oh, yes.... This seems to only
affect monobanders. Hy-Gain used to include the rope as part of the kit
in their monobanders. Must be that the traps on a normal tribander
somehow damp the vibrations.

marty...
N7MX

2327. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 04:58:51 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5CB5AF.A920B6C4@worldnet.att.net>
Source record: 149464

CAM wrote:

> Jerry Oxendine wrote:
> > You may have meant it as a joke, but there are *some* of us who DO use the
> > MFJ 259 to tune the antenna via a 2-position coax switch. Actually, it
> > works pretty well as manual tuning goes.
>
> Jerry, you have given me an idea. It would be easy to use the voltage
> driving the SWR meter inside the MFJ259 to remove the voltage from
> the screwdriver motor - and presto, an autotuner function for a
> screwdriver. Latch one of two relays with the up/down PB and
> unlatch it when the SWR voltage inside the MFJ259 falls below
> a certain value. That's about $10 worth of parts external to
> the MFJ259.

Why waste a 259 for that? Use a cheapie SWR bridge.

2328. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 05:12:23 UTC
From: AH <akha@attbi.com>
Message-ID: <XyK68.2857$S06.10307@rwcrnsc53>
Source record: 149465
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0202011753.163ed6b9@posting.google.com...
> The transfer function amplitude plot of a Butterworth filter is
> smooth.
>

so is Cauer, Chebyshev , and Bessel-Thompson, depending on order of the
filter.

> The transfer function amplitude plot of a Chebyshev filter contains
> ripples in the passband (if it is a bandpass filter) or the stopband
> (if it is a bandstop filter).
>

So does Cauer and inverse Chebyshev, depending on order. And probably a
lot more.

> Am I correct that Chebyshev and Butterworth filters are classified by
> the shape of the plots of their transfer function amplitudes?
>

Yes. That is one of the ways they can be classified. There's also
classifying them by pole/zero locations,
classifying by phase response, classifying by the form of T(s). Changing
T(s) changes your
poles and zeroes, which changes your response. They are all different ways
of
looking at the same thing. You can even classify the order of a chebyshev
by counting number of ripples, for example.

> Is there a way to tell whether a given filter is a Chebyshev or
> Butterworth WITHOUT going to the trouble of finding the transfer
> function?
>

By looking at the magnitude response graph (if you are given it) as you
stated above. You want to look at the entire response
through all passbands, stopbands, and transition regions and use
characteristics from that.
Cauer-response filters have ripple in both pass band and stop band, for
example.

Or, if you have been _given_ an s-plane chart you can look at pole and zero
locations.
Butterworth filters' normalized poles lay on a unit circle, Chebyshev poles
lay on an ellipse

within that circle, Bessel poles lay outside the circle, etc. Since a butterworth and chebyshev
response provide more attenuation than needed in the stopband, they are regarded as inefficient.
By adding zeroes into the transfer function/ s-plane map, you spread the attenuation more evenly
throughout the passband and change the response accordingly, and therefore get an inverse chebyshev response.

Incidentally, butterworth, chebyshev, etc, are types of responses named after their respective
inventors. It does not describe the circuit used. You can make an active filter with a low-pass Butterworth
response using a Sallen-Key circuit, for example.

Of course, once you learn all this it was probably easier just to find the transfer function.. The best way to classify it without going through the trouble of finding the transfer function is have your friend do it.

> P.S. I am also looking for a job as an antenna, RF, or microwave
> engineer and would appreciate any leads. I will be targeting filter
> companies specifically (and presenting myself accordingly) once I
> thoroughly understand the basic ins-and-outs.
>

I'm looking for a job in the government and would appreciate any leads also. I will be targetting
the position of President of the United States, specifically (and presenting myself accordingly)
once I thoroughly understand the basic ins-and-outs...

> Jason Hsu, AG4DG
> jason_hsu_802701@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

Andy, #7636490

2329. Re: Cushcraft A50-5S 6 meter ant

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 05:27:50 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <rNK68.40618$9y2.4309901@news20.bellglobal.com>
Source record: 149466

"Martin Hibbs" explained:
> Sounds like you may be the victim of low frequency vibration.
> All yagis suffer from it to one degree on another. Usual cure
> is a length of rope inserted inside the elements which damps
> the vibrations...

Obvious invention - heavy mass (lead weight) in a damping agent (thick oil) mounted to the vibration nodes (halfway out, and either one of the thirds; or take the weighted average and make it ~0.4). Might take the form of a little 'film canister'-sized gadget clipped to the element (or hidden inside).

That'll be a dollar (the actual value of a typical "invention").

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

2330. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 06:07:44 UTC
From: Greatest Prime <FishyBill@mediaone.net>
Message-ID: <B880C274.CE92%FishyBill@mediaone.net>
Source record: 149467
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

in article XyK68.2857$S06.10307@rwcrnsc53, AH at akha@attbi.com wrote on 2/1/02 9:12 PM:

> Incidentally, butterworth, chebyshev, etc, are types of responses named
> after their respective
> inventors. It does not describe the circuit used. You can make an active
> filter with a low-pass Butterworth
> response using a Sallen-Key circuit, for example.

Actually, the are usually named after the polynomials used to privide the poles. I am not sure about the butterworth filter, but the chebyshev and bessel filters use those polynomials in the design of the filter. Their namesakes died well before filters with those names were ever used.

Bill

2331. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 07:28:35 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C5CD8C4.7E2A4BDB@worldnet.att.net>
Source record: 149468
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

AH wrote:

>
> I'm looking for a job in the government and would appreciate any leads also.
> I will be targetting
> the position of President of the United States, specifically (and
> presenting myself accordingly)
> once I thoroughly understand the basic ins-and-outs...

Ah..... the successor to Bill Clinton!

2332. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 08:30:48 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3g83o$9su$5@quark.scn.rain.com>
Source record: 149469
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.antenna Dave Shrader <dshrader@earthlink.net> wrote:
> The problem is CORONA not power per se.

But that was not the claim to which I was responding - that "even
at 1 kw, it's become a bright orange piece of flaming metal".

A corona is simply another source of loss. It may not cause any more
heating in the stinger than would be present if the corona were absent.

Bill Nelson (billn@peak.org)

2333. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 08:34:28 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3g8ak$9su$6@quark.scn.rain.com>
Source record: 149470
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.antenna ve3tmt <ve3tmt@rac.ca> wrote:

> Once again your humour shines through. It is unbelievable what length
> CB'ers will go to in order to outdo the next guy. And whats even worse is
> the price they pay to do it.

Watch the width of that brush you are using. There are many Hams who will
go to the same lengths.

--
Bill Nelson (billn@peak.org)

2334. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 08:37:35 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3g8gf$9su$7@quark.scn.rain.com>
Source record: 149471

Joe Bramblett, KD5NRH <kd5nrh-r.r.a.a@kd5nrh.net> wrote:
> On 01 Feb 2002 02:14:11 GMT, davemade1@aol.com (DaveMade1) wrote:

>>If you search the davemade web site he
>>has a 1/2 wave base loaded mobile antenna, that has 2 giant fixed value 30kv
>>capacitors at the bottom to load the thing.

> A penis compensator, complete with testicle compensators.

> Is the corona ball shaped like the pope's hat, too?

Is it any worse than a Ham who has a 150 foot tower topped by a two or
3 element full sized 40 meter beam?

--
Bill Nelson (billn@peak.org)

2335. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 08:41:44 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3g8o8$9su$8@quark.scn.rain.com>
Source record: 149472
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.antenna Cougercat <felix1063@attbi.com> wrote:
> Lets see ... on a 13.6 volt system that would be approx 2205.88 amps using a
> 50% efficiency for the final class C power amp. Anyone have a trailer
> mounted gen set to load up this antenna?

They don't run 12 volt dc systems. Alternators are capable of AC.

But for 15 KW, assuming about 50% conversion efficiency all down the
line, it would require somewhere between 400 and 500 horsepower to
the alternators.

Most common gensets are not capable of that kind of power output.

--
Bill Nelson (billn@peak.org)

2336. www.davemade is:

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 08:53:02 UTC
From: bonemaster <0@0.0>
Message-ID: <WPN68.1351$ka7.797582381@news.inreach.com>
Source record: 149473
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

```
www.davemade.com is:

Address:
martin morgan
po 5131
hickory, nc 28603
US
Phone: 8282611000
Email: webmaster@davemade.com

First Registered:
January 06, 1999

Last Updated:
January 08, 2002

Administrative Contact:
na
martin morgan
po 5131
hickory, nc 28603
US
Phone: 8282611000
Email: webmaster@davemade.com

Technical Contact, Zone Contact:
Register.Com
Domain Registrar
575 8th Avenue - 11th Floor
New York, NY 10018
US
Phone: 212-798-9200
Fax..: 212-629-9305
Email: domain-registrar@register.com

Name Servers:
WEBSERV.CONNINC.COM 12.150.146.200
NS1.LCI.NET 150.159.216.202

Information Source:
register.com
```

2337. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 09:07:57 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3ga9d$9su$9@quark.scn.rain.com>
Source record: 149474
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

In rec.radio.amateur.antenna S. Hanrahan <2aa7ya@remove4spam.nemontel.net> wrote:

> Agreed. 10 years ago when I became a ham, 10 meters wasn't as
> cluttered with lids who don't know the meaning of "operating split"
> when it comes to chasing DX. As an ARRL member, I think it was a
> shame the ARRL took the stance on the license restructuring. I've
> seen posts on the DX Packetclusters from foreign stations saying "Boy
> I bet the ARRL really must be proud of themselves". 10 meters used to
> be a really fun band to be on, it still can be, but with lids who
> don't know simple procedures and operating practices, radio
> manufacturers might as well toss the license paperwork in the box
> along with the rig. All in all, the ARRL is a good organization, but
> any organization will make mistakes, big or small.

Don't blame the ARRL. While I have little use for the organization, it
was the screaming by Hams to get rid of the CW requirement that generated
the restructuring.

I personally believe that the restructuring that is being used is wrong.
Novice should be the entry level for HF, Tech for above 30 meters, with
Extra being the third class. Keep General if necessary, but there is no
real need for it.

I also believe that the written tests should be made more rigorous again.
They are trivial to pass, right now.

--
Bill Nelson (billn@peak.org)

2338. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 10:01:26 UTC
From: Malcontent <Anon@Anon.com>
Message-ID: <a3gdbs$sh0$0@dosa.alt.net>
Source record: 149475
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

> Don't blame the ARRL. While I have little use for the organization, it
> was the screaming by Hams to get rid of the CW requirement that generated
> the restructuring.
>
> I personally believe that the restructuring that is being used is wrong.
> Novice should be the entry level for HF, Tech for above 30 meters, with
> Extra being the third class. Keep General if necessary, but there is no
> real need for it.
>
> I also believe that the written tests should be made more rigorous again.
> They are trivial to pass, right now.
>
> --
> Bill Nelson (billn@peak.org)

Of course we all have our differing opinions. As a 13 wpm General I feel slighted that a 5 wpm tech is to be shoved into my slot without ever having to pound a key. I dislike it, but I will live with it. It is for this same reason that I hesitate taking the written test for Extra. It seems that the Extras resent those of us that test "up" to Extra....after all, they earned their ticket the hard way and they see us newbie Extras as interlopers. They feel that I should not be an Extra since my 13 wpm did not meet the criteria.
Me? Heck. I don't care one way or the other.
You won't see me jumping forth to join the ARRL...I have better things to do with my time and money.
The old codgers who claim that it is the ARRL or nothing are fighting a losing battle. In light of the fact that only a third or less Ham Ops belong to the ARRL speaks volumes.
I like my hobby. I do NOT need the ARRL in any way, shape or form. They have done nothing for me and I doubt they will any time soon.

2339. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 10:23:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5BBE19.80B6A0F4@eznec.com>
Source record: 149476
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Butterworth and Chebyshev filters are classified by the polynomials making up their Laplace transformed transfer functions.

The amplitude response of a Butterworth lowpass filter decreases monotonically from DC upward. This is, of course, only one of the characteristics of the response curve shape. The poles of a Butterworth are evenly spaced on a circle in the complex s plane. The amplitude response of a Chebyshev filter has ripple in the passband but not in the stopband, where it decreases monotonically. The passband ripples are equal in magnitude, and the number depends on the filter order. The pole locations are defined by a set of polynomials used for approximating functions, known as Chebyshev polynomials. They lie on what looks like an oval shape in the complex s plane. Bandpass filters have a response that looks like a lowpass and its reflection, all translated upward in frequency by an amount equal to the filter center frequency.

You'll never encounter a pure Butterworth or Chebyshev filter at high frequencies, although you'll often see a good approximation over a limited range of frequencies. Filters can be, and sometimes are, designed for characteristics lying between Butterworth and Chebyshev, or outside that range. They also sometimes include extra sections to adjust the phase response for a particular purpose.

The transfer function defines the filter type, so there's no way of knowing what one is by inspection, unless it's a matter of looking at the component values, then modeling or calculating to determine its response.

You have a very long way to go from asking this question to being seriously regarded as an engineer who's knowledgeable about filters. Filter design is a complex discipline that requires a lot of knowledge, creativity, and art. It's not something you can learn in a few weeks of asking questions and reading books. But if you're seriously interested in the theory behind filter design, I suggest beginning with a network synthesis text such as Van Valkenburg's _Introduction to Modern Network Synthesis_.

Roy Lewallen, W7EL

Jason Hsu wrote:
>
> The transfer function amplitude plot of a Butterworth filter is
> smooth.
>
> The transfer function amplitude plot of a Chebyshev filter contains

> ripples in the passband (if it is a bandpass filter) or the stopband
> (if it is a bandstop filter).
>
> Am I correct that Chebyshev and Butterworth filters are classified by
> the shape of the plots of their transfer function amplitudes?
>
> Is there a way to tell whether a given filter is a Chebyshev or
> Butterworth WITHOUT going to the trouble of finding the transfer
> function?
>
> P.S. I am also looking for a job as an antenna, RF, or microwave
> engineer and would appreciate any leads. I will be targeting filter
> companies specifically (and presenting myself accordingly) once I
> thoroughly understand the basic ins-and-outs.
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

2340. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 10:29:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5BBF79.314BC934@eznec.com>
Source record: 149477
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Last I checked, a horsepower was just under 750 watts (745.7 to be more precise). At 50% efficiency, 15 kW works out to 40 horsepower on my calculator.

Maybe they're just not makin' horses like they used to?

Roy Lewallen, W7EL

Bill Nelson wrote:
>
> In rec.radio.amateur.antenna Cougercat <felix1063@attbi.com> wrote:
> > Lets see ... on a 13.6 volt system that would be approx 2205.88 amps using a
> > 50% efficiency for the final class C power amp. Anyone have a trailer
> > mounted gen set to load up this antenna?
>
> They don't run 12 volt dc systems. Alternators are capable of AC.
>
> But for 15 KW, assuming about 50% conversion efficiency all down the
> line, it would require somewhere between 400 and 500 horsepower to
> the alternators.
>
> Most common gensets are not capable of that kind of power output.
>
> --
> Bill Nelson (billn@peak.org)

2341. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 10:54:57 UTC
From: Kevin Aylward <kevin@anasoft.co.uk>
Message-ID: <mBP68.16026$sU.2321230@news6-win.server.ntlworld.com>
Source record: 149478
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C5BBE19.80B6A0F4@eznec.com...
> Butterworth and Chebyshev filters are classified by the polynomials
> making up their Laplace transformed transfer functions.
>
> The amplitude response of a Butterworth lowpass filter decreases
> monotonically from DC upward. This is, of course, only one of the
> characteristics of the response curve shape. The poles of a Butterworth
> are evenly spaced on a circle in the complex s plane. The amplitude
> response of a Chebyshev filter has ripple in the passband but not in the
> stopband, where it decreases monotonically. The passband ripples are
> equal in magnitude, and the number depends on the filter order. The pole
> locations are defined by a set of polynomials used for approximating
> functions, known as Chebyshev polynomials. They lie on what looks like
> an oval shape in the complex s plane. Bandpass filters have a response
> that looks like a lowpass and its reflection, all translated upward in
> frequency by an amount equal to the filter center frequency.
>
> You'll never encounter a pure Butterworth or Chebyshev filter at high
> frequencies, although you'll often see a good approximation over a
> limited range of frequencies. Filters can be, and sometimes are,
> designed for characteristics lying between Butterworth and Chebyshev, or
> outside that range. They also sometimes include extra sections to adjust
> the phase response for a particular purpose.
>
> The transfer function defines the filter type, so there's no way of
> knowing what one is by inspection, unless it's a matter of looking at
> the component values, then modeling or calculating to determine its
> response.
>
> You have a very long way to go from asking this question to being
> seriously regarded as an engineer who's knowledgeable about filters.
> Filter design is a complex discipline that requires a lot of knowledge,
> creativity, and art.

Nah... Its all about getting tables of Bessel poles and hand coding in the
arrays e.g. 20by2 +19by2+18by2+....

Kevin Aylward , Warden of the Kings Ale
kevin@anasoft.co.uk
http://www.anasoft.co.uk - SuperSpice "Seriously...Why pay more?",
GUI xspice, an affordable unlimited component, mixed-mode Windows simulator
with Schematic Capture, waveform display, FFT's and Filter Design.
Opinions of my employer are not necessarily indicative of my own

Oscillators don't, amplifiers do"

2342. Re: Half Wave Matching 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 11:28:43 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <r2Q68.10516$TY3.1419536@monolith.news.easynet.net>
Source record: 149479

Entirely predictable, assuming you are just joining 50 ohm coax to the feed
point impedance of several thousand ohms.!
Feed it via a 100 foot stub of ladder-line or similar.
Or via a loop around a parallel-tuned circuit at the base.
Or wind it down to 130 feet

Bryan

Bob G4VGO <rmread@attglobal.net> wrote in message
news:3c49e874_4@news2.prserv.net...
> I have a half wave antenna I float under a balloon when the weather is
> right. (About 250 feet of wire at about a 15 degree off of vertical slant)
>
> It is a pig to tune, and I feed it against my normal ground system of
about
> 170 radials of various lenghts (about 2km all together.
>
> What I am wondering is if I should use an elevated counterpoise above the
> earth system that is shorter than a quarter wave or what does the NG
suggest
> as the impedence is very high and very reactive, making it a real b***h to
> match.
>
> Thanks
>
> Bob G4VGO
>
>

2343. Re: Ladderline matching/SWR when wet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 11:41:01 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <ZdQ68.10572$TY3.1422725@monolith.news.easynet.net>
Source record: 149480

It is nothing to do with the wet.
You have rf currents on the outside of the coax between the ATU and the rig, Put a choke balun in it.
Disconnect the mains earth from the ATU.

If that doesn't work
then take 11 feet of wire and connect to the earth of the rig. Hang it down outside the house wall.

If that cures 15 m the add a 8 ft. piece for 10 and a 17 ft. piece for 20.

If that doesnt work come back and tell us the length of the ladder-line.

Bryan G3GVB

<googlyelmo@earthlink.net> wrote in message
news:3C49D08A.538FC947@earthlink.net...
> I have a 70' inverted-V at 50 feet [ends at 20], fed with 450-ohm
> ladderline for 40-10. The antenna is mounted atop a 20' galvanized mast
> on the roof of a wood frame house, with the line dressed away from the
> mast >20 degrees its entire length. The included angle of the antenna is
> about 95 degrees. I use an MFJ-901B tuner to match my Ten-Tec Scout to
> the line. It is a 2nd-storey installation, with DC-ground to the ground
> pin of an outlet (checks good, all new wiring in the house).
>
> On 40, everything is fine. But on 10 and 15, I can't get a match, or
> anything like it (off the scale SWR). 20 tunes sharply, and barely, and
> sometimes "warbles" when it is really rainy, i.e. the sidetone
> rises/falls, following along with a quick (<1 sec.) swing of the SWR
> meter needle. I also sometimes get a little bit of a bite when I touch
> a metal switch on the rig while all this is going on, so there is some
> RF feedback going on here. I had a virtually identical set up when I
> lived in dry Arizona, and it worked very well on 40-20-15-10. But now I
> live in Seattle, and it looks like I am up against one of the most
> serious drawbacks ladderline presents, i.e. wetness.
>
> I just put this antenna up 10 days ago, and it has been
> rainy/foggy/misty (all of the above!) every day since (and likely to be
> for quite a while yet), so I don't know how this installation will
> perform dry. Is there anything I can do to bring down the SWR/losses on
> wet ladderline? I had the idea of treating the line with silicone, but
> have been advised that may negatively and seriously alter the
> characteristic-Z of the line, or otherwise degrade performance
> permanently. Both the line and the antenna radiator check out fine for
> opens and shorts, and the rig puts out its rated 50W at flat SWR into a
> dummy.

>
> I have preferred ladderline fed multi-band dipoles up to this point for
> their versatility and basic decent performance, and I'd hate to go to
> coax now. I'd like to hear any suggestions and comments, and especially
> like to hear from anyone who has successfully used ladderline in a wet
> and rainy climate. Gratefully,
>
> Will, KD7BFX
>

2344. Earth Anchors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 12:37:53 UTC
From: jwodell@provide.net
Message-ID: <3c5bdcd7.3020054@news.provide.net>
Source record: 149481

I've never heard of this, but thought I'd give it a shot.

We just had an ice storm, and all the trees are gone. So
I need a hole.

I hate digging, and thought of earth anchors. My soil is
the hardest clay I've ever seen. Would weld up neato
plate and put about a 30 foot tower on the thing, and
use about 4 big anchors, the kind that take 2 tons. No guys.

Probably a crazy idea, but I have an aversion to digging
deep holes. But I also have an aversion, I suspect, to
screwing those things in!

Please reply to jwodell@provide.net

73 jerry w8gnd

2345. Re: Earth Anchors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 12:54:15 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C5BE152.47B015CE@tampabay.rr.com>
Source record: 149483

hey jerry
in the effort it would take to screw in the anchors you could rent a
backhoe and dig you a tower base and be done with it and wouldnt have to
worry about frost heaving either

"Jerry W. O'Dell" wrote:

> I've never heard of this, but thought I'd give it a shot.
>
> We just had an ice storm, and all the trees are gone. So
> I need a hole.
>
> I hate digging, and thought of earth anchors. My soil is
> the hardest clay I've ever seen. Would weld up neato
> plate and put about a 30 foot tower on the thing, and
> use about 4 big anchors, the kind that take 2 tons. No guys.
>
> Probably a crazy idea, but I have an aversion to digging
> deep holes. But I also have an aversion, I suspect, to
> screwing those things in!
>
> Please reply to jwodell@provide.net
>
> 73 jerry w8gnd

2346. Re: Earth Anchors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 12:58:55 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C5BE280.D396B84F@icok.net>
Source record: 149482

Jerry,
I'm not too sure 4 of the 'screw-in' anchors would
be enough to hold up a 30 foot tower. It would depend
on how much wind you get in your area. If you doubled
or tripled the number of anchors over a larger area,
then maybe. I understand the aversion to digging holes,
but dig one anyway. I think you'd be happier in the
long run.
'Doc

2347. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 13:27:58 UTC
From: Win Hill <whill@mediaone.net>
Message-ID: <3C5BE7E8.2BB09F8E@mediaone.net>
Source record: 149484
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Dick Carroll wrote:
>
> AH wrote:
>
>> I'm looking for a job in the government and would appreciate any
>> leads also. I will be targetting the position of President of the
>> United States, specifically (and presenting myself accordingly)
>> once I thoroughly understand the basic ins-and-outs...
>
> Ah..... the successor to Bill Clinton!

Gives a whole new meaning to the phrase "ins-and-outs" :-)

- Win

2348. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 13:34:16 UTC
From: tdonaly@cs.com
Message-ID: <20020202083416.17394.00000636@mb-mn.news.cs.com>
Source record: 149485

Jason Hsu wrote,
(snip)
>
>P.S. I am also looking for a job as an antenna, RF, or microwave
>engineer and would appreciate any leads. I will be targeting filter
>companies specifically (and presenting myself accordingly) once I
>thoroughly understand the basic ins-and-outs.
>
>Jason Hsu, AG4DG
>jason_hsu_802701@@@@yahoo.com
>http://www.jasonhsu.com/ham_radio-technical.html
>

Unless you can understand the theory, you'll have
better luck - and more fun - being a piano player
in a sporting house. Of course, you'll have to learn
to play the piano...

Tom Donaly KA6RUH

2349. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 14:01:36 UTC
From: George <tronic@boxfrog.com>
Message-ID: <a3grg0$1tk$1@paris.btinternet.com>
Source record: 149486
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Well that is hardly *just above the CB band* is it??
and you are supposed to be a licensed Ham.

--
The Sorcerer
remove Spam for reply

"S. Hanrahan" <2aa7ya@remove4spam.nemontel.net> wrote in message
news:3c5b0619.19767484@isp-west.usenetserver.com...
> On Fri, 1 Feb 2002 20:51:38 +0000 (UTC), "George" <tronic@boxfrog.com>
> wrote:
>
> >Is it the 11mtr band you mean, around the 27.555MHz usb.
> >these people have been using these frequencies for years, and no-one is
> >going to stop them. most r-hams including myself started of on 27.555,
this
> >led to many of us becoming a r-ham.
> >have you got nothing better to do.
> >
> >
>
> Actually, I was referring to the 10, 15, 20, 40 and 80 meter bands.
> Give your radio a listen sometime.
>
> AA7YA
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.314 / Virus Database: 175 - Release Date: 11/01/02

2350. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 14:05:35 UTC
From: George <tronic@boxfrog.com>
Message-ID: <a3grneidk1@knossos.btinternet.com>
Source record: 149487
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Exactly, the more stupid pathetic people like this S Hanrahan keeps on whining and moaning the more the cb'rs are going to do it. Just to annoy the Pillock

--
The Sorcerer
remove Spam for reply

"Stahr" <w6nyc(remove this to email)@earthlink.net> wrote in message news:LAG68.100$Hb6.14339@newsread1.prod.itd.earthlink.net...
> Do we really have to go through all this CRAP again????????
>
> Can't there be at least a month between these stupid posts?
>
> Dennis
>
>
> "S. Hanrahan" <2aa7ya@remove4spam.nemontel.net> wrote in message
> news:3c5af818.16182201@isp-west.usenetserver.com...
> > On Fri, 21 Dec 2001 09:52:04 -0500, OldBiker <vito@crosslink.net>
> > wrote:
> >
> > >Great! If we could get the rest of them to do the same we'd have mucho
> > >more political power.
> > >
> > >I invite anyone with a wide-band receive rig to listen on the freq's
> > >just above CB where the "Hi-banders" congregate. I did, and as far as I
> > >can tell, these are serious CB hobbiests - criminals only because
> > >they're operating in the wrong bands. So fight crime: convert them to
> > >hams!
> > >My $.02
> > >Merry Christmas to all
> > >KA3DWW
> >
> > Now easier than ever, thanks to the license class restructuring.
> >
> > Stacey, AA7YA
> >
> >
>
>

Outgoing mail is certified Virus Free.

Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.314 / Virus Database: 175 - Release Date: 11/01/02

2351. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 14:26:27 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3gtg7$183cmu$1@ID-124126.news.dfncis.de>
Source record: 149488

Nobody wants filter designers any more. It was all worked out years ago.
Just enter the desired response into a computer program and out come the
circuit and component values.

2352. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 14:43:42 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <AWS68.45462$yi5.4460810@news20.bellglobal.com>
Source record: 149491

"Reg Edwards" reported:
> Nobody wants filter designers any more.
> It was all worked out years ago. Just enter
> the desired response into a computer
> program and out come the circuit and
> component values.

Many years ago I worked on a project that needed a very particular filter response to ensure optimum performance. Since I'm not a 'filter expert' (not even close) we took the problem to a local engineering outfit that had a real filter expert on staff.

We explained exactly what we wanted and the ins and outs (10 minutes). Then the filter expert turned around and turned on his PC. We were out the door in 30 minutes...

2353. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 14:47:14 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <3C5BFCA8.EB035EEC@austininstruments.com>
Source record: 149489
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

John Larkin wrote:
>
> How about by color?
>
> John

Or pore size?

John Fields

2354. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 14:50:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5BFCBB.359C32D8@IEEE.org>
Source record: 149492

Dick Carroll wrote:
>
> CAM wrote:
>
> > Jerry Oxendine wrote:
> > > You may have meant it as a joke, but there are *some* of us who DO use the
> > > MFJ 259 to tune the antenna via a 2-position coax switch. Actually, it
> > > works pretty well as manual tuning goes.
> >
> > Jerry, you have given me an idea. It would be easy to use the voltage
> > driving the SWR meter inside the MFJ259 to remove the voltage from
> > the screwdriver motor - and presto, an autotuner function for a
> > screwdriver. Latch one of two relays with the up/down PB and
> > unlatch it when the SWR voltage inside the MFJ259 falls below
> > a certain value. That's about $10 worth of parts external to
> > the MFJ259.
>
> Why waste a 259 for that? Use a cheapie SWR bridge.

Jerry uses the MFJ259. I use a Daiwa SWR meter. I run the DC forward voltage
to the 'minus' input of an LM339 and the DC reflected voltage to the 'plus'
input of the LM339. The LM339 furnishes a ground to a power relay when the
reflected voltage is high and the power relay furnishes +12vdc to the
screwdriver motor control box. When the reflected voltage falls to a small
fraction of the forward voltage, the LM339 removes power from the relay
which drops out and removes +12vdc from the screwdriver motor. The only
catch is that the operator must know which way to start the screwdriver
motor moving.
--
cheers, CAM http://www.qsl.net/w5dxp

2355. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 14:52:10 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0202020652.4876f5ad@posting.google.com>
Source record: 149490
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Thanks for your responses (especially AH, Greatest Prime, and Roy). I definitely need to review my s-plane charts, as they reveal important patterns. I also know now that filters can have characteristics of more than one classification (such as both Butterworth and Chebyshev). I also have the answer to my original question: I cannot classify filters by inspection alone.

As you can easily tell, I wasn't born knowing filter theory like some individuals. So I have to start somewhere. However, I know that a decent grasp of filter principles is within my reach, because I graduated with a Bachelor's Degree in electrical engineering, and I am familiar with the prerequisite fundamentals (frequency response plots, electric circuit analysis, etc.). Also, ham radio has given me a perspective that no amount of coursework could have.

I hope everyone here is looking forward to an article called "How Ham Radio Made My Career".

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

2356. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 15:12:21 UTC
From: zeus@myth.demon.co.uk
Message-ID: <pvvn5uc6jbsf41l7is6qansffthak20uis@4ax.com>
Source record: 149493
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Where do elliptic filters fit into this series? I suspect right in the middle, being an equi-ripple type thing, and presumably has a horrible phase response. All I remember from doing my MSc in Radio Comms 8 years ago was that they were a swine to design.

Mike

2357. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 15:19:26 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <rh0o5uo99i31jmts849rdci1se7ebpllie@4ax.com>
Source record: 149494

On Sat, 02 Feb 2002 08:50:35 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

>The only
>catch is that the operator must know which way to start the screwdriver
>motor moving.

Another possible catch is that some antennas show multiple nulls for
SWR. How do you know you are on the right one? Perhaps screwdriver
antennas are less susceptible, but my various dipoles at home have a
number of minimums in the HF and low VHF range.

73, Bill W7TI

2358. Re: Cushcraft A50-5S 6 meter ant

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 15:25:33 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <j31o5u4dvusdmu26q91l0purd4sess68g3@4ax.com>
Source record: 149495

On Fri, 01 Feb 2002 20:51:49 -0800, Martin Hibbs <mhibbs@ipeg.com>
wrote:

>Hy-Gain used to include the rope as part of the kit
>in their monobanders. Must be that the traps on a normal tribander
>somehow damp the vibrations.

Hy-Gain also included rope in their TH5MK2 tribanders, at least the one
I had. It was up about five years in Seattle; little ice or snow but
lots of wind and no failures.

Bill, W7TI

2359. Re: How do I classify filters WITHOUT looking at the transfer funct...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 15:35:23 UTC
From: richardharrison@webtv.net
Message-ID: <14583-3C5C073B-15@storefull-111.iap.bryant.webtv.net>
Source record: 149497

Again I am returning from my Saturday ham club breakfast with engineers.
Again I am repeating survey results on Jason`s questions.

This week there was another confirmation that hams usually don`t make it
to graduation as EEs.

Jason`s question about filter characteristics is answered by, job
interviewers rarely ask such questions. Interviewers assume technical
competence from the record. The interviewer wants to know if the job
applicant is someone the company can live with comfortably. Is he a
pleasant dependable person?

There was an exception. If times are tough, the hiring company may be
very selective. They may only look at highest honor graduates. If there
are plenty of these, some may actually dig into technical preparation.
One of our engineers applied to Shell Oil in 1950 and was given a
written test. That is a definite exception and not the rule.

If I were asked for an additional way to classify filters I`d say,
balanced and unbalanced.

Best regards, Richard Harrison, KB5WZI

2360. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 15:39:39 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5C083B.88577015@IEEE.org>
Source record: 149496

Bill Turner wrote:
> Another possible catch is that some antennas show multiple nulls for
> SWR. How do you know you are on the right one? Perhaps screwdriver
> antennas are less susceptible, but my various dipoles at home have a
> number of minimums in the HF and low VHF range.

The similar problem that screwdriver antennas have is confusing
3/4WL with 1/4WL. For instance, when moving from 80m to 10m,
the circuit might find the 3/4WL position. A toggle switch
that temporarily bypasses the relay is a solution. The
operator knows approximately how much of the coil needs to
be exposed for each band.
--
cheers, CAM http://www.qsl.net/w5dxp

2361. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 15:47:11 UTC
From: arrow146@aol.com
Message-ID: <20020202104711.17390.00001806@mb-fy.aol.com>
Source record: 149498

Hello, Bob AD3K
Thanks for your comments.

I would like to make a comment about price.

We also sell a 2 meter 1/4 wave ground plane for $29.
Any Ham should be able to make an antenna that
would work just as well for less than $2.
(SO239 4 hole connector & some Brass wire)
Why do we sell so many of them ?

As for the Adjustable DF Antenna, I doubt very much
if we will sell any to Hams.
This project was originally started because of requests
from the FAA & Search & Rescue.

So far I have a lot time, money & equipment invested in
making these Antennas, and it looks like it's got a ways
to go.
Anyone want to submit a bid for making the baluns for
this antenna ?

73 Al Lowe N0IMW <A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>

>From: Robert Spooner rls19@psu.edu
>Date: Fri, Feb 1, 2002 9:00 AM
>Message-id: <3C5ABB80.88BCA42A@psu.edu>
>
>Al,
>
>I'm not sure the commenters were considering the range of frequencies
>that your antenna can be used for. Compared to a simple antenna
>designed to be tuned and then fixed in the resulting configuration, the
>price is expensive. However, what you have put together is something
>that provides flexibility without the user expending a lot of time to
>design the antenna and put it together. There is always a tension
>between spending time and spending money, and where a ham comes down
>between the end points depends on what things give him the most
>enjoyment in the hobby - in this case design and construction or
>operating.
>
>The questions in my mind are:
>1) How large is the market for a direction finding antenna with that
>range of coverage? Most fox hunts take place on the ham bands, but on
>occasion a source of interference on another frequency needs to be
>found.

>2) For the indended use, is the frequency selectivity produced by tuning
>the antenna necessary or could the same result be gotten with a log
>periodic antenna covering the same range and using the receiver for the
>frequency selectivity. Would a non tunable log periodic antenna be less
>expensive?
>3) Is there a reason why even low-power transmitting is unsuitable?
>Being able to transmit even at a low power level would broaden the
>market.
>
>I agree with the comments about a balun being necessary. If the antenna
>impedance is close to 50 ohms, a ferrite bead choke balun that covers
>the frequency range shouldn't be hard to construct, but will add to the
>cost.
>
>You have come up with an interesting idea. I hope it works out as a
>product for you.
>
>73,
>Bob AD3K

2362. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 15:54:10 UTC
From: Kevin Aylward <kevin@anasoft.co.uk>
Message-ID: <VZT68.18813$sU.2559951@news6-win.server.ntlworld.com>
Source record: 149499
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0202020652.4876f5ad@posting.google.com...
> Thanks for your responses (especially AH, Greatest Prime, and Roy). I
> definitely need to review my s-plane charts, as they reveal important
> patterns. I also know now that filters can have characteristics of
> more than one classification (such as both Butterworth and Chebyshev).
> I also have the answer to my original question: I cannot classify
> filters by inspection alone.
>
> As you can easily tell, I wasn't born knowing filter theory like some
> individuals. So I have to start somewhere. However, I know that a
> decent grasp of filter principles is within my reach, because I
> graduated with a Bachelor's Degree in electrical engineering,

Quite frankly, a bachelors degree does not even guarantee that one is able to
tie their own shoe laces, and I should know, I use slip ons.

Kevin Aylward , Warden of the Kings Ale
kevin@anasoft.co.uk
http://www.anasoft.co.uk - SuperSpice "Seriously...Why pay more?",
GUI xspice, an affordable unlimited component, mixed-mode Windows simulator
with Schematic Capture, waveform display, FFT's and Filter Design.
Opinions of my employer are not necessarily indicative of my own
Oscillators don't, amplifiers do"

2363. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 16:11:34 UTC
From: arrow146@aol.com
Message-ID: <20020202111134.17390.00001814@mb-fy.aol.com>
Source record: 149500

>J. Harvey" JM001.Harvey@sympatico.ca
Wrote

>...six $2 telescopic whip antennas with some pipe, some very nice clamps,
>and a bit of coax. The "design" would be on the accompanying charts -
>making use of the ruler cleverly hidden in the handle.

Correct.

>Obviously, the prime market is for biologists (etc.) tracking animal radio
>collars. THAT market will not notice the $139 price.

Actualy we make fixed frequency hand held Yagi's for that.
A lot of the Animal Collars are on about 218 MHz.

>The ham market will be a bit tougher... ...we all know what telescopic whips
>actually cost. :-)

Correct again. Although the Ham market is a very big part of
our business. We do make products for other things.
Like the FAA uses our 126-3 Handheld Yagi's they also
use DF Loop antennas from us. 121.5-3 for ELT's.

Thanks to all for your comments.
73 Al Lowe N0IMW
<A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>

2364. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 16:33:37 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <RDqhWRAhTBX8EwDN@jmwa.demon.co.uk>
Source record: 149509
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that John Fields <jfields@austininstrum
ents.com> wrote (in <3C5BFCA8.EB035EEC@austininstruments.com>) about
'How do I classify filters WITHOUT looking at the transfer function?',
on Sat, 2 Feb 2002:
>John Larkin wrote:
>>
>> How about by color?
>>
>> John
>
>---
>Or pore size?
>---
>
I'm sure that wouldn't suit the OP; he probably wants good size filters.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
After swimming across the Hellespont, I felt like a Hero.
PLEASE do NOT copy news posts to me by E-MAIL!

2365. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 16:35:02 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <XzPgKUA2UBX8Ewhd@jmwa.demon.co.uk>
Source record: 149510
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Roy Lewallen <w7el@eznec.com>
wrote (in <3C5BBE19.80B6A0F4@eznec.com>) about 'How do I classify
filters WITHOUT looking at the transfer function?', on Sat, 2 Feb 2002:

>Butterworth and Chebyshev filters are classified by the polynomials
>making up their Laplace transformed transfer functions.

A serious response to a BSQ. How dull! (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
After swimming across the Hellespont, I felt like a Hero.
PLEASE do NOT copy news posts to me by E-MAIL!

2366. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 16:41:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <bTFjieAcaBX8Ewio@jmwa.demon.co.uk>
Source record: 149511
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Jason Hsu <jason_hsu@my-deja.com>
wrote (in <f7d9a152.0202020652.4876f5ad@posting.google.com>) about 'How
do I classify filters WITHOUT looking at the transfer function?', on
Sat, 2 Feb 2002:

>I also know now that filters can have characteristics of
>more than one classification (such as both Butterworth and Chebyshev).

Do you? Who told you that?

> I also have the answer to my original question: I cannot classify
>filters by inspection alone.

By inspecting WHAT? You CAN classify them by inspecting the frequency
response curves. It is rather easy to do that for Butterworth, Bessel
and Chebyshev types, but it is difficult for some other types.
>
>As you can easily tell, I wasn't born knowing filter theory like some
>individuals.

Who was, FGS?
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
After swimming across the Hellespont, I felt like a Hero.
PLEASE do NOT copy news posts to me by E-MAIL!

2367. Re: Earth Anchors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 16:53:43 UTC
From: richardharrison@webtv.net
Message-ID: <14580-3C5C1997-138@storefull-111.iap.bryant.webtv.net>
Source record: 149501

Jerry, W8GND wrote:
"Would weld up a neato plate and put a 30 foot tower on the thing and use about 4 big anchors."

Fine. The wind will try to overturn your tower. You need to pick the maximum wind speed to be tolerated and sum the loads times their distances from the fulcrum that the appurtenances and the tower make. The forces on the tower will act like a claw-hammer pulling a nail. You need to make a summation of the moments. The moment resisting the overturn equals equals the overturning moment, as long as the system is in equilibrium as it remains until something gives.

Bes regard, Richard Harrison, KB5WZI

2368. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 17:20:00 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <to7o5us1oneroujj6778l3uhmhcuf8hg81@4ax.com>
Source record: 149502

What I did was to carefully tune my screwdriver with an MFJ-259 then
mark those spots with plastic labels (P-Touch). I can see the tapes
in my side mirror so I know if the antenna is trying to find one of
the other null points.

Dick - W6CCD

On Sat, 02 Feb 2002 07:19:26 -0800, Bill Turner <w7ti@dslextreme.com>
wrote:

>On Sat, 02 Feb 2002 08:50:35 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:
>
>>The only
>>catch is that the operator must know which way to start the screwdriver
>>motor moving.
>
>____
>
>Another possible catch is that some antennas show multiple nulls for
>SWR. How do you know you are on the right one? Perhaps screwdriver
>antennas are less susceptible, but my various dipoles at home have a
>number of minimums in the HF and low VHF range.
>
>73, Bill W7TI

2369. Cushcraft A50-5S 6 meter ant

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 17:57:01 UTC
From: don <country@johnstown.net>
Message-ID: <3c5ad683$0$1584$f5f63664@news.tdin.com>
Source record: 149425

I have had a Cushcraft A50-5s 5 element 6 meter antenna installed on a 40' tower for about 12-14 months...yesterday I noticed the rear director had broken off and was laying on the ground. There were no signs of bending...looks like metal fatige. It did not snap at the mounting bolt location, but rather about a 1/2" past it.
Has anyone else had this type of problem with Cushcraft antennas???
Has Cushcrafts quality dipped to this level??

I called Cushcraft and presented the problem...the reponse from the Tech Support Dept was..."we have not seen any problems"

Don WB8PJE
tuffy@johnstown.net

2370. Re: Earth Anchors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 18:02:25 UTC
From: mcduffie@xactcom.net
Message-ID: <dp8o5u4rnh41uelttu55tornmhe0nelo8i@4ax.com>
Source record: 149504

On Sat, 02 Feb 2002 12:37:53 GMT, jwodell@provide.net (Jerry W. O'Dell) wrote:

> I hate digging, and thought of earth anchors. My soil is
> the hardest clay I've ever seen. Would weld up neato
> plate and put about a 30 foot tower on the thing, and
> use about 4 big anchors, the kind that take 2 tons. No guys.

You didn't say what kind of tower you were wanting to put up. Is it designed to be self supporting? If not, it won't work more than short term. The tower will stay up quite awhile, but the sections will wear out the holes where they go together over time.

Slightly off topic, but loosely related to your question...

Personal experiences:

I took over maintenance on a site where Rohn 55 was used to support a television translator antenna system. There are three yagis on a mast at the top of the unguyed 50+ foot tower. Ten years ago, when I first got the site, I climbed the tower with ease. I noted some sections were loose and wobbled a bit, making me nervous. The owner didn't want to do anything about it. The site had been there since the late 60s, but I'm not sure how long that particular tower had been up. Last year, I told them I wouldn't climb it again until it was guyed. We had the power company put in three screw anchors and guyed it with one set of guys a few feet below the top. It will last a long time that way. Winds at that site would easily reach 60-75MPH.

At another site, there is a very light duty self supporting 40' tower (tapered). It has two wire dipole-like HF antennas on it and one 15' vhf omni directional gain antenna on top. The tower is sitting on 3 SMALL screw-in anchors. The disks on the anchors are about 2.5-3" diameter, and the length is less than two feet. This was meant to be a temporary installation when it was put in almost twelve years ago, and it is still there. There are three very light ropes on it to back up the anchors, but they rarely come into play. Some help is provided by the dipoles.

My point is, it may not be good practice or good engineering, but you can get by with a lot of things if you are willing to take the risk and are aware that it won't last forever. By the way, the second site is next to my house. That same tower held my TH-4, and later my KT-34XA for several years at another location. It did pull out the anchors during one VERY strong wind with the XA on top of it. The dipoles were anchored well enough that it held up at a very odd angle until I woke up

and discovered it. It had rained a lot and the ground got soggy. I wouldn't think of doing that now. Hence, the newer tower shown on my "tower" web page.

Gary

--
There is no x in my ISPs domain name.

2371. ARNewsline 1277 - Feb 2 2002

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 18:20:28 UTC
From: radionews@aol.com
Message-ID: <20020202132028.28179.00001324@mb-ba.aol.com>
Source record: 149505

Amateur Radio Newsline™ Report 1277 – February 1, 2002

Amateur Radio Newsline report number 1277 with a release date of Friday, February 1st, 2002 to follow in 5-4-3-2-1.

The following is a Q-S-T.

The President of the United States speaks to hams in Florida and is ham radio seeing a second Solar Max? These stoies are first on amateur Radio Newsline report number 1277 coming your way right now.

(Billboard Cart Here)

**

BREAKING NEWS: PRESIDENT BUSH COMES TO HAM RADIO

The President of the United States has come to ham radio. Bill Burnett, KT4SB, has the details:

--

President George W. Bush has taken to the ham radio airwaves. This, to thank the Florida Amateur Radio community for being ready to serve the public when it is needed.

The President’s comments were made during a stopover the morning of January 31st at the Volusia County Fire Services and Training Center near Daytona. Around 9:15 AM Eastern Time, President Bush checked in to the Northern Florida Amateur Radio Emergency Service Net on 3.950 MHz using a portable station set up John Schmidt, AF4PU. Then the President made these remarks to the 40 or so stations listening to the net:

--

President George W. Bush:

"I want to thank all the volunteers who help make sure that Florida is prepared for any kind of emergency. I also want to assure you that your Federal government is doing everything we can to make sure that there is not an emergency--starting with unleashing the mighty U.S. military overseas to bring evil ones to justice. But should there be a need for a response, I want to thank you all for helping our communities be prepared. And finally, I want to tell you--we are lucky to be Americans and may God continue to bless this great land of ours. Thank you very much."

--

Needless to say the net members were delighted to have the President of the United States address them. More important, hams nationwide can now be sure that President Bush knows that Amateur Radio operators are ready to serve whenever he, and the nation, needs to call on them for help.

In Miami, I'm Bill Burnett, KT4SB, reporting for the Amateur Radio Newsline.

--

The complete story is on the web at
http://firstcoastcommunity.jacksonville.com/northfloridaamateurradiosocietynofars (Tnx NU4F, CQ Magazine)

**

HAM RADIO SCIENCE: TWO SOLAR MAXIMUMS THIS SEASON

In case you are wondering why the current solar cycle is still providing such amazing VHF and UHF DX, one researcher may have the answer. He says that the current cycle appears to be having a second peak and that this is really not very unusual. Henry Feinberg, K2SSQ, looks at the scientist and his latest data.

--

The most recent and ongoing Solar Maximum -- or Solar Max -- theoretically crested in mid-2000. Sunspot counts were higher than they had been in 10 years, and solar activity was intense. One remarkable eruption on July 14, 2000 caused brilliant auroras as far south as Texas. But after that, sunspot counts slowly declined and the Sun was relatively quiet for month-long stretches. Most scientists said that the Solar Max was over. But was it?

Now, as 2002 unfolds, the National Aeronautics and Space Administrations solar foorecasters say that it looks as if the Solar Max is back with us again. The Sun is again peppered with spots, eruptions are frequent and hams notice that the VHF DX keeps rolling in.

Why is this happening? Well David Hathaway, a solar physicist at the NASA Marshall Space Flight Center in Huntsville Alabama has one theory. Hathaway says that the current solar cycle appears to be double-peaked, and the second peak has arrived.

--
Hathaway Audio Here
In-Q: We have seen other cycles...
Out-Q: ...define this maximum
--

Scientists track solar cycles by counting sunspots and Hathaway is an expert forecaster of sunspot numbers. He says that sunspot counts peaked in 2000 some months earlier than we expected. He says that the subsequent dip toward solar minimum seemed premature and before long, sunspot counts reversed course and began to climb toward a second maximum that now appears to be only a few percent smaller than the first.

--
Hathaway Audio Here
In-Q: Its a bigger than average...
Out-Q: ...smaler than 19, 21 and 22.
--

Hathaway notes that there is a widespread misconception that solar activity varies every eleven years like a pure sinusoidal wave. It isn't. He says that solar activity is chaotic and there can be more than one peak in any given period. Translated for ham radio: Enjoy the VHF DX while you can.

For the Amateur Radio Newsline, Henry Feinberg, K2SSQ.

--

Hathaway says that the Solar Max eleven years ago was much the same as this one. The first peak arrived in mid-1989 followed by a smaller maximum in early 1991. And if you are interested in hearing more about this interesting phenomena from David Hathaway its as easy as taking your web browser over to www.rainreport.com. Or you can call on the phone to area code 847-827-7246. (NASA, RAIN)

**

HAM RADIO IN SPACE: HF ANTENNA INSTALLED ON ISS

High Frequency ham radio operations from the International Space Station could be on the not to distant horizon. This, after a successful space walk on January 25th to install another antenna on the orbiting outpost. Amateur Radio Newsline's Roy Neal, K-6-D-U-E, has the details.

--

The spacewalkers have had another good day in space. On Friday the 25th of January, Cosmonaut Yuri Onufrienko, RK3DUO and Astronaut Dan Bursch, KD5PNU, successfully mounted a second ham radio antenna near a docking port amidships on the International Space Station. It is made of flexible tape and is similar to but longer than another antenna installed on January 14th. That one tunes both VHF and UHF frequencies. The new antenna will tune HF frequencies.

ARISS Board Chairman Fran Bauer, KA3HDO, says it definitely will work on ten meters and may even be made to work on 15 and 20 meters. BUT right now there is no gear on board to handle those frequencies. Experiments using the lower frequencies are on the list of futures for ARISS but no timetable has been assigned to design and build them.

Owen Garriott, W5LFL, the first man to operate ham equipment in space, once prophesied that a five watt transmitter in orbit might well be heard simultaneously world wide. The great number of hams with good stations on the lower frequencies also makes them enticing to ARISS. It's a safe bet that serious consideration now is being given to expedite such a project. Once a station is sent up, the antenna will be waiting.

The new antenna is the second of four to be installed on board the space station. No timetable has been announced for the final installation. All of

these amateur antennas were built by Italy, tested and qualified in the US, to fit ports built by Russia, as befits the international nature of the ISS.

For the Amateur Radio Newsline, Roy Neal, K6DUE

--

Installation of the 2.5-meter long flexible tape antenna involved not only the mechanical deployment but routing cables and establishing the R-F connection as well. (ARISS)

**

HAM RADIO IN SPACE: THAT ANNOYING SATELLITE IS OFF 2 METERS

An annoying mystery satellite transmitting AFSK, frequency modulated Morse on 144.100 MHz for several days has been identified. It turned out to be a signal from the MAROC-TUBSAT satellite. This is an Earth-sensing spacecraft owned by a Moroccan government agency called he Royal Center for Remote Sensing. It was placed into a polar orbit by a Russian launcher on December 10, 2001.

As soon as he learned of the interference to amateur operations, Professor Udo Renner of the Center had the 144.100 MHz transmitter turned off. He then notified AMSAT Germany that TUBSAT was no longer on two meters.

But TUBSAT also has a downlink at 436.075 MHz. This system is only busy over North Africa and Europe and only when the control stations in Rabat and Berlin are activated. It has not been heard elsewhere in the world. (AMSAT-NA)

**

Break 1

From the United States of America, we are the Amateur Radio Newsline, heard on bulletin stations around the world including the Pentucket Radio Club repeater serving Groveland Massachusetts

(5 sec pause here)

**

SPECTRUM PRESERVATION: ARRL SAYS IT WILL FIGHT TO KEEP RFID OFF 70 CM

The ARRL says that it will go all the way to protect the 70 centimeter ham band from a threat brought by commercial interests. At issue is a plan from SAVI Technology and already tentatively agreed to by the FCC to deploy unlicensed transient R-F identification tag transmitters operating between 425 and 435 MHz. These tags run at much higher field strengths and duty cycles than Part 15 rules now permit.

According to a League bulletin issued on January 29th, ARRL officials have already met with members of the FCC staff as part of the League's effort to stave off a band threat. The bulletin says that General Counsel Chris Imlay, W3KD, and ARRL Technical Relations Manager Paul Rinaldo, W4RI, delivered an ex parte presentation to FCC Office of Engineering and Technology staffers January

14th outlining the opposition of the ham radio community. (ARRL)

**

FCC: CHAIRMAN POWELL HOME AFTER HOSPITAL TESTS

Federal Communications Commission Chairman Michael Powell was discharged from the hospital on Friday January 25th. This, after a two-night stay in the to undergo tests because of a lingering stomach bug.

Stomach discomfort caused him to cancel appearances at the Consumer Electronics Show in Las Vegas on January 8th and again at the annual conference of the National Association of Television Program Executives on Wednesday January 23rd. Doctors advised precautionary tests that required overnight stays at Walter Reed Army Medical Center in suburban Washington. (Published news reports)

**

ENFORCEMENT: THAT SONG WAS NOT AS BAD AS WE THOUGHT

The Federal Communications Commission has dropped an indecency fine against a Colorado radio station. KKMG FM of Colorado Springs had been fined seven-thousand dollars for airing the edited version of Eminem's "The Real Slim Shady." This, after a listener wrote the regulatory agency to complain.

At the time the fine was issued federal regulators said the edited version still included some expletives and references to violence and graphic sex. But the FCC now says it has reconsidered. It now says that the lyrics in the edited version didn't violate its rules by being "patently offensive." (FCC)

**

RESCUE RADIO: BRAZIL RADIO OPERATORS HELP IN POWER OUTAGE CRISIS

A major electricity blackout hit at least five Brazilian states on January 21st, and it was hobby radio enthusiasts that let people know about it.

The blackout, which began at 1:30 p.m., hit hardest in the industrial southeast and the major cities of Sao Paulo, Belo Horizonte, Rio De Janeiro, Goiania, Vitoria and the capital, Brasilia.

According to news reports, Brazil’s National Energy Agency blamed the outage on transmission line failures. The same news report credited Brazilian hobby radio operators as informing authorities that subways in Rio De Janero and Sao Paulo were halted and that traffic lights were out snarling commuters in several areas.

The outage was caused by a failure at the Itaipu hydroelectric station in southwestern Brazil. A power-line failure caused thirteen of the dam's eighteen turbines to stop, cutting off nearly 20 percent of the country's energy. Power was restored about three hours later. The news story did not identify the radio operators as being hams. (Various shortwave news reports)

**

RESCUE RADIO: NEW INTER-JURISDICTION RADIO SYSTEMS BEING INTRODUCED

Santa Clara County California, police, fire and emergency medical personnel have never been able to communicate with one another at the scene of a major disaster. This is because each agency uses a separate radio system. That is expected to change this year.

Santa Clara County will be leading the nation in using new digital radio technology to solve the inter-agency communications problem. The new system will allow up to eighteen participating jurisdictions in any county to talk to one another instantly.

By way of example, once the system is up and running, officers involved in one of California's famed high-speed car chase will be able to talk directly to police in the neighboring jurisdiction as the suspect approaches that town. They won't have to switch channels or go through dispatch centers. This means less time wasted and the probability that lives will be saved.

While Santa Clara county is at the head of the pack in adopting this new digital communications technology, the same news reports say that and Washington, D-C is not far behind. (Cal-State Info.)

**

PUBLIC RELATIONS: A CHEAP SATELLITE

A Cheap Satellite is the name of an Associated Press item that highlighted the work of the faculty and students at the United States Naval Academy in the development and launch of the P C Sat ham radio satellite. The story tells how the twenty-five pound bird was built using off the shelf products including a tape measure for its antenna and rechargeable double A cell batteries for power.

The story was written by Tom Stuckey and moved on the wire on Wednesday January 23rd. It noted that PCSat, was the 44th amateur satellite put in orbit. It is one of more than a dozen built by university students around the world. (VHF Reflector)

**

CONVENTIONS & HAMFESTS: ORLANDO HAMCATION WEAK SIGNAL FORUM

The Orlando HamCation will host its first ever Weak Signal VHF and UHF forum. Beginning at 2 p.m. on Saturday Ferbruary 9th, the one hour session will be moderated by N2CEI, of Down East Microwave. Also, Tom Haddon, K5VH, will be on hand to motivate more Florida hams to become active on the Microwave bands.

If you are in the Orlando Florida area on February 8th to the 10th drop in on the Orlando Hamcation. For more details and or advance reservations, go to oarc.org/hamcat.html on the World Wide Web (W2BZY)

**

CONVENTIONS & HAMFESTS: DATE CHANGE FOR RADIOFEST 2002

Brian Broggie, W6FVI, asks that we pass along a date change for RadioFest 2002 sponsored by the Naval Post Graduate School Amateur Radio Club in Monterey California. The new date is February 23rd. More information is in cyberspace at k6ly.org/radiofest. (W6FVI)

**

BREAK 2

Here when you need us 52 weeks a year. We are the Amateur Radio Newsline, with links to the world from our only official website at www .arnewsline.org.

(5 sec pause here)

**

HAM RADIO SCHOLARSHIPS: THE DARA SCHOLARSHIPS

The Dayton Amateur Radio Association is one of three ham radio organizations seeking nominations for its scholarship program for the 2002-2003 academic year. According to DARA, applicants must be graduating high school seniors in 2002 and hold any class of an FCC issued mateur Radio license. The scholarship awards run up to $2000, as determined by the scholarship committee. Money must be used toward tuition at an institution of higher education.

To obtain an application, send a self-addressed, stamped envelope to the Dayton Amateur Radio Association Scholarship Program, 9873 Lower Valley Pike, Medway, Ohio 45341. You can also obtain an application by e-mail to n8emo1@msn.com. Completed applications must be postmarked no latter than June 1st to be eligible for this years scholarship program. (DARA)

**

HAM RADIO SCHOLARSHIPS: THE FOUNDATION FOR AMATEUR RADIO

Another organization offering scholarships to hams id the Foundation For Amateur Radio. The Washington, D.C. area group will administer sixty-two scholarships for the academic year running from 2002 through 2003. Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. The awards range from $500 to $2500 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs. Additional information and an application form may be requested by letter or QSL card to the FAR Scholarships, Post Office Box 831, Riverdale, Maryland, 20738. (Foundation For Amateur Radio)

**

INTERNATIONAL - SOUTH AFRICA: SA RADIO AMATEURS OF THE YEAR NAMED

Turning to international news, South Africa is honoring two of its own as that nations Radio Amateurs of the Year. Q-News Graham Kemp, VK4BB, brings us the details:

--
The South African Amateur Radio Development Trust have announced the winners of the 2001 Siemens Radio Amateur of the Year Award. This award is made annually to a Radio Amateur who has made a major contribution to the Amateur Service either on a technical or development basis in ZS land.

The award has been bestowed jointly on Bradley Phillips, ZS5BP, and Garth Wilson, ZR6CY. ZS5BP for his work on the introduction of Iphone and the development of the Internet Radio Linked project. ZR6CY for his continuous efforts to develop communication skills amongst the youth. He has to date presented no less than 80 camps for Voortrekkers to learn the Morse code and basic communication skills.

For Q-News Australia, I'm Graham Kemp, VK4BB, reporting for the Amateur Radio Newsline.

--

This award is considered as South Africa's equivalent to the Dayton awards presented here in the United States. (SARL News, Q-News)

**
INTERNATIONAL - UK: KENWOOD TROPHY AWARDED TO G3XWH

Meantime, over in the U-K, Richard Horton, G3XWH, who chaired the RSGB's Future Licensing and Examination Forum has been awarded the Kenwood Trophy. This, for his significant contribution to training and development in amateur radio.

Horton recently retired from the Radio Society of Great Britain's Board where he was responsible for amateur radio development. His committee was responsible for much of the work that went into the creation of the new U-K Foundation Class license. (GB2RS)

**
DX

In DX, DJ4KW and DK9GG are currently active from Belize as V31YN and V31GW, respectively, through early February. Activity is on CW, RTTY and PSK 31. (RSGB)

And IN3QBR will be active from Vientiane as XW3QBR until the 31st of July. He will be joined, from the 20th of April until the 10th of May by IN3ZNR operating as XW3ZNR. (OPDX)

And R1ANF began operations as CE9 slash R1ANF on the 29th of December from a Chilean base in the South Shetland Islands. He is active on 10 to 28MHz with 100 watts to an R6000 vertical. For all three QSL as directed on the air. (RSGB)

**
THAT FINAL ITEM: CELEBRATING THE LIFE OF ED CLEGG W2LOY

And finally this week, if you were on the VHF bands in the 50's, 60's and 70's then the name Clegg Labs touched your ham radio operations. And as we hear in

this report, the family of the man behind the gear is inviting you to help celebrate his life.

--

Even if you did not own any Clegg gear, the chances are that you talked to someone on the air who did. Whether it was the top of the line Interceptor receiver and Zeus transmitter or the entry level 99'er transceiver, it was easy to spot a Clegg signal by its almost overpowering modulation that seemed just right for the R-F carrier it was on.

Almost every product that carried the Clegg label was designed by the company's founder Edward T. Clegg, W2LOY. When he moved the company to Pennsylvania in the 1970's, Ed took the call W3LOY. Likewise, after retiring to Ohio he traded the 3 for an 8, but kept the famed L-O-Y suffix.

And regardless of the call area, Ed Clegg was first and foremost a communications designer well ahead of his time. Even more important, he was a positive influence on just about everyone with whom he came in contact.

Ed Clegg left us last September at age 80. Now, his wife Martie will be hosting a gathering in March near the Clegg home in Lancaster Ohio. The purpose is to celebrate the life of Edward T. Clegg. And they are asking you to help.

Martie, her daughter Linda and Linda's husband Rob MacGuffie, K2HZN, are asking anyone who knew Ed to share in the celebration. They know that most of you won't be able to be in Lancaster Ohio on March 30th. But some of you do have memories, stories, photos and other Ed Clegg memorabilia that would help to make this day even more unforgettable.

If you have something to share, please contact Linda and Rob before the end of February. Their address is 70 Province Road, Gilmanton New Hampshire with a zipcode of 03237. Rob's cyperspace address is K2HZN@yahooo.com.

For the Amateur Radio Newsline, I’m Cathy Anno, KB0FDU.

--

By the way, a number of us here at the Amateur Radio Newsline began our ham radio careers using gear designed by Ed Clegg. In fact, our producer Bill Pasternak, WA6ITF, got to know Ed while Bill was still a teenager operating A-M on the 6 meter band. (Clegg family)

**

NEWSCAST CLOSE

With thanks to Alan Labs, Amateur News Weekly, AMSAT, the ARRL, the CGC Communicator, CQ Magazine, the FCC, the Ohio Penn DX Bulletin, Radio Netherlands, Rain, the RSGB and Australia's Q-News, that's all from the Amateur Radio Newsline(tm). Our e-mail address is newsline @arnewsline.org. More information is available at Amateur Radio Newsline's(tm) only official website located at www.arnewsline.org. You can also write to us or support us at

Amateur Radio Newsline(tm), P.O. Box 660937, Arcadia, California 91066.

For now, with Bill Pasternak, WA6ITF, at the editors desk, I'm _____
saying welcome to the year 2002, 73, and we thank you for listening." Amateur
Radio Newsline(tm) is Copyright 2002. All rights reserved.

2372. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 18:24:44 UTC
From: John Larkin <jjlarkin@highlandSNIPTHISTechnology.com>
Message-ID: <zi5cPEThSNe2YZpEAlaTxruu0UkU@4ax.com>
Source record: 149506
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Sat, 02 Feb 2002 14:47:14 GMT, John Fields
<jfields@austininstruments.com> wrote:

>John Larkin wrote:
>>
>> How about by color?
>>
>> John
>
>---
>Or pore size?
>---
>
>John Fields

Or the size of coffee cone they fit?

John

2373. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 18:29:13 UTC
From: John Larkin <jjlarkin@highlandSNIPTHISTechnology.com>
Message-ID: <ni9cPN9c9laGB1XRrYjWPqnUC6d0@4ax.com>
Source record: 149507
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Sat, 2 Feb 2002 15:54:10 -0000, "Kevin Aylward"
<kevin@anasoft.co.uk> wrote:

>Quite frankly, a bachelors degree does not even guarantee that one is able to
>tie their own shoe laces, and I should know, I use slip ons.
>
>Kevin Aylward , Warden of the Kings Ale

Velcro rules! Thus I am very concerned about the K-mart bankrupcy.

John

2374. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 18:31:58 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3havh$p31$1@slb7.atl.mindspring.net>
Source record: 149508
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Jason:

To paraphrase Marvin Minsky... "An ounce of perspective is worth 100 points of IQ".

If you really wanna be a filter expert, ya gotta look into the "Characteristic Function" of filters.
The characteristic function through "Feldtkeller's Equation" completely classifies and characterizes
almost all practical filters. How do I find out about the "characteristic function" you ask?

Below here's a few quick references on practical filter design, just to get you started...

Shoudn't take you more than a weekend or so to read em all and them summarize them back to
us here on the NG so that we can all become experts as well.

The classic treatise on the whole design methodology of filters is:

1. Rudy Saal, and E. Ulbrich, "On the Design of Filters by Synthesis", IRE Trans., Vol CT-5, pp. 284-327, Dec. 1958.

A neat round up of the most amazing history of this field by one of the "greats" is:

2. Anatoly I. Zverev, "The Golden Anniversary of Electric Wave Filters", IEEE Spectrum, Vol. 3, pp. 129 - 131, March 1966.

Zverev also has published an extensive tabulation of filters by their element values:

3. Anatoly I. Zverev, "Handbook of Filter Synthesis", John Wiley, NewYork, 1967.

For an extensive tabulation of all kinds of filters by their mathematical parameters, poles
and zeros, Amax, Amin, type, etc... complete with graphs/nomographs and other design aids.

4. Erich Christian and Egon Eisenmann, "Filter Design Tables and Graphs", John Wiley, New York, 1988.

For devilishly simple explicit formulae for elements of LC ladder filters, and an amazing
background on their derivation, by such experts as Bennett, Saraga,

Takahashi, et al.
See Weinberg below, pp. 651-659, there is *amazing* stuff in there for a "wanna be"
filter design expert.

As George Strait says in that song, "Write this down"... heh, heh... put those explicit
formulae on one of your wife's recipe cards and keep them in your shirt pocket, for
cribbing during the job interview tests!

5. Louis Weinberg, "Network Analysis and Synthesis", McGraw-Hill, 1962.

For a lot of very high level practical stuff on filter design, including complete analysis
programs in Fortran up to and including filters with "imaginary resistors" and discussions
of various transformations to get "nice" element value ranges, some neat stuff on
crystal filters, and more tabulations see...

6. DeVerl S. Humphreys, "The Analyisis, Design and Synthesis of Electrical Filters", Prentice-Hall, 1970.

And last but not least for the "best" practical explanation of all, "heh, heh", see...

7. Adel S. Sedra, and Peter O. Brackett, "Filter Theory and Design: Active and Passive", Matrix Publishers, Champaign, 1978.

Jason, my boy...

Enjoy! Shouldn't take you more than a fortnight to master those few references.

Hope to see you "active" in the filter design field in a couple of more years...

--Peter K1PO

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0202020652.4876f5ad@posting.google.com...
> Thanks for your responses (especially AH, Greatest Prime, and Roy). I
> definitely need to review my s-plane charts, as they reveal important
> patterns. I also know now that filters can have characteristics of
> more than one classification (such as both Butterworth and Chebyshev).
> I also have the answer to my original question: I cannot classify
> filters by inspection alone.
>
> As you can easily tell, I wasn't born knowing filter theory like some
> individuals. So I have to start somewhere. However, I know that a
> decent grasp of filter principles is within my reach, because I
> graduated with a Bachelor's Degree in electrical engineering, and I am
> familiar with the prerequisite fundamentals (frequency response plots,

> electric circuit analysis, etc.). Also, ham radio has given me a
> perspective that no amount of coursework could have.
>
> I hope everyone here is looking forward to an article called "How Ham
> Radio Made My Career".
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

2375. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 18:39:54 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <5F3aoEA6JDX8Ewmv@invest.fsbusiness.co.uk>
Source record: 149390
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Wes,

>http://users.triconet.org/wesandlinda/w7uvr.jpg

No good saying "Right Turn Clyde" in that rascal.

You cannot see out the window!

Phil G4ZOW

2376. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 19:09:25 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <pBrPGpAIlDX8Ewky@jmwa.demon.co.uk>
Source record: 149512
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Kevin Aylward
<kevin@anasoft.co.uk> wrote (in <VZT68.18813$sU.2559951@news6-win.server
.ntlworld.com>) about 'How do I classify filters WITHOUT looking at the
transfer function?', on Sat, 2 Feb 2002:
>Quite frankly, a bachelors degree does not even guarantee that one is able to
>tie their own shoe laces, and I should know, I use slip ons.

Same here, but I explain it differently; you need a bachelor's degree to
realise that shoe laces are a quite unnecessary complication in
life.(;-)
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
After swimming across the Hellespont, I felt like a Hero.
PLEASE do NOT copy news posts to me by E-MAIL!

2377. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 21:57:12 UTC
From: n3ab@fast.net
Message-ID: <3c5e5f76.14324900@news.fast.net>
Source record: 149513
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

On Sat, 2 Feb 2002 05:01:26 -0500, "Malcontent" <Anon@Anon.com> wrote:

>
>

<SNIP>

>reason that I hesitate taking the written test for Extra. It seems that the
>Extras resent those of us that test "up" to Extra....after all, they earned
>their ticket the hard way and they see us newbie Extras as interlopers.
>They feel that I should not be an Extra since my 13 wpm did not meet the
>criteria.

I've been a ham since 1968 and had my Extra since '74, so using your terminology, I took the tests "the hard way". I resent no one who enters our hobby no matter how he or she took any tests. And I do not consider a "newbie Extra" (your terminology) as an "interloper". Please don't wrongly judge many of us who have been in the hobby most of our lives and are happy to see ham radio thrive. Your note indicates that you are the one who is biased. We all share a common hobby, but sometimes I wonder.....

John N3AB

2378. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 22:04:08 UTC
From: kb0pyo <kb0pyo@redred.com>
Message-ID: <3C5C6258.C30DB6C5@redred.com>
Source record: 149514
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna

rec.radio.swap deleted from reply, and this has what to do with buying
or selling radios?

George wrote:
>
> Exactly, the more stupid pathetic people like this S Hanrahan keeps on
> whining and moaning the more the cb'rs are going to do it. Just to annoy the
> Pillock
>
> --
> ***The Sorcerer***
> remove Spam for reply
>
> "Stahr" <w6nyc(remove this to email)@earthlink.net> wrote in message
> news:LAG68.100$Hb6.14339@newsread1.prod.itd.earthlink.net...
> > Do we really have to go through all this CRAP again????????
> >
> > Can't there be at least a month between these stupid posts?
> >
> > Dennis
> >
> >
> > "S. Hanrahan" <2aa7ya@remove4spam.nemontel.net> wrote in message
> > news:3c5af818.16182201@isp-west.usenetserver.com...
> > > On Fri, 21 Dec 2001 09:52:04 -0500, OldBiker <vito@crosslink.net>
> > > wrote:
> > >
> > > >Great! If we could get the rest of them to do the same we'd have mucho
> > > >more political power.
> > > >
> > > >I invite anyone with a wide-band receive rig to listen on the freq's
> > > >just above CB where the "Hi-banders" congregate. I did, and as far as I
> > > >can tell, these are serious CB hobbiests - criminals only because
> > > >they're operating in the wrong bands. So fight crime: convert them to
> > > >hams!
> > > >My $.02
> > > >Merry Christmas to all
> > > >KA3DWW
> > >
> > > Now easier than ever, thanks to the license class restructuring.
> > >
> > > Stacey, AA7YA
> > >

> > >
> >
> >
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.314 / Virus Database: 175 - Release Date: 11/01/02

2379. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 22:15:25 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <3C5C654C.126450E4@austininstruments.com>
Source record: 149515
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

John Woodgate wrote:

> Same here, but I explain it differently; you need a bachelor's degree to
> realise that shoe laces are a quite unnecessary complication in
> life.(;-)

As is a bachelor's degree!

John Fields
Professional circuit designer

2380. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 22:55:25 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C5C6E5D.680BBC71@coqui.net>
Source record: 149516
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna

JRS wrote:
>
> On Sat, 2 Feb 2002 05:01:26 -0500, "Malcontent" <Anon@Anon.com> wrote:
>
> > >
> > >
>
> <SNIP>
>
> >reason that I hesitate taking the written test for Extra. It seems that the
> >Extras resent those of us that test "up" to Extra....after all, they earned
> >their ticket the hard way and they see us newbie Extras as interlopers.
> >They feel that I should not be an Extra since my 13 wpm did not meet the
> >criteria.
>
> I've been a ham since 1968 and had my Extra since '74, so using your
> terminology, I took the tests "the hard way". I resent no one who
> enters our hobby no matter how he or she took any tests. And I do not
> consider a "newbie Extra" (your terminology) as an "interloper".
> Please don't wrongly judge many of us who have been in the hobby most
> of our lives and are happy to see ham radio thrive. Your note
> indicates that you are the one who is biased. We all share a common
> hobby, but sometimes I wonder.....
>
> John N3AB

John,
I'm about 2-3 years behind you in Novice and Extra. When I got my Extra
they were doing the multiple choice code test at a Hamfest instead of
solid-copy under the watchful eye of the FCC-marm in the Atlanta office,
a 5 hour drive away (or 5 days if you had to walk barefoot in the snow
carrying a load of firewood). The written test had been 'watered down'
to where it was easier than my Advanced. You'll probably recall that
that Extra was considered 'cheapened' at the time. And there was a time
when I wouldn't be caught dead with one of those newbie calls like I
have now.
Yes indeed, these little arguments fade with time. I don't think ham
radio is in danger of being overrun by people who aren't interested and
just get a license or upgrade because they are bored that day.

-Bill WX4A

2381. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-02 23:26:27 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3hsj1$6ce$1@nntp9.atl.mindspring.net>
Source record: 149517
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"John Fields" <jfields@austininstruments.com> wrote in message
news:3C5C654C.126450E4@austininstruments.com...
> John Woodgate wrote:
>
> > Same here, but I explain it differently; you need a bachelor's degree to
> > realise that shoe laces are a quite unnecessary complication in
> > life.(;-)
>
> ---
> As is a bachelor's degree!
> ---
>
> John Fields
> Professional circuit designer

Yeah that's fine if all ya wanna do is be a lonely bachelor for the rest of
your life...

But if ya wanna get married and have a family, gotta go for that "Masters".

--Peter K1PO

2382. Re: South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 00:07:57 UTC
From: Gary <tangogolf15@ntlworld.com>
Message-ID: <Cp%68.22004$sU.2956643@news6-win.server.ntlworld.com>
Source record: 149518
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hi all
thanks for the info and the link will check now
gary

2383. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 00:40:27 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <3C5C8708.EFF231F9@austininstruments.com>
Source record: 149369
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Peter O. Brackett wrote:

> Yeah that's fine if all ya wanna do is be a lonely bachelor for the rest of
> your life...
>
> But if ya wanna get married and have a family, gotta go for that "Masters".

Why?

John Fields
Professional circuit designer

2384. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 00:51:22 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3i1ia$r8b$1@nntp9.atl.mindspring.net>
Source record: 149370
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

John:

I thot "Bachelors" was for bachelors, and "Masters" was for masters of their households.

That's not right?

What then? How does one qualify to get married and have a family?

What schools do ya have to attend? Where do ya find the wimmin? etc...

What?

--Peter

"John Fields" <jfields@austininstruments.com> wrote in message news:3C5C8708.EFF231F9@austininstruments.com...
> Peter O. Brackett wrote:
>
> > Yeah that's fine if all ya wanna do is be a lonely bachelor for the rest of
> > your life...
> >
> > But if ya wanna get married and have a family, gotta go for that "Masters".
>
> ---
> Why?
> ---
>
> John Fields
> Professional circuit designer

2385. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 00:59:30 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3i21ijos5@quark.scn.rain.com>
Source record: 149371
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.antenna Roy Lewallen <w7el@eznec.com> wrote:
> Last I checked, a horsepower was just under 750 watts (745.7 to be more
> precise). At 50% efficiency, 15 kW works out to 40 horsepower on my
> calculator.

> Maybe they're just not makin' horses like they used to?

Yep. That is what I get for doing the math in my head - too late at
night. Thanks for the correction.

--
Bill Nelson (billn@peak.org)

2386. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 01:20:56 UTC
From: 2aa7ya@remove4spam.nemontel.net
Message-ID: <3c5c900b.2538174@isp-west.usenetserver.com>
Source record: 149372
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

On Sat, 2 Feb 2002 14:01:36 +0000 (UTC), "George" <tronic@boxfrog.com>
wrote:

>Well that is hardly *just above the CB band* is it??

Right, it's within the ham bands, that's my point.

>and you are supposed to be a licensed Ham.

And you call yourself one too. Go figure.

AA7YA

2387. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 01:26:01 UTC
From: 2aa7ya@remove4spam.nemontel.net
Message-ID: <3c5c90ac.2699219@isp-west.usenetserver.com>
Source record: 149373
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

On Sat, 2 Feb 2002 09:07:57 +0000 (UTC), Bill Nelson
<billn@spock.peak.org> wrote:

>Don't blame the ARRL. While I have little use for the organization, it
>was the screaming by Hams to get rid of the CW requirement that generated
>the restructuring.

Put the blame where the blame fits. The ARRL is the lobbying force,
"the voice", if you will, of all those screaming hams, in Washington.

>
>I personally believe that the restructuring that is being used is wrong.
>Novice should be the entry level for HF, Tech for above 30 meters, with
>Extra being the third class. Keep General if necessary, but there is no
>real need for it.
>
>I also believe that the written tests should be made more rigorous again.
>They are trivial to pass, right now.

Personally, I think they should leave the license classes as they are,
modernize the tests and yes, make them more rigorous again.

AA7YA

2388. Low VHf antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 01:32:47 UTC
From: Paul Logan <Paul.Logan4@btinternet.com>
Message-ID: <a3i3vugov1@knossos.btinternet.com>
Source record: 149375

Hi all,

can anyone recomend a good hombrew antenna that would give good pick up
across 30 - 50 mhz?.

--
Paul Logan,
Lisnaskea, N. Ireland

Located 54 15 N 7 27 W in IO64GF.
Interests: FM and TV-DX, SWL, Scanning.

Low VHF Skip and Scanning page: http://www.geocities.com/yogi540

2389. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 01:35:41 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C5C93ED.85364CBB@coqui.net>
Source record: 149374
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna

"S. Hanrahan" wrote:
>
> On Sat, 2 Feb 2002 09:07:57 +0000 (UTC), Bill Nelson
> <billn@spock.peak.org> wrote:
>
> >Don't blame the ARRL. While I have little use for the organization, it
> >was the screaming by Hams to get rid of the CW requirement that generated
> >the restructuring.
>
> Put the blame where the blame fits. The ARRL is the lobbying force,
> "the voice", if you will, of all those screaming hams, in Washington.

Bzzzt. Although the ARRL is a lobbying force for hams, it is also a
lobbying force utilized by equip mfrs who would like to have a larger
market. The non-hams out there whittling toothpicks and cursing ham
radio because of the code requirement are not directly represented.
I don't think most of their members as licensed hams are screaming for a
reduction in standards.
Could be wrong. Follow the money...it says Icom/Yaesu/Kenwood/etc.
-Bill

2390. Re: Low VHf antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 01:44:07 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C5C95E4.ABCC18EA@tampabay.rr.com>
Source record: 149378

hey paul
your cheapest way is a radio shack 102 inch whip they sell for around $20
and you just trim it down to the freq you want if its just for recieving
chances are you wont need to do anyhting

Paul Logan wrote:

> Hi all,
>
> can anyone recomend a good hombrew antenna that would give good pick up
> across 30 - 50 mhz?.
>
> --
> Paul Logan,
> Lisnaskea, N. Ireland
>
> Located 54 15 N 7 27 W in IO64GF.
> Interests: FM and TV-DX, SWL, Scanning.
>
> Low VHF Skip and Scanning page: http://www.geocities.com/yogi540

2391. Re: South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 01:44:39 UTC
From: 2aa7ya@remove4spam.nemontel.net
Message-ID: <3c5c95e1.4032537@isp-west.usenetserver.com>
Source record: 149377
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Here's another site to bookmark....

http://www.dx-central.com/

Has DX spots and DX news.

AA7YA

On 2 Feb 2002 02:48:59 GMT, Bob Nielsen <nielsen@remove_this.oz.net>
wrote:

>On Sat, 2 Feb 2002 01:00:37 -0000, Gary wrote:
>> Hi all
>> as someone who served on south georgia after the conflict and and now a keen
>> SWL any idea what freq/band/mode they may be using
>> Ex R Signals RTG so no problem on any mode
>> T I A
>> Gary
>
>Check the DX summit web site for recent spots on their operation:
>
>http://oh2aq.kolumbus.com/dxs/
>
>Bob, N7XY

2392. Re: Low VHf antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 01:45:22 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C5C9632.C693EA8@coqui.net>
Source record: 149376

Paul Logan wrote:
>
> Hi all,
>
> can anyone recomend a good hombrew antenna that would give good pick up
> across 30 - 50 mhz?.
>
> --
> Paul Logan,
> Lisnaskea, N. Ireland
>
> Located 54 15 N 7 27 W in IO64GF.
> Interests: FM and TV-DX, SWL, Scanning.
>
> Low VHF Skip and Scanning page: http://www.geocities.com/yogi540

I saw your post on rrs and I suspect that this request references that.
Apart from building a simple dipole or ground plane and getting it well
out into the open, maybe a small beam is in order.
E-skip on this band often arrives at high angles and a beam is not
always necessarily better than a dipole...but won't be any worse. The 5
or 6 db you gain with say a 3-el beam may help in some cases when the
angle is low.
From my experience with TV-FM DXing, best advice is to get the antenna
out into the clear and as high as possible. Any gain is usually
irrelevant when the band is wide open.

What ant are you using now copying Calif on 42 Mhz?

-Bill WX4A

2393. Re: Low VHf antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 01:52:57 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3i5i1$18c2cn$3@ID-124126.news.dfncis.de>
Source record: 149379

Try a 1/4-wave vertical for 30 or 40 MHz and see what happens.

2394. Re: South Georgia Is now QRV - VP8GEO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 02:07:34 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c5c9b6e$1@news.bnb-lp.com>
Source record: 149380
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

That is a good source for DX spots AA7YA....and just recently now
DX-Central has added some nice new - free - DX spotting features.

Once you setup a free account you can then also setup DX spot filters
by band and mode and also by originating country. DX-Central is the only
web browser based DX spot service that has filters.

Also they offer free email notification of DX spots of any prefix(s)
you want to be alerted about. Now I don't depend on the email spots for
my first level of DX info but it is a very good auxiliary source for
spots and for the chance to snag a new one.

It costs nothing to setup the DX-Central account....email address and
password and you're ready to go!

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

"S. Hanrahan" <2aa7ya@remove4spam.nemontel.net> wrote in message
news:3c5c95e1.4032537@isp-west.usenetserver.com...
> Here's another site to bookmark....
>
> http://www.dx-central.com/
>
> Has DX spots and DX news.
>
> AA7YA
>
> On 2 Feb 2002 02:48:59 GMT, Bob Nielsen <nielsen@remove_this.oz.net>
> wrote:
>
> >On Sat, 2 Feb 2002 01:00:37 -0000, Gary wrote:
> >> Hi all
> >> as someone who served on south georgia after the conflict and and
now a keen
> >> SWL any idea what freq/band/mode they may be using
> >> Ex R Signals RTG so no problem on any mode

> >> T I A
> >> Gary
> >
> >Check the DX summit web site for recent spots on their operation:
> >
> >http://oh2aq.kolumbus.com/dxs/
> >
> >Bob, N7XY
>
>

2395. Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 03:12:30 UTC
From: cprstn54zz@att.net
Message-ID: <3c5ca87b.14931484@news-server.optonline.net>
Source record: 149381

Is it because the center conductor induces a current in the sheathing,
or because the sheathing picks up RF from the dipole antenna?

Why put the coil of coax (choke) near the antenna feed? Why not at
the radio? Why not at both places?

I have 100 ft of RG-8X between my 10 meter dipole and the radio. I
have coiled up the coax as per the ARRL Handbook (7 turns in a 4"
diameter circle) at the antenna. My feed line is still radiating RF
big time, as are my microphone and radio chassis. My SWR is 1.10. Do
I need a 1:1 balun? What else can I do? Should I care?

Ken
(to reply via email
remove "zz" from address)

2396. installing 2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 03:22:43 UTC
From: hoho@dfg.ca
Message-ID: <3C5CAD03.4E82822@dfg.ca>
Source record: 149383

good day on the news,

I own a 16 elements colinear antenna made with coax pieces (omni
radiation pattern)
and a yagi antenna. Both antenna are matched to accept 50 ohm coax line.

I would like to know how to connect these two antenna on the same radio
using only
coax line.

The purpose is to give a max gain in one direction and have a good omni
pattern.

Is there a way to connect some coax to acheive that (I need a 50 ohm
line for my transceiver).

Thanks,

VA2 KWG

2397. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 03:24:47 UTC
From: whagen6@cs.com
Message-ID: <20020202222447.18785.00000763@mb-ce.news.cs.com>
Source record: 149382

your feedline radiates because the current in the antenna is not balanced (the same on each side).
when the current runs up the center wire, it flows out onto the leg of the antenna. when the current runs up the inside of the sheild, it can either run out on the leg of the antenna attached to the coax, or run down the outside of the coax. The various forms of chokes and baluns help prevent the current from flowing on the outside of the coax. There is no reason to put chokes at the transmitter end as there is no current flowing on the outside of the coax.
To help alleviate your problem use ferrite beads, add more turns to you bundle of loops, try a current balun, change the length of your transmission line, and make sure it runs perpendicular to the antenna. Also, make sure you have a short length of fat braid to ground your rig.
The problem with radiation from the feedline is that it can distort your radiation pattern, change the polarity, which may or may not be bad, but having the radiation in the shack from the rig and mike can burn you.
Other comment s, descriptions, and remedies welcome.
kc6ufe

2398. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 03:35:47 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3ibgh$183um2$1@ID-124126.news.dfncis.de>
Source record: 149384

Coax choke or no coax choke, all feedlines pick up energy from the antenna
and re-radiate to some small extent. Nothing to be alarmed about.

What makes you think your feedline is radiating excessively? It probably
isn't.

If there's much RF in the shack it is probably due to the equipment and
feedline being in the near field of your 10m dipole which radiates a
powerful signal in all directions. A dipole is supposed to do just that.
Unless you live in a steel corrugated sheet house RF will come through the
walls of your house or shack without much difficulty.

You could try connecting the choke at the shack end of the feedline. A much
better choke on 10m is 4 or 5 turns of coax on a 1.5" or 2" diameter ferrite
ring. For lower freqs just wind on more turns.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

Ken <cprstn54zz@att.net> wrote in message
news:3c5ca87b.14931484@news-server.optonline.net...
> Is it because the center conductor induces a current in the sheathing,
> or because the sheathing picks up RF from the dipole antenna?
>
> Why put the coil of coax (choke) near the antenna feed? Why not at
> the radio? Why not at both places?
>
> I have 100 ft of RG-8X between my 10 meter dipole and the radio. I
> have coiled up the coax as per the ARRL Handbook (7 turns in a 4"
> diameter circle) at the antenna. My feed line is still radiating RF
> big time, as are my microphone and radio chassis. My SWR is 1.10. Do
> I need a 1:1 balun? What else can I do? Should I care?
>
>
>
> Ken
> (to reply via email
> remove "zz" from address)

2399. Re: installing 2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 03:47:07 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C5CB2BB.94355CE7@coqui.net>
Source record: 149385

hoho@dfg.ca wrote:
>
> good day on the news,
>
> I own a 16 elements colinear antenna made with coax pieces (omni
> radiation pattern)
> and a yagi antenna. Both antenna are matched to accept 50 ohm coax line.
>
> I would like to know how to connect these two antenna on the same radio
> using only
> coax line.
>
> The purpose is to give a max gain in one direction and have a good omni
> pattern.
>
> Is there a way to connect some coax to acheive that (I need a 50 ohm
> line for my transceiver).
>
> Thanks,
>
> VA2 KWG

I would use a switch.
-Bill

2400. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 04:09:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5CB7E7.170EBD0E@eznec.com>
Source record: 149386

This is a good description of one of the causes of current on the outside of the coax -- it's conducted from the inside, at the end of the coax where it's able to flow over the edge. The other cause is induced current from coupling with the antenna. Putting the feedline perpendicular to a symmetrical antenna minimizes this coupling, but it's not always possible to do. A current or choke balun will reduce the current on the outside of the coax regardless of the cause.

In the original posting, the question was asked if current got on the outside by coupling to the center conductor. The answer is no. The field from the current on the inner conductor induces a current on the inside of the outer conductor. This current remains inside the shield (except for a very small amount of leakage due to the shield being imperfect). All of the field from the current on the inner conductor couples to the inside of the shield and vice versa. This results in these two currents always being equal in magnitude and opposite in direction regardless of what you do to the outside of the coax.

Roy Lewallen, W7EL

"William F. Hagen" wrote:
>
> your feedline radiates because the current in the antenna is not balanced (the
> same on each side).
> when the current runs up the center wire, it flows out onto the leg of the
> antenna. when the current runs up the inside of the sheild, it can either run
> out on the leg of the antenna attached to the coax, or run down the outside of
> the coax. The various forms of chokes and baluns help prevent the current from
> flowing on the outside of the coax. There is no reason to put chokes at the
> transmitter end as there is no current flowing on the outside of the coax.
> To help alleviate your problem use ferrite beads, add more turns to you bundle
> of loops, try a current balun, change the length of your transmission line, and
> make sure it runs perpendicular to the antenna. Also, make sure you have a
> short length of fat braid to ground your rig.
> The problem with radiation from the feedline is that it can distort your
> radiation pattern, change the polarity, which may or may not be bad, but having
> the radiation in the shack from the rig and mike can burn you.
> Other comment s, descriptions, and remedies welcome.
> kc6ufe

2401. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 04:12:30 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <n5JMoNAuiLX8EwHo@jmwa.demon.co.uk>
Source record: 149392
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that John Fields <jfields@austininstrum
ents.com> wrote (in <3C5C654C.126450E4@austininstruments.com>) about
'How do I classify filters WITHOUT looking at the transfer function?',
on Sat, 2 Feb 2002:
>John Woodgate wrote:
>
>> Same here, but I explain it differently; you need a bachelor's degree to
>> realise that shoe laces are a quite unnecessary complication in
>> life.(;-)
>
>---
>As is a bachelor's degree!
>---
That's a course of a different holler. (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
After swimming across the Hellespont, I felt like a Hero.
PLEASE do NOT copy news posts to me by E-MAIL!

2402. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 04:13:24 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <hZrNARAkjLX8EwkC@jmwa.demon.co.uk>
Source record: 149393
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Peter O. Brackett
<ab4bc@ix.netcom.com> wrote (in <a3hsj1$6ce$1@nntp9.atl.mindspring.net>)
about 'How do I classify filters WITHOUT looking at the transfer
function?', on Sat, 2 Feb 2002:
>Yeah that's fine if all ya wanna do is be a lonely bachelor for the rest of
>your life...
>
>But if ya wanna get married and have a family, gotta go for that "Masters".

It may help to go for that mistress first, to gain experience.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
After swimming across the Hellespont, I felt like a Hero.
PLEASE do NOT copy news posts to me by E-MAIL!

2403. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 04:15:47 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <mpeMcUAzlLX8EwmS@jmwa.demon.co.uk>
Source record: 149394
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Peter O. Brackett
<ab4bc@ix.netcom.com> wrote (in <a3i1ia$r8b$1@nntp9.atl.mindspring.net>)
about 'How do I classify filters WITHOUT looking at the transfer
function?', on Sat, 2 Feb 2002:

>What schools do ya have to attend?

Ones with strong non-science faculties.

> Where do ya find the wimmin? etc...

In the non-science faculties.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
After swimming across the Hellespont, I felt like a Hero.
PLEASE do NOT copy news posts to me by E-MAIL!

2404. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 05:10:16 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3igno$vr3$1@nntp9.atl.mindspring.net>
Source record: 149387

Reg et al:

Common mode chokes/current baluns... Hey! Two common mode chokes can't hurt, in fact will often be much better than one big one, especially if spaced far apart.

Two chokes, each of a smaller inductance than one bigger one, one placed say near the bottom end of the coax, and the other at the top end of the coax will almost always be "better" than one choke placed right at the antenna feed point.

The common mode rejection of any choke or transformer is ultimately limited by self-capacitance.

Common mode choking impedance [inductive reactance] does not increase forever as you add turns/inductance to the common mode choke. The ultimate limiting factor for a choke is the parasitic inter-winding capacitance which allows the common mode signals to bypass or "blow-by" the choke.

To mitigate this effect the turns of the choke need to be spaced further from each other. The best way to do this is to create two, or even more, separate smaller chokes, each with less inductance, separated by a considerable distance from each other, this separation reduces the capacitance blow by of the common mode signals.

In fact, as we all know, this is why really effective rf-chokes are invariably constructed as "pies" connected in series with the pies separated from each other to reduce the inter-winding capacitance. The same is true for choke baluns, or so-called current baluns.

--Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a3ibgh$183um2$1@ID-124126.news.dfncis.de...
> Coax choke or no coax choke, all feedlines pick up energy from the antenna
> and re-radiate to some small extent. Nothing to be alarmed about.
>
> What makes you think your feedline is radiating excessively? It probably
> isn't.
>
> If there's much RF in the shack it is probably due to the equipment and
> feedline being in the near field of your 10m dipole which radiates a
> powerful signal in all directions. A dipole is supposed to do just that.
> Unless you live in a steel corrugated sheet house RF will come through the
> walls of your house or shack without much difficulty.
>
> You could try connecting the choke at the shack end of the feedline. A

much
> better choke on 10m is 4 or 5 turns of coax on a 1.5" or 2" diameter
ferrite
> ring. For lower freqs just wind on more turns.
> ---
> ****************************
> Regards, Reg G4FGQ
> Free Radio Modelling Software
> Http://www.g4fgq.com
> ****************************
>
> Ken <cprstn54zz@att.net> wrote in message
> news:3c5ca87b.14931484@news-server.optonline.net...
> > Is it because the center conductor induces a current in the sheathing,
> > or because the sheathing picks up RF from the dipole antenna?
> >
> > Why put the coil of coax (choke) near the antenna feed? Why not at
> > the radio? Why not at both places?
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> > I have 100 ft of RG-8X between my 10 meter dipole and the radio. I
> > have coiled up the coax as per the ARRL Handbook (7 turns in a 4"
> > diameter circle) at the antenna. My feed line is still radiating RF
> > big time, as are my microphone and radio chassis. My SWR is 1.10. Do
> > I need a 1:1 balun? What else can I do? Should I care?
> >
> >
> >
> > Ken
> > (to reply via email
> > remove "zz" from address)
>
>

2405. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 06:12:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3iko0$18p2m1$1@ID-124126.news.dfncis.de>
Source record: 149388

Pete, I know you know this -

If a feedline is coupled to the near field of an antenna it will re-radiate.
In fact *anything* coupled to the near field of an antenna will re-radiate.
It is impossible to eliminate the effect.

If you MUST have coaxial chokes, the best form consists of a ferrite slug
(a bead is a tiny thing you hang a string of round your neck) spaced every
1/8-wavelength along the coax length. Call it the G4FGQ distributed choke.
Lumping a number of ferrite slugs all together at one place is an
inefficient way of using them.

A single choke at one location merely shifts the current standing wave on
the outside of the coax to another location where it radiates just as much
as it did before. (That is, of course, if you believe radiation occurs
mostly from where the current is greatest such as at the middle of a
1/2-wave dipole antenna.) A choke fitted at an SWR current minimum has no
effect - it might just as well not be there.

The first thing to do when a choke is fitted and you have RF in the shack,
is to remove the choke. Removal of the choke is just as likely to get rid of
RF in the shack as when fitting a choke just because there might be some.

If you have severe RF in the shack (lips burned on microphone) the first
place to try a choke is where the feedline comes into the building or shack.
If you look out of the shack window and you have a broadside view of a 1KW
dipole there's nothing to be done except to try re-orientating it.

If your neighbors suffer from TVI one thing you can be sure of - it is not
getting into their house via your feedline !

Reg.

2406. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 06:19:10 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <EB843C3356E85A97.456C960D668A5C9E.310630E210D5164C@lp.airnews.net>
Source record: 149389

On Sat, 2 Feb 2002 08:37:35 +0000 (UTC), Bill Nelson
<billn@spock.peak.org> wrote:

>Is it any worse than a Ham who has a 150 foot tower topped by a two or
>3 element full sized 40 meter beam?

Is the ham actually gaining anything from it, or just trying to look
cooler than the guy next door?

Renting out space on a 150ft tower can be pretty profitable in the
right areas.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net

2407. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 06:46:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5CDCBF.93BDD2C8@eznec.com>
Source record: 149391

A while back I did some modeling of a ground plane antenna with a wire representing the outside shield of a coax feedline, with the feedline length adjusted to maximize induced current. With no balun, the current was maximum at the feedpoint, minimum a quarter wavelength below, and so forth. When I put a model balun (a fairly high impedance in series with the feedline wire) at the feedpoint, the induced current was just about the same magnitude. But it had shifted in position so the minimum was at the feedpoint, the first maximum a quarter wavelength below. All I had done was change the boundary conditions. What the model showed to be effective was placing a second balun a quarter wavelength below the first. That way, for the feedline nearest the antenna at least, the boundary conditions don't allow any of the possible full current distributions to exist, and the current is very low. Consequently, this spacing of baluns is what I recommend when more than one is used. I don't think that two baluns placed an integral number of half waves apart will be much more effective than a single one.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Reg et al:
>
> Common mode chokes/current baluns... Hey! Two common mode chokes can't
> hurt, in fact will often be much better than one big one, especially if
> spaced far apart.
>
> Two chokes, each of a smaller inductance than one bigger one, one placed say
> near the bottom end of the coax, and the other at the top end of the coax
> will almost always be "better" than one choke placed right at the antenna
> feed point.
>
> The common mode rejection of any choke or transformer is ultimately limited
> by self-capacitance.
>
> Common mode choking impedance [inductive reactance] does not increase
> forever as you add turns/inductance to the common mode choke. The ultimate
> limiting factor for a choke is the parasitic inter-winding capacitance which
> allows the common mode signals to bypass or "blow-by" the choke.
>
> To mitigate this effect the turns of the choke need to be spaced further
> from each other. The best way to do this is to create two, or even more,
> separate smaller chokes, each with less inductance, separated by a
> considerable distance from each other, this separation reduces the
> capacitance blow by of the common mode signals.

>
> In fact, as we all know, this is why really effective rf-chokes are
> invariably constructed as "pies" connected in series with the pies separated
> from each other to reduce the inter-winding capacitance. The same is true
> for choke baluns, or so-called current baluns.
>
> --Peter K1PO
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:a3ibgh$183um2$1@ID-124126.news.dfncis.de...
> > Coax choke or no coax choke, all feedlines pick up energy from the antenna
> > and re-radiate to some small extent. Nothing to be alarmed about.
> >
> > What makes you think your feedline is radiating excessively? It probably
> > isn't.
> >
> > If there's much RF in the shack it is probably due to the equipment and
> > feedline being in the near field of your 10m dipole which radiates a
> > powerful signal in all directions. A dipole is supposed to do just that.
> > Unless you live in a steel corrugated sheet house RF will come through the
> > walls of your house or shack without much difficulty.
> >
> > You could try connecting the choke at the shack end of the feedline. A
> much
> > better choke on 10m is 4 or 5 turns of coax on a 1.5" or 2" diameter
> ferrite
> > ring. For lower freqs just wind on more turns.
> > ---
> > ****************************
> > Regards, Reg G4FGQ
> > Free Radio Modelling Software
> > Http://www.g4fgq.com
> > ****************************
> >
> > Ken <cprstn54zz@att.net> wrote in message
> > news:3c5ca87b.14931484@news-server.optonline.net...
> > > Is it because the center conductor induces a current in the sheathing,
> > > or because the sheathing picks up RF from the dipole antenna?
> > >
> > > Why put the coil of coax (choke) near the antenna feed? Why not at
> > > the radio? Why not at both places?
> > >
> > > I have 100 ft of RG-8X between my 10 meter dipole and the radio. I
> > > have coiled up the coax as per the ARRL Handbook (7 turns in a 4"
> > > diameter circle) at the antenna. My feed line is still radiating RF
> > > big time, as are my microphone and radio chassis. My SWR is 1.10. Do
> > > I need a 1:1 balun? What else can I do? Should I care?
> > >
> > >
> > >

> > > Ken
> > > (to reply via email
> > > remove "zz" from address)
> >
> >

2408. AEA Via Antenna Analyzer Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 09:19:11 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5CFF70.83E7ADC2@bellatlantic.net>
Source record: 149395

Anyone have comments on the AEA Via antenna analyzer relative to
offerings by MFJ and Autek? Also, what's a good price on a Via?

http://www.aea-wireless.com

'73 KI4Z

2409. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 09:21:37 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <OR7VddDhEQX8EABM@ifwtech.com>
Source record: 149397

Reg Edwards wrote:
>
>If a feedline is coupled to the near field of an antenna it will re-radiate.
>In fact *anything* coupled to the near field of an antenna will re-radiate.
>It is impossible to eliminate the effect.
>
Very true - but it *is* possible to reduce the coupled currents below
the level where they cause trouble to either ourselves or our neighbors.
That's what we're aiming to do.

>If you MUST have coaxial chokes, the best form consists of a ferrite slug
>(a bead is a tiny thing you hang a string of round your neck) spaced every
>1/8-wavelength along the coax length. Call it the G4FGQ distributed choke.
>Lumping a number of ferrite slugs all together at one place is an
>inefficient way of using them.
>
That's debatable - it depends very much on the antenna/feedline setup
and the wavelength. There are two ways current can appear on the outer
surface of your feedline: electromagnetically coupled from the antenna;
and launched directly from the feedpoint connection, due to current
imbalance there.

The feedpoint is almost always the biggest source of surface current,
simply because there is a direct hard-wired connection to the coax
surface at that point. Therefore in most cases it's best to stop the
current being launched from the feedpoint first, by placing a
substantial reactance there. This can be done at almost zero cost by a
flat coil of coax which acts as a common-mode choke, aka current balun.
(A long string of ferrite beads will do the same, but it's very
expensive and heavy compared with a simple coil of coax.) To the extent
that you can prevent outer-surface currents at the feedpoint, you are
also forcing the currents in the antenna more towards symmetry. However,
it does need a substantial lump of inductance to do that - just two or
three ferrite beads at the feedpoint usually won't be enough.

>A single choke at one location merely shifts the current standing wave on
>the outside of the coax to another location where it radiates just as much
>as it did before. (That is, of course, if you believe radiation occurs
>mostly from where the current is greatest such as at the middle of a
>1/2-wave dipole antenna.) A choke fitted at an SWR current minimum has no
>effect - it might just as well not be there.
>
All very true (except for that slip of the fingers about "SWR current" -
go wash your hands with carbolic, Reg! :-)

When you force a current minimum on the coax outer surface by placing a choke there, the surface current caused by EM induction from the antenna will simply try to rearrange itself. With long feedlines and at high frequencies you will potentially have several maxima and minima, and trying to kill the currents completely is like trying to squeeze down a long balloon - wherever you squeeze hard, by inserting a choke that forces a current minimum, a new maximum will pop up a quarter-wavelength away.

Reg's distributed ferrite chokes will help keep the current down all along the line... but it's still best to kill the hard-wired current source at the feedpoint first. When you've stopped that one, it only leaves the EM-coupled component to deal with.

>The first thing to do when a choke is fitted and you have RF in the shack,
>is to remove the choke. Removal of the choke is just as likely to get rid of
>RF in the shack as when fitting a choke just because there might be some.
>
Removing a choke can never really cure the problem. Worse trouble is almost certain to reappear on a different band.

I would leave every existing choke in place, add more if you need them, but above all make sure that the choke right at the feedpoint is a good 'un. The ARRL Antenna Handbook contains details provided by W7EL for flat-coil chokes. The most effective ones are self-resonant on a single band, but there are also slightly less effective designs that cover several bands. You can also string together chokes designed for different bands.

>If your neighbors suffer from TVI one thing you can be sure of - it is not
>getting into their house via your feedline !

RF is slippery stuff, so that is not universally true. My neighbors share the same electricity feed, and once my RF was coupled onto my own electricity lines, it treated both our houses as one.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2410. Re: Earth Anchors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 09:24:26 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5D00AB.DB3D13C@bellatlantic.net>
Source record: 149396

I wouldn't trust it self supporting, guys would be a really good idea.
If you're only putting up wire antennas, and don't care much if it falls
down in heavy wind, it might work self supporting, but not in my yard.

'733 KI4Z

"Jerry W. O'Dell" wrote:

> I've never heard of this, but thought I'd give it a shot.
>
> We just had an ice storm, and all the trees are gone. So
> I need a hole.
>
> I hate digging, and thought of earth anchors. My soil is
> the hardest clay I've ever seen. Would weld up neato
> plate and put about a 30 foot tower on the thing, and
> use about 4 big anchors, the kind that take 2 tons. No guys.
>
> Probably a crazy idea, but I have an aversion to digging
> deep holes. But I also have an aversion, I suspect, to
> screwing those things in!
>
> Please reply to jwodell@provide.net
>
> 73 jerry w8gnd

2411. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 11:12:25 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <tW878.9201$Xk4.524339@news1.east.cox.net>
Source record: 149399
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"AH" <akha@attbi.com> wrote in message
news:XyK68.2857$S06.10307@rwcrnsc53...
>
> "Jason Hsu" <jason_hsu@my-deja.com> wrote in message
> news:f7d9a152.0202011753.163ed6b9@posting.google.com...
> > The transfer function amplitude plot of a Butterworth filter is
> > smooth.
> >
>
> so is Cauer, Chebyshev , and Bessel-Thompson, depending on order of the
> filter.
>
>
> > The transfer function amplitude plot of a Chebyshev filter contains
> > ripples in the passband (if it is a bandpass filter) or the stopband
> > (if it is a bandstop filter).
> >
>
> So does Cauer and inverse Chebyshev, depending on order. And probably a
> lot more.
>
> > Am I correct that Chebyshev and Butterworth filters are classified by
> > the shape of the plots of their transfer function amplitudes?
> >
>
> Yes. That is one of the ways they can be classified. There's also
> classifying them by pole/zero locations,
> classifying by phase response, classifying by the form of T(s). Changing
> T(s) changes your
> poles and zeroes, which changes your response. They are all different
ways
> of
> looking at the same thing. You can even classify the order of a chebyshev
> by counting number of ripples, for example.
>
> > Is there a way to tell whether a given filter is a Chebyshev or
> > Butterworth WITHOUT going to the trouble of finding the transfer
> > function?
> >
>
> By looking at the magnitude response graph (if you are given it) as you
> stated above. You want to look at the entire response
> through all passbands, stopbands, and transition regions and use

> characteristics from that.
> Cauer-response filters have ripple in both pass band and stop band, for
> example.
>
> Or, if you have been _given_ an s-plane chart you can look at pole and
zero
> locations.
> Butterworth filters' normalized poles lay on a unit circle, Chebyshev
poles
> lay on an ellipse
> within that circle, Bessel poles lay outside the circle, etc. Since a
> butterworth and chebyshev
> response provide more attenuation than needed in the stopband, they are
> regarded as inefficient.
> By adding zeroes into the transfer function/ s-plane map, you spread the
> attenuation more evenly
> throughout the passband and change the response accordingly, and
therefore
> get an inverse chebyshev response.
>
> Incidentally, butterworth, chebyshev, etc, are types of responses named
> after their respective
> inventors. It does not describe the circuit used. You can make an active
> filter with a low-pass Butterworth
> response using a Sallen-Key circuit, for example.
>
> Of course, once you learn all this it was probably easier just to find
the
> transfer function.. The best way to classify it without going through the
> trouble of finding the transfer function is have your friend do it.
>
>
> > P.S. I am also looking for a job as an antenna, RF, or microwave
> > engineer and would appreciate any leads. I will be targeting filter
> > companies specifically (and presenting myself accordingly) once I
> > thoroughly understand the basic ins-and-outs.
> >
>
> I'm looking for a job in the government and would appreciate any leads
also.
> I will be targetting
> the position of President of the United States, specifically (and
> presenting myself accordingly)
> once I thoroughly understand the basic ins-and-outs...
>
> Andy, #7636490

You must be trying to implode his brain.

Ed

2412. SWL needs help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 11:37:58 UTC
From: terry@mitchell.demon.nl
Message-ID: <5ff243ef.0202030337.77a86b8e@posting.google.com>
Source record: 149400

Dear people,

A few years ago I did sell all mine receivers and I want to start all over again as a SWL. Does anybody know what is a good receiver to start with again and what is on the market. I have a budget from 320 U$ (371 Euro). But I have another problem as well I’m moved to a new apartment and second floor in a flat and the roof is not flat but slanting (if I wrote it correct). I have a ceiling what I can use but there is still that antenna problem how can I solve this ?

Thanks for all the help in advance

Terry Mitchell

2413. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 12:19:32 UTC
From: cprstn54zz@att.net
Message-ID: <3c5d2989.47968906@news-server.optonline.net>
Source record: 149401

On Sun, 3 Feb 2002 03:35:47 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:
>What makes you think your feedline is radiating excessively? It probably
>isn't.

My Radio Shack field strength meter shows nothing in the middle of my
shack (which is 40 ft from the dipole as the crow flies) but reads
high near my mic and radio, and off the scale when put it near the
feed line where it comes in through my window.

BTW, I am using a deep-cycle battery to power the rig, so the RF is
not coming in through the house supply.

Ken
(to reply via email
remove "zz" from address)

2414. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 13:30:06 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <hhlNuqAetTX8Ewnl@jmwa.demon.co.uk>
Source record: 149403
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Ed Price <edprice@cox.net> wrote
(in <tW878.9201$Xk4.524339@news1.east.cox.net>) about 'How do I classify
filters WITHOUT looking at the transfer function?', on Sun, 3 Feb 2002:
>You must be trying to implode his brain.

If any.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
After swimming across the Hellespont, I felt like a Hero.
PLEASE do NOT copy news posts to me by E-MAIL!

2415. Re: AEA Via Antenna Analyzer Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 14:19:48 UTC
From: EAG <n5nug@ix.netcom.com>
Message-ID: <a3jgtpeqf1@slb2.atl.mindspring.net>
Source record: 149404

Mark, what is your email address, I have a AEA SWR-121 for sale. 73, Ed - N5NUG

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message news:3C5CFF70.83E7ADC2@bellatlantic.net...
> Anyone have comments on the AEA Via antenna analyzer relative to
> offerings by MFJ and Autek? Also, what's a good price on a Via?
>
> http://www.aea-wireless.com
>
> '73 KI4Z
>

2416. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 14:20:48 UTC
From: Pie`` IK2VTJ <picarusoNONVOGLIOSPAM@writeme.com>
Message-ID: <a3jgvl$ikein$1@ID-83989.news.dfncis.de>
Source record: 149405

"Arrow146" <arrow146@aol.com> ha scritto nel messaggio
news:20020130181113.22343.00000051@mb-mb.aol.com...
> I would like to get the Opinion from some of the Experts here.
> If you have the time, would you please look at this antenna, and give me
your
> Opinion.
>
> One Question: Does a direct feed (Receive Only) antenna
> really need a balun?
> <A HREF="http://Arrowantennas.com/adf1.html">Arrow Antenna ADF1</A>
> Thank You for your Time.
> 73 Al Lowe N0IMW

Hi AL,
what about a different flexible antenna?
Have a look to the ARDF site in the signature and click on (I'm sorry but it
is only in italian language) 'Strumenti'-> 'Antenne'->'Flextel23'.

--
73 de IK2VTJ, Piero.

http://www.qsl.net/ik2vtj
http://www.ardf.it

Togli / Remove
NONVOGLIOSPAM
dall'indirizzo / from address

2417. Re: Wanted 6 meter antenna advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 14:47:26 UTC
From: ac6v <ac6v@amsat.org>
Message-ID: <3C5D4D7E.2D22DE88@amsat.org>
Source record: 149406

Hi Chris maybe make your own, using 234/freq, a six meter vertical dipole would be 4.67 x 2 = 9.34 feet. Feed it at the center and run the coax at 90 degrees to the dipole. Check and trim for best SWR.

A ham here (San Diego) running 10 Watts has woked 24 states, mostly New England but also Alaska, Hawaii, Puerto Rico and Cuba with this antenna.

Your mileage may vary

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
==========
Chris N wrote:

> Hello,
>
> I need some design advice on an antenna for 6 meters. I live in a 3rd floor
> apartment with about 7 by 12 ft of balcony space. I would like to build
> one, but would consider buying a used halo or loop if anyone would like to
> get rid of one. If you live in similar circumstances to me tell me what
> worked for you on the "magic band."
>
> Thanks alot,
>
> Chris N

2418. Re: Wanted 6 meter antenna advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 15:02:29 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C5D5101.FC5B4CC5@tampabay.rr.com>
Source record: 149407

hey chris
i would suggest either the M2 HO loop or the PAR loop they would give you horizontal polaration which would be fine for SSB

Chris N wrote:

> Hello,
>
> I need some design advice on an antenna for 6 meters. I live in a 3rd floor
> apartment with about 7 by 12 ft of balcony space. I would like to build
> one, but would consider buying a used halo or loop if anyone would like to
> get rid of one. If you live in similar circumstances to me tell me what
> worked for you on the "magic band."
>
> Thanks alot,
>
> Chris N

2419. Which Mini Beam ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 15:09:13 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <a3jjnf$bt0$1@news8.svr.pol.co.uk>
Source record: 149408

Hi All,

Looking for personal experiences / info to help me decide which mini beam to buy.

I'd like to operate 10/12/15/17/20m from a single mini beam.

Look forward to getting some replies.

MikeT ...
M0AWS

2420. Re: Which Mini Beam ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 15:26:20 UTC
From: Michael Melland <w9wis@charter.net>
Message-ID: <u5qlg49243me73@corp.supernews.com>
Source record: 149409

> I'd like to operate 10/12/15/17/20m from a single mini beam.

Mike,

I have a Traffie Technology HX5Bi due for delivery this week. It gives actual gain on all those freqs. Everyone I know with one is very satisfied. Check their web page:
http://www.hexbeam.com

One cavat.... it's not cheap. The price went up about $300 the first of the year. But..... a TV rotor will turn it and you can mount it on a push-up pole if needed. It weighs only 20 lbs and due to it's design it has very little wind loading..... 3 lbs or so.

Mike

2421. Re: Which Mini Beam ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 15:38:06 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <a3jlcr$m01$1@news6.svr.pol.co.uk>
Source record: 149410

Hi Michael,

The antenna looks most interesting, however it also looks extremely large on
the photos detailed on the website !

I was hoping for something a little more compact ??

I've got a very small plot to try and squeeze an antenna into :)

Any other suggestions ?

Thanks !

MikeT ...

Michael Melland <w9wis@charter.net> wrote in message
news:u5qlg49243me73@corp.supernews.com...
> > I'd like to operate 10/12/15/17/20m from a single mini beam.
>
>
> Mike,
>
> I have a Traffie Technology HX5Bi due for delivery this week. It gives
> actual gain on all those freqs. Everyone I know with one is very
satisfied.
> Check their web page:
> http://www.hexbeam.com
>
> One cavat.... it's not cheap. The price went up about $300 the first of
the
> year. But..... a TV rotor will turn it and you can mount it on a push-up
> pole if needed. It weighs only 20 lbs and due to it's design it has very
> little wind loading...... 3 lbs or so.
>
> Mike
>
>

2422. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 16:03:56 UTC
From: fractenna@aol.com
Message-ID: <20020203110356.12872.00000853@mb-mk.aol.com>
Source record: 149411

May I suggest that you dig out Don Meador's book on 'Analog S.P. with LaPlace Transforms and Active Filter Design'? Although somewhat pricey (albeit typical for today's editions) it is quite useful for beginners.

To answer your question succinctly: if you can look at the transfer function over its entire domain, you can get a good handle on its type. But most people don't approach it that way. Instead they try to find the filter type whose ripple is tolerable for the given application. In other words they start with the filter type and then look at the transfer function--relative to the practical need.

BTW I prefer to work in poles and zeroes. Makes me an old timer:-)?

Kindly let me suggest that you not try to hit the job market with knowledge you are in the process of acquiring, but try to emphasize your best extant skills.

Best wishes in your efforts.

73
Chip N1IR

2423. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 16:16:35 UTC
From: k9sqg@aol.com
Message-ID: <20020203111635.17371.00000841@mb-fk.aol.com>
Source record: 149412

Even without the ZZ the email address is not reconized as valid by AOL. Unable to get my reply through.

2424. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 16:26:29 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <4ioq5u83hikr9j0g8jupefgcnes1l88ngp@4ax.com>
Source record: 149415

Hi Roy,

Here's something I discovered for modeling a bead type balun For
2-meters. Such a balun is around 8" long. Therefore I modeled wire
representing the outside shield using 2" long segments. Then I placed
four 250-Ohm inductive loads - one on each of the first four segments
at the antenna end. This produces a model which, I feel, more closely
represents the actually installation. The results were notably better
than using a single load on one segment.

73
Danny, K6MHE

On Sat, 02 Feb 2002 22:46:23 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>A while back I did some modeling of a ground plane antenna with a wire
>representing the outside shield of a coax feedline, with the feedline
>length adjusted to maximize induced current. With no balun, the current
>was maximum at the feedpoint, minimum a quarter wavelength below, and so
>forth. When I put a model balun (a fairly high impedance in series with
>the feedline wire) at the feedpoint, the induced current was just about
>the same magnitude. But it had shifted in position so the minimum was at
>the feedpoint, the first maximum a quarter wavelength below. All I had
>done was change the boundary conditions. What the model showed to be
>effective was placing a second balun a quarter wavelength below the
>first. That way, for the feedline nearest the antenna at least, the
>boundary conditions don't allow any of the possible full current
>distributions to exist, and the current is very low. Consequently, this
>spacing of baluns is what I recommend when more than one is used. I
>don't think that two baluns placed an integral number of half waves
>apart will be much more effective than a single one.
>
>Roy Lewallen, W7EL

2425. Six meter QST project ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 16:27:03 UTC
From: dan <danlx@execpc.com>
Message-ID: <3c5d657b$0$1610$272ea4a1@news.execpc.com>
Source record: 149413

Hi all,
Has anyone here tried the six meter ant that is made from lawn chair parts? I've got the junk laying around to do it and just was wondering if it would be worth it for the home, until I can afford a beam, and for a mobile. Anyone built one? What kind of results/coverage, mobile or base?
Thanks, N9JBF
Dan
N9JBF

I've rambled enough, back to the rocking chair. ZZZZZZZZZ

Remove left x for a direct reply.

2426. Re: installing 2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 16:30:25 UTC
From: hoho@dfg.ca
Message-ID: <3C5D65A1.AEC66333@dfg.ca>
Source record: 149414

no the purpose is only to accentuate a little in one direction, keeping the
omni pattern

resuming that , I only want to connect 2 antenna on the same radio, transmit
and receive on both antenna at the same time

Thanks

VA2 KWG

" .Your Friend Bill" a écrit :

> hoho@dfg.ca wrote:
> >
> > good day on the news,
> >
> > I own a 16 elements colinear antenna made with coax pieces (omni
> > radiation pattern)
> > and a yagi antenna. Both antenna are matched to accept 50 ohm coax line.
> >
> > I would like to know how to connect these two antenna on the same radio
> > using only
> > coax line.
> >
> > The purpose is to give a max gain in one direction and have a good omni
> > pattern.
> >
> > Is there a way to connect some coax to acheive that (I need a 50 ohm
> > line for my transceiver).
> >
> > Thanks,
> >
> > VA2 KWG
>
> I would use a switch.
> -Bill

2427. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 17:02:25 UTC
From: cprstn54zz@att.net
Message-ID: <3c5d6c80.65112359@news-server.optonline.net>
Source record: 149416

On 03 Feb 2002 16:16:35 GMT, k9sqg@aol.com (K9SQG) wrote:
>Even without the ZZ the email address is not reconized as valid by AOL. Unable
>to get my reply through.

I received the email copy [reply] of this. Apparently, AOL gives a
spurious error message. Maybe it got confused by the "(Ken)" my
Newsgroup client sticks on to the address. I only wish the spammers
were so easily confused.

Ken
(to reply via email
remove "zz" from address)

2428. Re: Cushcraft A50-5S 6 meter ant

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 17:28:52 UTC
From: don <country@johnstown.net>
Message-ID: <3c5c2170$0$1601$f5f63664@news.tdin.com>
Source record: 149503

Well....thanks all for the advice....Come to think of it, I have heard
vibration from the antenna in very low wind conditions...almost a calm.
I'll try the rope in the elements...

Thanks again everyone!!

Anyone want to climb the tower...lol
I'm getting to old for this!!

Don
WB8PJE

"don" <country@johnstown.net> wrote in message
news:3c5ad683$0$1584$f5f63664@news.tdin.com...
> I have had a Cushcraft A50-5s 5 element 6 meter antenna installed on a 40'
> tower for about 12-14 months...yesterday I noticed the rear director had
> broken off and was laying on the ground. There were no signs of
> bending...looks like metal fatige. It did not snap at the mounting bolt
> location, but rather about a 1/2" past it.
> Has anyone else had this type of problem with Cushcraft antennas???
> Has Cushcrafts quality dipped to this level??
>
> I called Cushcraft and presented the problem...the reponse from the Tech
> Support Dept was..."we have not seen any problems"
>
> Don WB8PJE
> tuffy@johnstown.net
>
>
>

2429. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 17:30:48 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3js48$h83$1@slb0.atl.mindspring.net>
Source record: 149417

Frac:

[snip]
> To answer your question succinctly: if you can look at the transfer
function
> over its entire domain, you can get a good handle on its type. But most
people
> don't approach it that way. Instead they try to find the filter type whose
> ripple is tolerable for the given application. In other words they start
with
> the filter type and then look at the transfer function--relative to the
> practical need.
[snip]

How do you know what most people do?

[snip]
> BTW I prefer to work in poles and zeroes. Makes me an old timer:-)?
[snip]

No! Poles and zeros doesn't make you an "old timer"! Just a pup, heh,
heh...
If you were an old-timer you would use "image parameter design" methods
and the cookbook tables from the old ARRL handbooks and other such.

[snip]
> Kindly let me suggest that you not try to hit the job market with
knowledge you
> are in the process of acquiring, but try to emphasize your best extant
skills.
> Best wishes in your efforts.
> 73
> Chip N1IR
[snip]

Good suggestion Chip.

BTW... Why don't you get him a job interview at Fractenna, I understand
that you have some influence there?

--Peter K1PO

2430. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 17:36:18 UTC
From: n7ws@yahoo.com
Message-ID: <3c5d72f4.4663063@news.triconet.org>
Source record: 149418
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Sat, 2 Feb 2002 18:39:54 +0000, Philip de Cadanet
<phil@invest.fsbusiness.co.uk> wrote:

|Wes,
|
|>http://users.triconet.org/wesandlinda/w7uvr.jpg
|
|No good saying "Right Turn Clyde" in that rascal.
|
|You cannot see out the window!

Hi Phil

It is a bit unclear, but there are actually rear-view mirrors that facilitate turns.

Look carefully at the top (exterior) photo and you can see them. In the bottom photo look behind the steering wheel and inside rear-view mirror and you can see the (out-of-focus) exterior mirror.

Wes

2431. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 17:58:43 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <3C5D7AE5.CCAB2BC3@austininstruments.com>
Source record: 149269
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Peter O. Brackett wrote:
>
> John:
>
> I thot "Bachelors" was for bachelors, and "Masters" was for masters of their
> households.
> That's not right?

Yes, that's not right.

Put some more 'thot' into it and you may come to the realization that
bachelors are masters of their own households far more often than
non-bachelors.

> What then? How does one qualify to get married and have a family?

There are usually no qualifications; one merely finds an agreeable
(hopefully) companion and then buys a license.

> What schools do ya have to attend?

None

> Where do ya find the wimmin? etc...

They're everywhere. Look for the people with tits.

John Fields
Professional circuit designer

2432. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 17:59:40 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <CTe78.15664$TY3.1789441@monolith.news.easynet.net>
Source record: 149270

Stop transmitting until you have taken trouble to learn how to do so competently. There are many books and courses and clubs.

Bryan

Ken <cprstn54zz@att.net> wrote in message news:3c5ca87b.14931484@news-server.optonline.net...
> Is it because the center conductor induces a current in the sheathing,
> or because the sheathing picks up RF from the dipole antenna?
>
> Why put the coil of coax (choke) near the antenna feed? Why not at
> the radio? Why not at both places?
>
> I have 100 ft of RG-8X between my 10 meter dipole and the radio. I
> have coiled up the coax as per the ARRL Handbook (7 turns in a 4"
> diameter circle) at the antenna. My feed line is still radiating RF
> big time, as are my microphone and radio chassis. My SWR is 1.10. Do
> I need a 1:1 balun? What else can I do? Should I care?
>
>
>
> Ken
> (to reply via email
> remove "zz" from address)

2433. Re: ARNewsline 1277 - Feb 2 2002

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 18:02:42 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <JVe78.15667$TY3.1789914@monolith.news.easynet.net>
Source record: 149271

Is he properly licensed. ?
Bryan

Radionews <radionews@aol.com> wrote in message
news:20020202132028.28179.00001324@mb-ba.aol.com...
> Amateur Radio NewslineT Report 1277 - February 1, 2002
>
> Amateur Radio Newsline report number 1277 with a release date of Friday,
> February 1st, 2002 to follow in 5-4-3-2-1.
>
> The following is a Q-S-T.
>
> The President of the United States speaks to hams in Florida and is ham
radio
> seeing a second Solar Max? These stoies are first on amateur Radio
Newsline
> report number 1277 coming your way right now.
>
> (Billboard Cart Here)
>
> **
>
> BREAKING NEWS: PRESIDENT BUSH COMES TO HAM RADIO
>
> The President of the United States has come to ham radio. Bill Burnett,
KT4SB,
> has the details:
>
> --
>
> President George W. Bush has taken to the ham radio airwaves. This, to
thank
> the Florida Amateur Radio community for being ready to serve the public
when it
> is needed.
>
> The President's comments were made during a stopover the morning of
January
> 31st at the Volusia County Fire Services and Training Center near Daytona.
> Around 9:15 AM Eastern Time, President Bush checked in to the Northern
Florida
> Amateur Radio Emergency Service Net on 3.950 MHz using a portable station
set
> up John Schmidt, AF4PU. Then the President made these remarks to the 40

or so
> stations listening to the net:
>
> --
>
> President George W. Bush:
>
> "I want to thank all the volunteers who help make sure that Florida is
prepared
> for any kind of emergency. I also want to assure you that your Federal
> government is doing everything we can to make sure that there is not an
> emergency--starting with unleashing the mighty U.S. military overseas to
bring
> evil ones to justice. But should there be a need for a response, I want
to
> thank you all for helping our communities be prepared. And finally, I
want to
> tell you--we are lucky to be Americans and may God continue to bless this
great
> land of ours. Thank you very much."
>
> --
>
> Needless to say the net members were delighted to have the President of
the
> United States address them. More important, hams nationwide can now be
sure
> that President Bush knows that Amateur Radio operators are ready to serve
> whenever he, and the nation, needs to call on them for help.
>
> In Miami, I'm Bill Burnett, KT4SB, reporting for the Amateur Radio
Newsline.
>
> --
>
> The complete story is on the web at
> http://firstcoastcommunity.jacksonville.com/northfloridaamateurradiosociet
> ynofars (Tnx NU4F, CQ Magazine)
>
> **
>
> HAM RADIO SCIENCE: TWO SOLAR MAXIMUMS THIS SEASON
>
> In case you are wondering why the current solar cycle is still providing
such
> amazing VHF and UHF DX, one researcher may have the answer. He says that
the
> current cycle appears to be having a second peak and that this is really
not
> very unusual. Henry Feinberg, K2SSQ, looks at the scientist and his

latest
> data.
>
> --
>
> The most recent and ongoing Solar Maximum -- or Solar Max -- theoretically
> crested in mid-2000. Sunspot counts were higher than they had been in 10
> years, and solar activity was intense. One remarkable eruption on July
14,
> 2000 caused brilliant auroras as far south as Texas. But after that,
sunspot
> counts slowly declined and the Sun was relatively quiet for month-long
> stretches. Most scientists said that the Solar Max was over. But was it?
>
> Now, as 2002 unfolds, the National Aeronautics and Space Administrations
solar
> foorecasters say that it looks as if the Solar Max is back with us again.
The
> Sun is again peppered with spots, eruptions are frequent and hams notice
that
> the VHF DX keeps rolling in.
>
> Why is this happening? Well David Hathaway, a solar physicist at the NASA
> Marshall Space Flight Center in Huntsville Alabama has one theory.
Hathaway
> says that the current solar cycle appears to be double-peaked, and the
second
> peak has arrived.
>
> --
> Hathaway Audio Here
> In-Q: We have seen other cycles...
> Out-Q: ...define this maximum
> --
>
> Scientists track solar cycles by counting sunspots and Hathaway is an
expert
> forecaster of sunspot numbers. He says that sunspot counts peaked in 2000
some
> months earlier than we expected. He says that the subsequent dip toward
solar
> minimum seemed premature and before long, sunspot counts reversed course
and
> began to climb toward a second maximum that now appears to be only a few
> percent smaller than the first.
>
> --
> Hathaway Audio Here
> In-Q: Its a bigger than average...
> Out-Q: ...smaler than 19, 21 and 22.

> --
>
> Hathaway notes that there is a widespread misconception that solar
activity
> varies every eleven years like a pure sinusoidal wave. It isn't. He says
> that solar activity is chaotic and there can be more than one peak in any
> given period. Translated for ham radio: Enjoy the VHF DX while you can.
>
> For the Amateur Radio Newsline, Henry Feinberg, K2SSQ.
>
> --
>
> Hathaway says that the Solar Max eleven years ago was much the same as
this
> one. The first peak arrived in mid-1989 followed by a smaller maximum in
early
> 1991. And if you are interested in hearing more about this interesting
> phenomena from David Hathaway its as easy as taking your web browser over
to
> www.rainreport.com. Or you can call on the phone to area code
847-827-7246.
> (NASA, RAIN)
>
> **
>
> HAM RADIO IN SPACE: HF ANTENNA INSTALLED ON ISS
>
> High Frequency ham radio operations from the International Space Station
could
> be on the not to distant horizon. This, after a successful space walk on
> January 25th to install another antenna on the orbiting outpost. Amateur
Radio
> Newsline's Roy Neal, K-6-D-U-E, has the details.
>
> --
>
> The spacewalkers have had another good day in space. On Friday the 25th
of
> January, Cosmonaut Yuri Onufrienko, RK3DUO and Astronaut Dan Bursch,
KD5PNU,
> successfully mounted a second ham radio antenna near a docking port
amidships
> on the International Space Station. It is made of flexible tape and is
similar
> to but longer than another antenna installed on January 14th. That one
tunes
> both VHF and UHF frequencies. The new antenna will tune HF frequencies.
>
> ARISS Board Chairman Fran Bauer, KA3HDO, says it definitely will work on
ten

> meters and may even be made to work on 15 and 20 meters. BUT right now
there
> is no gear on board to handle those frequencies. Experiments using the
lower
> frequencies are on the list of futures for ARISS but no timetable has
been
> assigned to design and build them.
>
> Owen Garriott, W5LFL, the first man to operate ham equipment in space,
once
> prophesied that a five watt transmitter in orbit might well be heard
> simultaneously world wide. The great number of hams with good stations on
the
> lower frequencies also makes them enticing to ARISS. It's a safe bet that
> serious consideration now is being given to expedite such a project. Once
a
> station is sent up, the antenna will be waiting.
>
>
> The new antenna is the second of four to be installed on board the space
> station. No timetable has been announced for the final installation. All
of
> these amateur antennas were built by Italy, tested and qualified in the
US, to
> fit ports built by Russia, as befits the international nature of the ISS.
>
> For the Amateur Radio Newsline, Roy Neal, K6DUE
>
> --
>
> Installation of the 2.5-meter long flexible tape antenna involved not only
the
> mechanical deployment but routing cables and establishing the R-F
connection as
> well. (ARISS)
>
> **
>
> HAM RADIO IN SPACE: THAT ANNOYING SATELLITE IS OFF 2 METERS
>
> An annoying mystery satellite transmitting AFSK, frequency modulated Morse
on
> 144.100 MHz for several days has been identified. It turned out to be a
signal
> from the MAROC-TUBSAT satellite. This is an Earth-sensing spacecraft
owned by
> a Moroccan government agency called he Royal Center for Remote Sensing.
It
> was placed into a polar orbit by a Russian launcher on December 10, 2001.
>

> As soon as he learned of the interference to amateur operations, Professor
Udo
> Renner of the Center had the 144.100 MHz transmitter turned off. He then
> notified AMSAT Germany that TUBSAT was no longer on two meters.
>
> But TUBSAT also has a downlink at 436.075 MHz. This system is only busy
over
> North Africa and Europe and only when the control stations in Rabat and
Berlin
> are activated. It has not been heard elsewhere in the world. (AMSAT-NA)
>
> **
>
> Break 1
>
> From the United States of America, we are the Amateur Radio Newsline,
heard on
> bulletin stations around the world including the Pentucket Radio Club
repeater
> serving Groveland Massachusetts
>
>
> (5 sec pause here)
>
> **
>
> SPECTRUM PRESERVATION: ARRL SAYS IT WILL FIGHT TO KEEP RFID OFF 70 CM
>
> The ARRL says that it will go all the way to protect the 70 centimeter ham
band
> from a threat brought by commercial interests. At issue is a plan from
SAVI
> Technology and already tentatively agreed to by the FCC to deploy
unlicensed
> transient R-F identification tag transmitters operating between 425 and
435
> MHz. These tags run at much higher field strengths and duty cycles than
Part
> 15 rules now permit.
>
> According to a League bulletin issued on January 29th, ARRL officials have
> already met with members of the FCC staff as part of the League's effort
to
> stave off a band threat. The bulletin says that General Counsel Chris
Imlay,
> W3KD, and ARRL Technical Relations Manager Paul Rinaldo, W4RI, delivered
an ex
> parte presentation to FCC Office of Engineering and Technology staffers
January
> 14th outlining the opposition of the ham radio community. (ARRL)

>
> **
>
> FCC: CHAIRMAN POWELL HOME AFTER HOSPITAL TESTS
>
> Federal Communications Commission Chairman Michael Powell was discharged
from
> the hospital on Friday January 25th. This, after a two-night stay in the
to
> undergo tests because of a lingering stomach bug.
>
> Stomach discomfort caused him to cancel appearances at the Consumer
Electronics
> Show in Las Vegas on January 8th and again at the annual conference of the
> National Association of Television Program Executives on Wednesday January
> 23rd. Doctors advised precautionary tests that required overnight stays
at
> Walter Reed Army Medical Center in suburban Washington. (Published news
> reports)
>
> **
>
> ENFORCEMENT: THAT SONG WAS NOT AS BAD AS WE THOUGHT
>
> The Federal Communications Commission has dropped an indecency fine
against a
> Colorado radio station. KKMG FM of Colorado Springs had been fined
> seven-thousand dollars for airing the edited version of Eminem's "The Real
Slim
> Shady." This, after a listener wrote the regulatory agency to complain.
>
> At the time the fine was issued federal regulators said the edited version
> still included some expletives and references to violence and graphic sex.
But
> the FCC now says it has reconsidered. It now says that the lyrics in the
> edited version didn't violate its rules by being "patently offensive."
(FCC)
>
> **
>
> RESCUE RADIO: BRAZIL RADIO OPERATORS HELP IN POWER OUTAGE CRISIS
>
> A major electricity blackout hit at least five Brazilian states on January
> 21st, and it was hobby radio enthusiasts that let people know about it.
>
> The blackout, which began at 1:30 p.m., hit hardest in the industrial
southeast
> and the major cities of Sao Paulo, Belo Horizonte, Rio De Janeiro,
Goiania,
> Vitoria and the capital, Brasilia.

>
> According to news reports, Brazil's National Energy Agency blamed the
outage
> on transmission line failures. The same news report credited Brazilian
hobby
> radio operators as informing authorities that subways in Rio De Janero and
Sao
> Paulo were halted and that traffic lights were out snarling commuters in
> several areas.
>
> The outage was caused by a failure at the Itaipu hydroelectric station in
> southwestern Brazil. A power-line failure caused thirteen of the dam's
> eighteen turbines to stop, cutting off nearly 20 percent of the country's
> energy. Power was restored about three hours later. The news story did
not
> identify the radio operators as being hams. (Various shortwave news
reports)
>
> **
>
> RESCUE RADIO: NEW INTER-JURISDICTION RADIO SYSTEMS BEING INTRODUCED
>
> Santa Clara County California, police, fire and emergency medical
personnel
> have never been able to communicate with one another at the scene of a
major
> disaster. This is because each agency uses a separate radio system.
That is
> expected to change this year.
>
> Santa Clara County will be leading the nation in using new digital radio
> technology to solve the inter-agency communications problem. The new
system
> will allow up to eighteen participating jurisdictions in any county to
talk to
> one another instantly.
>
> By way of example, once the system is up and running, officers involved in
one
> of California's famed high-speed car chase will be able to talk directly
to
> police in the neighboring jurisdiction as the suspect approaches that
town.
> They won't have to switch channels or go through dispatch centers. This
means
> less time wasted and the probability that lives will be saved.
>
> While Santa Clara county is at the head of the pack in adopting this new
> digital communications technology, the same news reports say that and
> Washington, D-C is not far behind. (Cal-State Info.)

>
> **
>
> PUBLIC RELATIONS: A CHEAP SATELLITE
>
> A Cheap Satellite is the name of an Associated Press item that highlighted
the
> work of the faculty and students at the United States Naval Academy in
the
> development and launch of the P C Sat ham radio satellite. The story
tells how
> the twenty-five pound bird was built using off the shelf products
including a
> tape measure for its antenna and rechargeable double A cell batteries for
> power.
>
> The story was written by Tom Stuckey and moved on the wire on Wednesday
January
> 23rd. It noted that PCSat, was the 44th amateur satellite put in orbit.
It is
> one of more than a dozen built by university students around the world.
(VHF
> Reflector)
>
> **
>
> CONVENTIONS & HAMFESTS: ORLANDO HAMCATION WEAK SIGNAL FORUM
>
> The Orlando HamCation will host its first ever Weak Signal VHF and UHF
forum.
> Beginning at 2 p.m. on Saturday Ferbruary 9th, the one hour session will
be
> moderated by N2CEI, of Down East Microwave. Also, Tom Haddon, K5VH, will
be on
> hand to motivate more Florida hams to become active on the Microwave
bands.
>
> If you are in the Orlando Florida area on February 8th to the 10th drop in
on
> the Orlando Hamcation. For more details and or advance reservations, go to
> oarc.org/hamcat.html on the World Wide Web (W2BZY)
>
> **
>
> CONVENTIONS & HAMFESTS: DATE CHANGE FOR RADIOFEST 2002
>
> Brian Broggie, W6FVI, asks that we pass along a date change for RadioFest
2002
> sponsored by the Naval Post Graduate School Amateur Radio Club in Monterey
> California. The new date is February 23rd. More information is in

cyberspace
> at k6ly.org/radiofest. (W6FVI)
>
> **
>
> BREAK 2
>
> Here when you need us 52 weeks a year. We are the Amateur Radio Newsline,
with
> links to the world from our only official website at www .arnewsline.org.
>
> (5 sec pause here)
>
> **
>
> HAM RADIO SCHOLARSHIPS: THE DARA SCHOLARSHIPS
>
> The Dayton Amateur Radio Association is one of three ham radio
organizations
> seeking nominations for its scholarship program for the 2002-2003 academic
> year. According to DARA, applicants must be graduating high school
seniors in
> 2002 and hold any class of an FCC issued mateur Radio license. The
> scholarship awards run up to $2000, as determined by the scholarship
committee.
> Money must be used toward tuition at an institution of higher education.
>
> To obtain an application, send a self-addressed, stamped envelope to the
Dayton
> Amateur Radio Association Scholarship Program, 9873 Lower Valley Pike,
Medway,
> Ohio 45341. You can also obtain an application by e-mail to
n8emo1@msn.com.
> Completed applications must be postmarked no latter than June 1st to be
> eligible for this years scholarship program. (DARA)
>
> **
>
> HAM RADIO SCHOLARSHIPS: THE FOUNDATION FOR AMATEUR RADIO
>
> Another organization offering scholarships to hams id the Foundation For
> Amateur Radio. The Washington, D.C. area group will administer sixty-two
> scholarships for the academic year running from 2002 through 2003.
Licensed
> Radio Amateurs may compete for these awards if they plan to pursue a
full-time
> course of studies beyond high school and are enrolled in or have been
accepted
> for enrollment at an accredited university, college or technical school.
> The awards range from $500 to $2500 with preference given in some cases to

> residents of specified geographical areas or the pursuit of certain study
> programs. Additional information and an application form may be requested
by
> letter or QSL card to the FAR Scholarships, Post Office Box 831,
Riverdale,
> Maryland, 20738. (Foundation For Amateur Radio)
>
> **
>
> INTERNATIONAL - SOUTH AFRICA: SA RADIO AMATEURS OF THE YEAR NAMED
>
> Turning to international news, South Africa is honoring two of its own as
that
> nations Radio Amateurs of the Year. Q-News Graham Kemp, VK4BB, brings us
the
> details:
>
> --
> The South African Amateur Radio Development Trust have announced the
winners of
> the 2001 Siemens Radio Amateur of the Year Award. This award is made
annually
> to a Radio Amateur who has made a major contribution to the Amateur
Service
> either on a technical or development basis in ZS land.
>
> The award has been bestowed jointly on Bradley Phillips, ZS5BP, and Garth
> Wilson, ZR6CY. ZS5BP for his work on the introduction of Iphone and the
> development of the Internet Radio Linked project. ZR6CY for his
continuous
> efforts to develop communication skills amongst the youth. He has to date
> presented no less than 80 camps for Voortrekkers to learn the Morse code
and
> basic communication skills.
>
> For Q-News Australia, I'm Graham Kemp, VK4BB, reporting for the Amateur
Radio
> Newsline.
>
> --
>
> This award is considered as South Africa's equivalent to the Dayton awards
> presented here in the United States. (SARL News, Q-News)
>
> **
> INTERNATIONAL - UK: KENWOOD TROPHY AWARDED TO G3XWH
>
> Meantime, over in the U-K, Richard Horton, G3XWH, who chaired the RSGB's
> Future Licensing and Examination Forum has been awarded the Kenwood
Trophy.

> This, for his significant contribution to training and development in
amateur
> radio.
>
> Horton recently retired from the Radio Society of Great Britain's Board
where
> he was responsible for amateur radio development. His committee was
> responsible for much of the work that went into the creation of the new
U-K
> Foundation Class license. (GB2RS)
>
> **
> DX
>
> In DX, DJ4KW and DK9GG are currently active from Belize as V31YN and
V31GW,
> respectively, through early February. Activity is on CW, RTTY and PSK 31.
> (RSGB)
>
> And IN3QBR will be active from Vientiane as XW3QBR until the 31st of July.
He
> will be joined, from the 20th of April until the 10th of May by IN3ZNR
> operating as XW3ZNR. (OPDX)
>
> And R1ANF began operations as CE9 slash R1ANF on the 29th of December from
a
> Chilean base in the South Shetland Islands. He is active on 10 to 28MHz
with
> 100 watts to an R6000 vertical. For all three QSL as directed on the air.
> (RSGB)
>
> **
> THAT FINAL ITEM: CELEBRATING THE LIFE OF ED CLEGG W2LOY
>
> And finally this week, if you were on the VHF bands in the 50's, 60's and
70's
> then the name Clegg Labs touched your ham radio operations. And as we
hear in
> this report, the family of the man behind the gear is inviting you to help
> celebrate his life.
>
> --
>
> Even if you did not own any Clegg gear, the chances are that you talked to
> someone on the air who did. Whether it was the top of the line
Interceptor
> receiver and Zeus transmitter or the entry level 99'er transceiver, it was
easy
> to spot a Clegg signal by its almost overpowering modulation that seemed
just

> right for the R-F carrier it was on.
>
> Almost every product that carried the Clegg label was designed by the
company's
> founder Edward T. Clegg, W2LOY. When he moved the company to
Pennsylvania in
> the 1970's, Ed took the call W3LOY. Likewise, after retiring to Ohio he
traded
> the 3 for an 8, but kept the famed L-O-Y suffix.
>
> And regardless of the call area, Ed Clegg was first and foremost a
> communications designer well ahead of his time. Even more important, he
was a
> positive influence on just about everyone with whom he came in contact.
>
> Ed Clegg left us last September at age 80. Now, his wife Martie will be
> hosting a gathering in March near the Clegg home in Lancaster Ohio. The
> purpose is to celebrate the life of Edward T. Clegg. And they are asking
you
> to help.
>
> Martie, her daughter Linda and Linda's husband Rob MacGuffie, K2HZN, are
asking
> anyone who knew Ed to share in the celebration. They know that most of
you
> won't be able to be in Lancaster Ohio on March 30th. But some of you do
have
> memories, stories, photos and other Ed Clegg memorabilia that would help
to
> make this day even more unforgettable.
>
> If you have something to share, please contact Linda and Rob before the
end of
> February. Their address is 70 Province Road, Gilmanton New Hampshire with
a
> zipcode of 03237. Rob's cyperspace address is K2HZN@yahooo.com.
>
> For the Amateur Radio Newsline, I'm Cathy Anno, KB0FDU.
>
> --
>
> By the way, a number of us here at the Amateur Radio Newsline began our
ham
> radio careers using gear designed by Ed Clegg. In fact, our producer Bill
> Pasternak, WA6ITF, got to know Ed while Bill was still a teenager
operating
> A-M on the 6 meter band. (Clegg family)
>
> **
>

> NEWSCAST CLOSE
>
> With thanks to Alan Labs, Amateur News Weekly, AMSAT, the ARRL, the CGC
> Communicator, CQ Magazine, the FCC, the Ohio Penn DX Bulletin, Radio
> Netherlands, Rain, the RSGB and Australia's Q-News, that's all from the
Amateur
> Radio Newsline(tm). Our e-mail address is newsline @arnewsline.org. More
> information is available at Amateur Radio Newsline's(tm) only official
website
> located at www.arnewsline.org. You can also write to us or support us at
> Amateur Radio Newsline(tm), P.O. Box 660937, Arcadia, California 91066.
>
> For now, with Bill Pasternak, WA6ITF, at the editors desk, I'm
----
> saying welcome to the year 2002, 73, and we thank you for listening."
Amateur
> Radio Newsline(tm) is Copyright 2002. All rights reserved.
>
>
>
>
>
>
>
>
>

2434. Re: Wanted 6 meter antenna advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 18:28:08 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna5r09j.6m2.QSB@animas.frontier.net>
Source record: 149272

On Sun, 03 Feb 2002 06:47:26 -0800, ac6v scribbled:
>
> A ham here (San Diego) running 10 Watts has woked 24 states,...

Using safflower oil? HI!HI!

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

2435. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 18:31:31 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <a4zAX$GDIYX8EABo@ifwtech.com>
Source record: 149273

captbrian wrote:
>Stop transmitting until you have taken trouble to learn how to do so
>competently.

Well, that was welcoming to a newbie...

>There are many books

Only one book that I know of - the ARRL Antenna Handbook - talks about the practical problems of RF on feedlines and how to cure it.

He might be lucky enough to find something in a back-issue of some magazine... but as a newbie he probably won't have those.

> and courses

Really? Please name even one that deals with this subject, in the practical terms that he needs right now.

>and clubs.

Where he may find equal parts of fact and folklore... and for a newbie, it's hard to tell the difference.

I think he's come to the right place. All the answers offered may not agree, but he'll learn plenty from the discussion.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2436. New Setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 19:01:52 UTC
From: Ed Strungis <ed.strungis@verizon.net>
Message-ID: <AOf78.12935$pb.6603@nwrddc01.gnilink.net>
Source record: 149274

Hello,
Kind of a long post. I'm in the process of setting up a a brandy new station/shack. Good news I have a whole room to myself.(Kids moved out.) Semi good news, it's on the second floor. My question has to do with grounding both for RF and lightening. In what I've read, most sources call for a ground run to be as short as possible. In my case about 20 feet. Also, some sources say multiple ground rods, about 8 feet apart bonded together.Does this add into the length of a ground run? As for bonding, some sources say that all your grounds (Cable TV, Telephone, electrical service, etc.) should be bonded together. Other sources say that the shack ground should be isolated (Don't use the electrical outlet ground, or a nearby cold water piper for example.) I've read that your equipment ground connections can be all terminated on a grounded copper buss bar. Others say never daisy-chain your equipment. Very confusing for a newbie. Any advice, steering in the right direction, etc. would be greatly appreciated.
Thanks,
Ed S

2437. Newbe - Build an antenna switch

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 19:13:12 UTC
From: Scott <GAEL79@Peoplepc.com>
Message-ID: <u5r2ujfg9v1q3f@corp.supernews.com>
Source record: 149275

Hello All, I would like to try to build an antenna switch for HF. I know I can get the connectors at Radio Shack. I am pretty handy with sheet metal (aluminum), so I don't think the case will be a problem. I am just starting in the hobby, but would like to build it to run legal limit. Does anyone have any experience doing this? any advice on the switch or wiring technique inside of the box, would be appreciated. Is it best to use short sections of 50 ohm coax between the socket and switch and ground the box separately, or just use solid copper wire for the positives (center conductor), and use the box as the ground? I assume either way I should ground the box to my "station's" grounding buss. Is this correct?

Thanks for the help.

Scott

2438. Re: Wanted 6 meter antenna advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 19:14:44 UTC
From: ac6v <ac6v@amsat.org>
Message-ID: <3C5D8C24.38101E90@amsat.org>
Source record: 149276

He has the QSL cards confirming the contacts hi hi

Allodoxaphobia wrote:

> On Sun, 03 Feb 2002 06:47:26 -0800, ac6v scribbled:
> >
> > A ham here (San Diego) running 10 Watts has woked 24 states,...
>
> Using safflower oil? HI!HI!
>
> 73
> Jonesy
> --
> | Marvin L Jones | jonz | W3DHJ | OS/2
> | Gunnison, Colorado | @ | Jonesy | linux __
> | 7,703' -- 2,345m | frontier.net | DM68mn SK

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm

2439. Tuners - Heath SA 2040 or Murch 2000a?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 19:23:49 UTC
From: Scott <GAEL79@Peoplepc.com>
Message-ID: <u5r3id27t1i1f4@corp.supernews.com>
Source record: 149277

Hi,
I am just starting to set up my first HF station (10 - 80 meter). I just set up an 80 meter, 1 wavelength horizontal loop antenna. So far, all of my HF gear is Heathkit, around the same vintage. I am now looking for a tuner for the loop antenna. I was originally going to stay Heathkit, and go with the SA 2040, but I have read some O.K. reviews of the Murch UT 2000A, and it looks like they run a little cheaper on the used market. Can anyone help me to "Get off the fence" and pick a tuner?

Any comments from users of one or the other or both of these will help me to decide.

Thank you for your input.

Scott

2440. Affect of limbs and leaves on wire antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 19:35:14 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3C5D90F2.9030803@europa.com>
Source record: 149278

Sometime before the leaves start coming out on a big Elm tree that is in our front yard, I want to try and get the end of a 80 meter dipole I have going to it up higher than it is now. Currently I have the guy rope about 25 to 30 feet over a limb. The end of the rope connects to the end insulator of the dipole about 15 feet out beyond the limbs and leaves. I want to take the rope up another 10 to 15 feet higher, but the best limb for that is actually on the other side of the tree. Since I would like to shift my dipole that way anyway (I have it in a 90 degree angle now with one leg going North/South and one leg going East/West) so as to give me less of an angle at the center. I know that when dry, I shouldn't have too much of a problem with the leaves and finger size limbs that will grow around it, but how about when they are wet? Can I expect this to affect the tuning of the antenna by very much? Approximately 15 to 20 feet of the one end will be within the tree growth area. The antenna is made of non insulated copper wire. I am thinking of changing this antenna for one of the Alpha Delta 80-10 dipoles when I do the work. I only use up to 100 watts from my Icom 745 with the AT-150 antenna tuner.

Thanks.

Mike
KJ4TX

--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

2441. Re: Wanted 6 meter antenna advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 19:51:36 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna5r56c.aif.QSB@animas.frontier.net>
Source record: 149279

On Sun, 03 Feb 2002 11:14:44 -0800, ac6v scribbled:

> He has the QSL cards confirming the contacts hi hi

Running just 9.5 watts here with a 3 el beam (up at 7,745'), I've
worked 49 states. Still chasing the elusive R.I.

Best DX: VK8MS.

Worked Tim, V73AT yesterday afternoon - 3 other new countries in the A.M.

I've worked other fellas that were running far less power, or far
less 'desirable' antennas than I -- usually Great Sigs, nonetheless.

Six Meters is a Kick In The Pants!

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

2442. Re: AEA Via Antenna Analyzer Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 19:57:07 UTC
From: John Kaufmann <john.w1fv@telocity.com>
Message-ID: <3C5D9613.5000703@telocity.com>
Source record: 149280

I have the AEA-CIA which is very similar to the VIA, but less money. I used to have the MFJ-259B but gave up on it after it broke twice. The MFJ is actually a nice unit except for the poor build quality. Several other people I know have also had theirs fail. Battery life in the MFJ is very short. I was constantly annoyed when the unit would stop working in the field because the batteries had run low.

The AEA has much better build quality, although it costs quite a bit more than the MFJ. It's advantages are the graphical display and the ability to download data to a PC. AEA also has a data acquisition and plotting program which allows you to generate automated frequency sweep plots on your PC. It's very handy. Battery life is much better than the MFJ. As for price, I ended up buying direct from AEA Wireless at list price because I couldn't find any dealers (are there any?).

I don't have any experience with the Autek.

73, John W1FV

2443. new relaise Qso Manager

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 20:37:42 UTC
From: Paolo Nossa <ik4clf@inwind.it>
Message-ID: <qch78.22810$om6.585272@news1.tin.it>
Source record: 149281
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,relcom.radi

www.qsl.net/ik4clf
HF QSO/QSL/Award managment, ADIF Import/Export, full version free to
everybody.
Requires Access 97 or Access 2000 (with JPEG and TIFF filter installed),
screen resolution 800x600/1024x768.
Includes: over 9500 logged QSO's for easy/quick testing of performance and 5
maps (Italy, Usa, Usa-Cal, Usa-Fla, Svalbard Is).
Full mapping (382 maps) available at Downloads page or free on request
(CD-ROM).

2444. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 20:57:37 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <2wh78.49802$E4.2070380@e3500-atl2.usenetserver.com>
Source record: 149282

Dick,

Using the label/visual method, you shouldn't have any trouble with mistaken resonance. Since
you are already near the correct resonance by sighting the antenna, you shouldn't be crossing
the 3/4WL point anyway.

On the point of 'wasting' a 259 for tuning the antenna, I don't consider it wasted since it is
removable for other uses. Heck, if it weren't being used for this purpose, it would just be
sitting on the shelf until I needed it. It is also very precise since I can also observe for the
closest impedance match. I once suggested to MFJ that they design a screwdriver auto-
positioner based on the 259 since most of the compoments were already there. Seems AmCom has beat them to it. That is what I want next.

Jerry
www.qsl.net/k4kwh
Dick Hughes <rhughes33@cableone.net> wrote in message
news:to7o5us1oneroujj6778l3uhmhcuf8hg81@4ax.com...
> What I did was to carefully tune my screwdriver with an MFJ-259 then
> mark those spots with plastic labels (P-Touch). I can see the tapes
> in my side mirror so I know if the antenna is trying to find one of
> the other null points.
>
> Dick - W6CCD
>
> On Sat, 02 Feb 2002 07:19:26 -0800, Bill Turner <w7ti@dslextreme.com>
> wrote:
>
> >On Sat, 02 Feb 2002 08:50:35 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:
> >
> >>The only
> >>catch is that the operator must know which way to start the screwdriver
> >>motor moving.
> >
> >_____
> >
> >Another possible catch is that some antennas show multiple nulls for
> >SWR. How do you know you are on the right one? Perhaps screwdriver
> >antennas are less susceptible, but my various dipoles at home have a
> >number of minimums in the HF and low VHF range.

> >
> >73, Bill W7TI
>

2445. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 21:13:10 UTC
From: Kijoma <bill_news@kijoma.com>
Message-ID: <3c5d9d79_1@news1.meganetnews.com>
Source record: 149283
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I like these clueless grads who wangle a job on false illusion of ability.

A "lot" of my customers have been companies who have one or more of these on board who have completely stuffed up a project.

Long may they live for the benefit of others like me :)

--
Bill Lewis
Engineering Director
Kijoma Solutions Ltd
RF - Analogue - Digital - Software
Electronic Product Design & Consultancy
Email : Bill.Lewis_@_kijoma.com (removes the _'s)

"Phil Allison" <bilup@bigpond.com> wrote in message
news:tzI68.85432$HW3.118025@newsfeeds.bigpond.com...
>
> "Jim Thompson" <Jim-T@analog_innovations.com.invalid> wrote in message
> news:keim5uoltso540qp9jbn9gfn32kke588r0@4ax.com...
> >
> > Presenting yourself as a knowledgeable "engineer", when you don't have
> > a clue ?:-)
>
>
> Been known to happen before a few times - especially with graduates.
>
> Regards, Phil
>
>
>
>
>

2446. Re: 15,000W (yes 15kw) mobile antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 21:16:08 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <qNh78.49918$E4.2077340@e3500-atl2.usenetserver.com>
Source record: 149284
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

We used to have 30 KVA military gensets that used a 4 cyl Jeep engine.

Jerry
K4KWH
Roy Lewallen <w7el@eznec.com> wrote in message
news:3C5BBF79.314BC934@eznec.com...
> Last I checked, a horsepower was just under 750 watts (745.7 to be more
> precise). At 50% efficiency, 15 kW works out to 40 horsepower on my
> calculator.
>
> Maybe they're just not makin' horses like they used to?
>
> Roy Lewallen, W7EL
>
> Bill Nelson wrote:
> >
> > In rec.radio.amateur.antenna Cougercat <felix1063@attbi.com> wrote:
> > > Lets see ... on a 13.6 volt system that would be approx 2205.88 amps
using a
> > > 50% efficiency for the final class C power amp. Anyone have a trailer
> > > mounted gen set to load up this antenna?
> >
> > They don't run 12 volt dc systems. Alternators are capable of AC.
> >
> > But for 15 KW, assuming about 50% conversion efficiency all down the
> > line, it would require somewhere between 400 and 500 horsepower to
> > the alternators.
> >
> > Most common gensets are not capable of that kind of power output.
> >
> > --
> > Bill Nelson (billn@peak.org)

2447. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 21:20:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3ki69$17ms62$1@ID-124126.news.dfncis.de>
Source record: 149295

Ian, when a balanced 1/2-wave dipole is fed with coax, what fraction of system input power is radiated from the feedline ?

Compare that with what is radiated from the dipole and ask yourself what is the likelihood of the unbalanced feedline being the source of any TVI which somewhat rarely might exist in the neighbourhood.

Reg G4FGQ

2448. AntiSpam Test

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 21:59:20 UTC
From: ac6v <me@nowhere.com>
Message-ID: <3C5DB2B8.A77C0047@nowhere.com>
Source record: 149285

```
AntiSpam Test
```

2449. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 22:21:26 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <gjdr5u41ujcrhtkh8ovkf6rgi5ml4qp488@4ax.com>
Source record: 149286

Yes, except that my Am Com controller sometimes has a mind of its own
and starts off in the wrong direction. I don't think it is the Am
Com's fault. I have a problem in the antenna that I haven't had time
to resolve yet. When I try to find the resonance point with the
MFJ-259 it won't sit still. Could be water in the toroid or an
intermittent in the fiberglass whip. Maybe RF on the coax or control
cable. OK, I admit it. It's too darn cold outside to work on the
antenna.

Dick

On Sun, 3 Feb 2002 15:57:37 -0500, "Jerry Oxendine"
<joxendi@bellsouth.net> wrote:

>Dick,
>
>Using the label/visual method, you shouldn't have any trouble with mistaken
>resonance. Since
>you are already near the correct resonance by sighting the antenna, you
>shouldn't be crossing
>the 3/4WL point anyway.

>
>Jerry
>www.qsl.net/k4kwh
>Dick Hughes <rhughes33@cableone.net> wrote in message
>news:to7o5us1oneroujj6778l3uhmhcuf8hg81@4ax.com...
>> What I did was to carefully tune my screwdriver with an MFJ-259 then
>> mark those spots with plastic labels (P-Touch). I can see the tapes
>> in my side mirror so I know if the antenna is trying to find one of
>> the other null points.
>>
>> Dick - W6CCD

2450. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 22:37:08 UTC
From: n2ey@aol.com
Message-ID: <20020203173708.02067.00001068@mb-ct.aol.com>
Source record: 149287

In article <a3cegu$16m58r$1@ID-124126.news.dfncis.de>, "Reg Edwards"
<g4fgq.regp@btinternet.com> writes:

>Do women make as good engineers as men ?
>
The women engineers I have known do their jobs as well as
their male counterparts.

73 de Jim, N2EY

2451. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 22:59:03 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5DC0B7.3100FB1E@IEEE.org>
Source record: 149289

Dick Hughes wrote:
> Yes, except that my Am Com controller sometimes has a mind of its own
> and starts off in the wrong direction.

I have a design that takes one ten cent IC and one $3 relay. The
operator chooses the direction. If the reflected power pickup
voltage is more than a certain voltage (selectable from the front
panel) the antenna moves until the reflected power pickup voltage
is less than that certain voltage. I use the reflected power pickup
voltage from my Daiwa SWR meter and the extra IC, relay, and direction
switch are built into the Daiwa enclosure. It's as slick as owl poop.
--
cheers, CAM http://www.qsl.net/w5dxp

2452. Re: Wanted 6 meter antenna advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 23:02:38 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C5DC189.A1155D58@tampabay.rr.com>
Source record: 149288

geee
down in here florida you cant get a band opening on 6 with out working a
dozen or so R.I. i think i have worked every ham in FN42 and FN41

Allodoxaphobia wrote:

> On Sun, 03 Feb 2002 11:14:44 -0800, ac6v scribbled:
>
> > He has the QSL cards confirming the contacts hi hi
>
> Running just 9.5 watts here with a 3 el beam (up at 7,745'), I've
> worked 49 states. Still chasing the elusive R.I.
>
> Best DX: VK8MS.
>
> Worked Tim, V73AT yesterday afternoon - 3 other new countries in the A.M.
>
> I've worked other fellas that were running far less power, or far
> less 'desirable' antennas than I -- usually Great Sigs, nonetheless.
>
> Six Meters is a Kick In The Pants!
>
> 73
> Jonesy
> --
> | Marvin L Jones | jonz | W3DHJ | OS/2
> | Gunnison, Colorado | @ | Jonesy | linux __
> | 7,703' -- 2,345m | frontier.net | DM68mn SK

2453. CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 23:07:41 UTC
From: "R.U. Amused?" <n6ttd@spamsuxarrl.net>
Message-ID: <1pj78.13909$S06.50196@rwcrnsc53>
Source record: 149290
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

Hello All;

I live an a development in California that has CC&R's, restrictive to all types of external antennas, including satellite dishes. I need to erect an antenna to use with my amateur radio, and I was wondering if anyone else went up against CC&R's with an antenna, and what was the ending result. CC&R's are part of every new development out here; you can't buy a new house without them, effectively eliminating amateurs from operating. My CC&R's are not even linked to a homeowners association, so I am wondering how enforceable they are.

Any comments or suggestions are appreciated.

James
n6ttd@arrl.net

2454. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 23:19:09 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C5DC567.F6980227@tampabay.rr.com>
Source record: 149292
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

hey dont let them BS you there are many ways to play radio with out them even
seeing an antenna check your restrictions and if you can have a flagpole you can
make one out of PVC pipe and hide a multiband HF vertical inside of it
or you can string a wire around the roof line of the house telling the housiung
nazis that it is an antifungal strip what do they know...grin just buy a bunch
of those 1 inch stand offs from radio shack and string the wire thru them and
then run it into the house to a tuner
there are also ways to play VHF/UHF there is a weathervane antenna as well as
the ventenna so you can play it just takes a little effort and thought
or move...grin
good luck

"R.U. Amused?" wrote:

> Hello All;
>
> I live an a development in California that has CC&R's, restrictive to all
> types of external antennas, including satellite dishes. I need to erect an
> antenna to use with my amateur radio, and I was wondering if anyone else
> went up against CC&R's with an antenna, and what was the ending result.
> CC&R's are part of every new development out here; you can't buy a new house
> without them, effectively eliminating amateurs from operating. My CC&R's are
> not even linked to a homeowners association, so I am wondering how
> enforceable they are.
>
> Any comments or suggestions are appreciated.
>
> James
> n6ttd@arrl.net

2455. Re: Which Mini Beam ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 23:22:19 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020203182219.23893.00000977@mb-mi.aol.com>
Source record: 149291

The clear winner is the TGM Quagi. Check out the reviews on eHam for details.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free,
Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

2456. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 23:26:28 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5DC724.79C59395@IEEE.org>
Source record: 149293

N2EY wrote:
>
> In article <a3cegu$16m58r$1@ID-124126.news.dfncis.de>, "Reg Edwards"
> <g4fgq.regp@btinternet.com> writes:
>
> >Do women make as good engineers as men ?
> >
> The women engineers I have known do their jobs as well as
> their male counterparts.

And I like their I/O better.
--
cheers, CAM http://www.qsl.net/w5dxp

2457. Re: Affect of limbs and leaves on wire antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 23:32:00 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020203183200.23893.00000980@mb-mi.aol.com>
Source record: 149294

I bet the benefits of raising your antenna and reorienting it will outweigh any problem with the tree. I have no problem with mine. Wood is an insulator but if you are concerned about it being wet, use insulated wire.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

2458. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-03 23:51:20 UTC
From: "R.U. Amused?" <n6ttd@spamsuxarrl.net>
Message-ID: <Y1k78.13814$Ri2.45536@rwcrnsc54>
Source record: 149296
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

Verticals don't seem to work (crappy soil conditions, and I don't have room for radiators. All houses in the area are two story houses, so I really want to get the antenna above them also. I also have a nice beam that I want to put up. I just want to try to buck the system, and wanted advice on it. If it doesn't work though, I certainly will try the stealth approach.

TNX.

JT
N6TTD@arrl.net

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message news:3C5DC567.F6980227@tampabay.rr.com...
> hey dont let them BS you there are many ways to play radio with out them even
> seeing an antenna check your restrictions and if you can have a flagpole you can
> make one out of PVC pipe and hide a multiband HF vertical inside of it
> or you can string a wire around the roof line of the house telling the housiung
> nazis that it is an antifungal strip what do they know...grin just buy a bunch
> of those 1 inch stand offs from radio shack and string the wire thru them and
> then run it into the house to a tuner
> there are also ways to play VHF/UHF there is a weathervane antenna as well as
> the ventenna so you can play it just takes a little effort and thought
> or move...grin
> good luck
>
>
> "R.U. Amused?" wrote:
>
> > Hello All;
> >
> > I live an a development in California that has CC&R's, restrictive to all
> > types of external antennas, including satellite dishes. I need to erect an
> > antenna to use with my amateur radio, and I was wondering if anyone else
> > went up against CC&R's with an antenna, and what was the ending result.
> > CC&R's are part of every new development out here; you can't buy a new house

> > without them, effectively eliminating amateurs from operating. My CC&R's
are
> > not even linked to a homeowners association, so I am wondering how
> > enforceable they are.
> >
> > Any comments or suggestions are appreciated.
> >
> > James
> > n6ttd@arrl.net
>

2459. Re: Which Mini Beam ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 00:00:58 UTC
From: "R.U. Amused?" <n6ttd@spamsuxarrl.net>
Message-ID: <_ak78.13858$Ri2.45350@rwcrnsc54>
Source record: 149297

Try the MA5B by Cushcraft.

JT

n6ttd

"Mike Tatum" <miket@cybatek.fsnet.co.uk> wrote in message
news:a3jjnf$bt0$1@news8.svr.pol.co.uk...
> Hi All,
>
> Looking for personal experiences / info to help me decide which mini beam
to
> buy.
>
> I'd like to operate 10/12/15/17/20m from a single mini beam.
>
> Look forward to getting some replies.
>
> MikeT ...
> M0AWS
>
>

2460. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 00:08:50 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5DD112.A0F33CA7@IEEE.org>
Source record: 149298

Reg Edwards wrote:
> Ian, when a balanced 1/2-wave dipole is fed with coax, what fraction of
> system input power is radiated from the feedline ?

What's the impedance seen by the signal looking back down the
outside of the coax if it is exactly 1/2WL and grounded at
the transmitter?
--
cheers, CAM http://www.qsl.net/w5dxp

2461. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 00:22:45 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <p1lr5ugg45bs8vigsa4b9360g1eptlt0ss@4ax.com>
Source record: 149299

Well, are you going to share it Cecil?

Dick - W6CCD

On Sun, 03 Feb 2002 16:59:03 -0600, CAM <Cecil.A.Moore@IEEE.org>
wrote:

>Dick Hughes wrote:
>> Yes, except that my Am Com controller sometimes has a mind of its own
>> and starts off in the wrong direction.
>
>I have a design that takes one ten cent IC and one $3 relay. The
>operator chooses the direction. If the reflected power pickup
>voltage is more than a certain voltage (selectable from the front
>panel) the antenna moves until the reflected power pickup voltage
>is less than that certain voltage. I use the reflected power pickup
>voltage from my Daiwa SWR meter and the extra IC, relay, and direction
>switch are built into the Daiwa enclosure. It's as slick as owl poop.

2462. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 00:28:05 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <t5lr5u0bnonnapd8iuqtc6tah8vv2k92c6@4ax.com>
Source record: 149300

If you own the property, CCR's can't stop you from putting up a satellite dish less than one meter in diameter. They can stop other types of antennas. They are enforceable by those who wish to pursue it through the courts. About your only recourse is to use one of the various kinds of stealth antennas. I would try the attic if you have one.

Dick Hughes - W6CCD

On Sun, 03 Feb 2002 23:07:41 GMT, "R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote:

>Hello All;
>
>I live an a development in California that has CC&R's, restrictive to all
>types of external antennas, including satellite dishes. I need to erect an
>antenna to use with my amateur radio, and I was wondering if anyone else
>went up against CC&R's with an antenna, and what was the ending result.
>CC&R's are part of every new development out here; you can't buy a new house
>without them, effectively eliminating amateurs from operating. My CC&R's are
>not even linked to a homeowners association, so I am wondering how
>enforceable they are.
>
>Any comments or suggestions are appreciated.
>
>James
>n6ttd@arrl.net
>
>

2463. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 00:34:12 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <8Gk78.1953$uh3.1274986@paloalto-snr2.gtei.net>
Source record: 149301
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

"R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
news:1pj78.13909$S06.50196@rwcrnsc53...
> Hello All;
>
> I live an a development in California that has CC&R's, restrictive to all
> types of external antennas, including satellite dishes. I need to erect
an
> antenna to use with my amateur radio, and I was wondering if anyone else
> went up against CC&R's with an antenna, and what was the ending result.
> CC&R's are part of every new development out here; you can't buy a new
house
> without them, effectively eliminating amateurs from operating. My CC&R's
are
> not even linked to a homeowners association, so I am wondering how
> enforceable they are.
>
> Any comments or suggestions are appreciated.
>
> James
> n6ttd@arrl.net

A CC&R is a legal contract that you signed and agreed to. It is enforceable just like any other contract - especially in the People's Republic of California. But, like any other contract, if you have enough time and money you might be able to obtain some type of compromise or variance.

(Actually, there are a lot of houses in CA without any antenna restrictions - depending on where you want to live. When I bought my last house I saved myself a lot of grief by telling the Realtor that I was only interested in looking at houses that did not have any anti-antenna CC&R's or local ordinances. And before I signed the purchase agreement, I had this fact stipulated in the disclosure documents)

However, if you have an attic that you can string a dipole up in, you can still get on the air. It won't perform like a yagi at 80 feet, but you can still work the world with 100 watts...

Good Luck,

73 de W6DKN

2464. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 00:42:00 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C5DD94B.2730ECEF@bellatlantic.net>
Source record: 149302
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Peter O. Brackett" wrote:

> Shoudn't take you more than a weekend or so to read em all and them
> summarize them back to
> us here on the NG so that we can all become experts as well.

What makes you think he'll spend even 1 weekend on this?

2465. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 00:43:20 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3klop$m1g$1@slb3.atl.mindspring.net>
Source record: 149303

Reg:

[snip]
>"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a3ki69$17ms62$1@ID-124126.news.dfncis.de...
> Ian, when a balanced 1/2-wave dipole is fed with coax, what fraction of
> system input power is radiated from the feedline ?
> Compare that with what is radiated from the dipole and ask yourself what
is
> the likelihood of the unbalanced feedline being the source of any TVI
which
> somewhat rarely might exist in the neighbourhood.
[snip]

Your point is well taken for the transmit direction.

However for the receive direction when trying to pull weak DX signals out of
the mud with high sensitivity receivers, the
common mode noise pickup, the ITV, can often be extremely troublesome,
especially if the "unbalanced" feedline passes
close to television sets.

I have found that good common mode rejection principles applied to antenna
feedlines
helps more with reception problems than with transmit problems. Especially
with weak signal work.

--Peter K1PO

2466. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 00:48:22 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5DDA56.418FD147@IEEE.org>
Source record: 149304

Dick Hughes wrote:
> Well, are you going to share it Cecil?

The IC is an LM339 quad comparitor. All four stages are paralleled. The '+' inputs are tied to the centertap on a 10k pot. The other two terminals on the 10k pot are tied to +12 and ground. The pot furnishes an adjustable reference voltage. The '-' inputs on the LM339 are tied to the reflected voltage output from the shielded can in the Daiwa SWR meter. The outputs of the LM339 drive a SPST 12v relay. The relay contacts furnish the +12v power to the familiar DPDT direction switch which is not a momentary switch anymore.

If there is no reflected power (receive) the relay is off and no power is applied to the screwdriver motor. When reflected power appears and the pickup voltage is above the threshold, the relay picks up, furnishing power to the DPDT direction switch which must be set by the operator. When the pickup voltage from the reflected voltage output falls below the level preset by the pot, the relay falls out removing voltage from the screwdriver motor.
--
cheers, CAM http://www.qsl.net/w5dxp

2467. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 00:55:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3kp91$18uu45$1@ID-124126.news.dfncis.de>
Source record: 149316

Reciprocity Rules !

2468. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 00:58:59 UTC
From: cprstn54zz@att.net
Message-ID: <3c5dd600.92120203@news-server.optonline.net>
Source record: 149305

On Sun, 3 Feb 2002 18:31:31 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

>Only one book that I know of - the ARRL Antenna Handbook - talks about
>the practical problems of RF on feedlines and how to cure it.

I secured a copy of the the ARRL Antenna Handbook and have read the section on this problem. It covers the subject in greater detail than the ARRL Handbook, but it is still not rigorous. It explains -- as was done here -- why coax is "unbalanced": Current travels the inside of the sheath but at the antenna feedpoint some of that current fails to flow out onto the dipole leg but rather flows down the outside of the sheath, whereas all of the center conductor current flows into its dipole leg. It still sounds kind of circular, because it does not explain why the current finds the outside of the sheathing a suitable path to follow. Also, the concept that the inside of a thin good conductor is at one potential while the outside is at another is counterintuitive.

Anyway, my main question did not really get answered, although other questions did and the information was helpful: I already had installed the recommended coax choke and was wondering why I was still getting RF off the coax, insmuch as the coax choke was supposed to be very effective with a monoband dipole.

The Antenna Handbook had a little more detail about these chokes, distinguising between flat-wound and scramble-wound. Mine is scramble wound. Tomorrow I will wind it flat around a section of 4" PVC sewer pipe and see if that helps. After that, I will try a Hi-Q 1:1 current balun. After that, the ferrite beads on the coax.

Ken
(to reply via email
remove "zz" from address)

2469. Impressions of the MFJ 1025/1026 Noise Canceller?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:00:46 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5DDC2A.787FB397@bellatlantic.net>
Source record: 149306

Anyone try either of these? Assuming a good noise antenna, does it work?

'73 KI4Z

2470. Re: Newbe - Build an antenna switch

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:05:58 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5DDD61.6DA331DB@bellatlantic.net>
Source record: 149307

Hardly worth building one.. they're dirt cheap on E-Bay or Radio swap. But if you feel the need, use solid wire inside, and keep it as short as you can. For legal limit, you'll need a really good switch which might not be easy to find.

'73 KI4Z.

Scott wrote:

> Hello All, I would like to try to build an antenna switch for HF. I know I
> can get the connectors at Radio Shack. I am pretty handy with sheet metal
> (aluminum), so I don't think the case will be a problem. I am just starting
> in the hobby, but would like to build it to run legal limit. Does anyone
> have any experience doing this? any advice on the switch or wiring
> technique inside of the box, would be appreciated. Is it best to use short
> sections of 50 ohm coax between the socket and switch and ground the box
> separately, or just use solid copper wire for the positives (center
> conductor), and use the box as the ground? I assume either way I should
> ground the box to my "station's" grounding buss. Is this correct?
>
> Thanks for the help.
>
> Scott

2471. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:06:31 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3kn23$j1e$1@slb4.atl.mindspring.net>
Source record: 149308

Thread:

An interesting story...

Although the percentage of women in Engineering is not very high, for some reason unknown to me, I personally have
enjoyed the opportunity to work with several very fine female Engineers.

During one three year period in my career, I had reporting to me among my staff three excellent women Engineers. All three became
pregnant, by their respective husbands, during one 12 month period! Barbara, Caroline and Iris.

I recall working with one of our lovely Engineer mothers-to-be late one Friday night, on a multi-million dollar project, in which she
had played a vital design role, and for which customer acceptance tests were to be the following Monday. I wondered that Friday
afternoon why Barbara wanted to work late on Friday instead of coming in on Saturday and Sunday. She must have had a
premonition...

In any case, we got all of the final bugs out of the acceptance test procedure, never could have done it without her, around 9:30pm,
and some of the male Engineers wanted to go have a beer, it was then she told me that... I should call her husband and drive her
to the hospital! This was somewhere around 10:00pm that Friday night. Wow! She had been in labor for several hours that
evening and just kept working with us in the lab till we were done, because we needed her, and she never said a thing!

With her help "we" delivered both the project and the baby in good health!

Later, my wife Mary wanted to know why I sent Barbara a bigger bouquet of roses than I ever sent her when she was delivering our
own kids... heh, heh... My dear wife still doesn't understand Engineers and their projects!

To this day, that little girl, Barbara's daughter, is one of my sweethearts.

--Peter K1PO

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C5DC724.79C59395@IEEE.org...
> N2EY wrote:
> >
> > In article <a3cegu$16m58r$1@ID-124126.news.dfncis.de>, "Reg Edwards"
> > <g4fgq.regp@btinternet.com> writes:

> >
> > >Do women make as good engineers as men ?
> > >
> > The women engineers I have known do their jobs as well as
> > their male counterparts.
>
> And I like their I/O better.
> --
> cheers, CAM http://www.qsl.net/w5dxp

2472. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:08:51 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <3C5DDF23.D11922D4@aztek-eng.com>
Source record: 149309

Having competed in the USA ARDF Championships in New Mexico
last year, I can assure you that I saw absolutely NO ONE
hunting on 2 meters via the null. Most entrants used 3
element (flexible elements) yagis. I agree that a balun
is necessary. On Al's antenna I would be most worried about
the elements getting knocked out of alignment by bushes etc.

73,
Larry Benko, W0QE

Leland Cox wrote:
>
> Make a 2 element beam without the balun, use a gamma match. or no
> match. look for the null off the back side. Much sharper than the peak
> on the front side.
> Les, AA4F
>
> Val wrote:
> >
> > 139 dollars. Not cheap.... You can make a nice one Yourself
> > for about 1/10 of that price.
> >
> > And, for HEAVENS SAKE use a BALUN (if used for ADF).
> > Well, it's nice if you get max. signal strength when You
> > aim at the target. Without a balun You'll get a declination
> > -as with a magnetic compass, at least here in Scandinavia
> > NOT pointing straight North
> >
> > (If You succeed in obtaining a balanced input preamp or a
> > RX with balanced input front-end, You do not need a balun)
> >
> > Arrow146 wrote:
> > >
> > > I would like to get the Opinion from some of the Experts here.
> > > If you have the time, would you please look at this antenna, and give me your
> > > Opinion.
> > >
> > > One Question: Does a direct feed (Receive Only) antenna
> > > really need a balun?
> > > <A HREF="http://Arrowantennas.com/adf1.html">Arrow Antenna ADF1</A>
> > > Thank You for your Time.
> > > 73 Al Lowe N0IMW

2473. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:12:43 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <7t5dPJkYUaExgtC+EgeDEsznP=AI@4ax.com>
Source record: 149310

"R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote:

>Hello All;
>
>I live an a development in California that has CC&R's, restrictive to all
>types of external antennas, ...
>
>Any comments or suggestions are appreciated.
>
>James
>n6ttd@arrl.net
>
>

Try this resource...

http://www.arrl.org/FandES/field/regulations/antenna-restrictions.html

Bob
k5qwg

2474. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:15:45 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3knbs$3l9$1@slb7.atl.mindspring.net>
Source record: 149311
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

ehsjr:

[snip]
<ehsjr@bellatlantic.net> wrote in message
news:3C5DD94B.2730ECEF@bellatlantic.net...
> "Peter O. Brackett" wrote:
> > Shoudn't take you more than a weekend or so to read em all and them
> > summarize them back to
> > us here on the NG so that we can all become experts as well.
> What makes you think he'll spend even 1 weekend on this?
[snip]

I'm with you, somehow I doubt that he will spend any time on the "real
background" of filter design and analysis, that said...
There's a long shot that, if he keeps on taking his medicine dutifully... he
might eventually "get it"...

--Peter K1PO

2475. Re: Tuners - Heath SA 2040 or Murch 2000a?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:22:22 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <Phl78.60420$Up4.2744990@e3500-atl1.usenetserver.com>
Source record: 149313

I have the Heath SA-2040 and I like it fine. I can't compare it to the
Murch--I just know that
I had a 2040 once and foolishly sold it at a hamfest. It didn't take long
to realize that I had
made a mistake! So, I found another one, and I'm keepin' it! The Heath may
be higher, but
I don't think it is "overpriced"; it, after all, does what it was designed
to do. And I HATE tuners! Hope that helps.

73

Jerry
K4KWH
Scott <GAEL79@Peoplepc.com> wrote in message
news:u5r3id27t1i1f4@corp.supernews.com...
> Hi,
> I am just starting to set up my first HF station (10 - 80 meter). I just
> set up an 80 meter, 1 wavelength horizontal loop antenna. So far, all of
my
> HF gear is Heathkit, around the same vintage. I am now looking for a
tuner
> for the loop antenna. I was originally going to stay Heathkit, and go
with
> the SA 2040, but I have read some O.K. reviews of the Murch UT 2000A, and
it
> looks like they run a little cheaper on the used market. Can anyone help
me
> to "Get off the fence" and pick a tuner?
>
> Any comments from users of one or the other or both of these will help me
to
> decide.
>
> Thank you for your input.
>
> Scott
>
>

2476. Re: Tuners - Heath SA 2040 or Murch 2000a?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:23:33 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <3C5DE297.E814580@earthlink.net>
Source record: 149312

MURCH UT 2000A

QST April 1980 review available at ARRL Members site.

73, Deacon Dave, W1MCE

PS: I've used one for almost 30 years at KW level.

Scott wrote:
>
> Hi,
> I am just starting to set up my first HF station (10 - 80 meter). I just
> set up an 80 meter, 1 wavelength horizontal loop antenna. So far, all of my
> HF gear is Heathkit, around the same vintage. I am now looking for a tuner
> for the loop antenna. I was originally going to stay Heathkit, and go with
> the SA 2040, but I have read some O.K. reviews of the Murch UT 2000A, and it
> looks like they run a little cheaper on the used market. Can anyone help me
> to "Get off the fence" and pick a tuner?
>
> Any comments from users of one or the other or both of these will help me to
> decide.
>
> Thank you for your input.
>
> Scott

2477. Re: Impressions of the MFJ 1025/1026 Noise Canceller?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:28:54 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <3C5DE3D7.A90094E1@earthlink.net>
Source record: 149314

I own an MFJ 1025. I use an ANC-4.

Deacon Dave, W1MCE

Mark Hall wrote:
>
> Anyone try either of these? Assuming a good noise antenna, does it
> work?
>
> '73 KI4Z

2478. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:34:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3kp92$18uu45$2@ID-124126.news.dfncis.de>
Source record: 149317

```
> What's the impedance seen by the signal looking back down the
> outside of the coax if it is exactly 1/2WL and grounded at
> the transmitter?
========================

Cec, have you ever known a good ground at the transmitter ? Its usually
more like a dummy load of indeterminate value with an unknown reactance
thrown in to add to the confusion.
---
Reg
```

2479. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:42:13 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <5HI78.52570$E4.2183484@e3500-atl2.usenetserver.com>
Source record: 149315

Dick,

If *I* were having that problem, I would suspect the toroid first. I don't even use them in my
screwdrivers. I use either a small coil of about 6-8 turns paralleled to ground (Trim or add turns as needed, or I use another inductor (2") in series and tapped to ground off whatever
turn gives me the 50 ohms. I found toroids to be "finicky" and prone to trouble--especially on
10 meters. They would act "funny" as you describe and refuse to tune, or tune one way one time, another way another time. Next, I would wind a coax "choke" about 6 turns on an 1 1/2"
dowel or similar form and tape it to hold its shape. You can remove or leave the dowel. That
usually gets rid of RF on the shield. It is also pretty effective if you have odd things happening
on various frequencies; lights a-flickerin', windshield wipers a-wipin', and washers a-washin' when you don't want it. My other car's wipers and washers would fire off before I did the
choke thing. ...just a couple of ideas. OH, the choke goes right at the antenna.

Jerry
K4KWH

Dick Hughes <rhughes33@cableone.net> wrote in message
news:gjdr5u41ujcrhtkh8ovkf6rgi5ml4qp488@4ax.com...
> Yes, except that my Am Com controller sometimes has a mind of its own
> and starts off in the wrong direction. I don't think it is the Am
> Com's fault. I have a problem in the antenna that I haven't had time
> to resolve yet. When I try to find the resonance point with the
> MFJ-259 it won't sit still. Could be water in the toroid or an
> intermittent in the fiberglass whip. Maybe RF on the coax or control
> cable. OK, I admit it. It's too darn cold outside to work on the
> antenna.
>
> Dick
>
> On Sun, 3 Feb 2002 15:57:37 -0500, "Jerry Oxendine"
> <joxendi@bellsouth.net> wrote:
>
> >Dick,
> >
> >Using the label/visual method, you shouldn't have any trouble with
mistaken

> >resonance. Since
> >you are already near the correct resonance by sighting the antenna, you
> >shouldn't be crossing
> >the 3/4WL point anyway.
>
> >
> >Jerry
> >www.qsl.net/k4kwh
> >Dick Hughes <rhughes33@cableone.net> wrote in message
> >news:to7o5us1oneroujj6778l3uhmhcuf8hg81@4ax.com...
> >> What I did was to carefully tune my screwdriver with an MFJ-259 then
> >> mark those spots with plastic labels (P-Touch). I can see the tapes
> >> in my side mirror so I know if the antenna is trying to find one of
> >> the other null points.
> >>
> >> Dick - W6CCD

2480. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:51:55 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <s3qr5u0stsonpapvj5h4q20us7spiclaa4@4ax.com>
Source record: 149318

Thanks for the ideas. (And thank you too Cecil.) I went through some
really bad weather last month, and drove into the garage with the whip
still on before that (Ouch, ouch.) That's why I think either the
toroid is swimming inside the box, or I broke something in the whip.
Could have damaged the coil fingers as well. I just have to get out
there and check everything out. It did work fine before all that.

Dick

On Sun, 3 Feb 2002 20:42:13 -0500, "Jerry Oxendine"
<joxendi@bellsouth.net> wrote:

>Dick,
>
>If *I* were having that problem, I would suspect the toroid first. I don't
>even use them in my
>screwdrivers. I use either a small coil of about 6-8 turns paralleled to
>ground (Trim or add turns as needed, or I use another inductor (2") in
>series and tapped to ground off whatever
>turn gives me the 50 ohms. I found toroids to be "finicky" and prone to
>trouble--especially on
>10 meters. They would act "funny" as you describe and refuse to tune, or
>tune one way one time, another way another time. Next, I would wind a coax
>"choke" about 6 turns on an 1 1/2"
>dowel or similar form and tape it to hold its shape. You can remove or leave
>the dowel. That
>usually gets rid of RF on the shield. It is also pretty effective if you
>have odd things happening
>on various frequencies; lights a-flickerin', windshield wipers a-wipin', and
>washers a-washin' when you don't want it. My other car's wipers and washers
>would fire off before I did the
>choke thing. ...just a couple of ideas. OH, the choke goes right at the
>antenna.
>
>Jerry
>K4KWH
>
>
>Dick Hughes <rhughes33@cableone.net> wrote in message
>news:gjdr5u41ujcrhtkh8ovkf6rgi5ml4qp488@4ax.com...
>> Yes, except that my Am Com controller sometimes has a mind of its own
>> and starts off in the wrong direction. I don't think it is the Am
>> Com's fault. I have a problem in the antenna that I haven't had time
>> to resolve yet. When I try to find the resonance point with the
>> MFJ-259 it won't sit still. Could be water in the toroid or an

>> intermittent in the fiberglass whip. Maybe RF on the coax or control
>> cable. OK, I admit it. It's too darn cold outside to work on the
>> antenna.
>>
>> Dick
>>
>> On Sun, 3 Feb 2002 15:57:37 -0500, "Jerry Oxendine"
>> <joxendi@bellsouth.net> wrote:
>>
>> >Dick,
>> >
>> >Using the label/visual method, you shouldn't have any trouble with
>mistaken
>> >resonance. Since
>> >you are already near the correct resonance by sighting the antenna, you
>> >shouldn't be crossing
>> >the 3/4WL point anyway.
>>
>> >
>> >Jerry
>> >www.qsl.net/k4kwh
>> >Dick Hughes <rhughes33@cableone.net> wrote in message
>> >news:to7o5us1oneroujj6778l3uhmhcuf8hg81@4ax.com...
>> >> What I did was to carefully tune my screwdriver with an MFJ-259 then
>> >> mark those spots with plastic labels (P-Touch). I can see the tapes
>> >> in my side mirror so I know if the antenna is trying to find one of
>> >> the other null points.
>> >>
>> >> Dick - W6CCD
>
>

2481. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 01:59:33 UTC
From: "R.U. Amused?" <n6ttd@spamsuxarrl.net>
Message-ID: <9Wl78.14364$Ri2.46931@rwcrnsc54>
Source record: 149319

Thanks all. I think I am just going to throw it up and see what happens. If the neighbors complain, I'll go with the "stealth route".

TNX,

JT
N6TTD
"Bob Miller" <bamiller@texas.net> wrote in message
news:7t5dPJkYUaExgtC+EgeDEsznP=AI@4ax.com...
> "R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote:
>
> >Hello All;
> >
> >I live an a development in California that has CC&R's, restrictive to all
> >types of external antennas, ...
> >
> >Any comments or suggestions are appreciated.
> >
> >James
> >n6ttd@arrl.net
> >
> >
>
> Try this resource...
>
> http://www.arrl.org/FandES/field/regulations/antenna-restrictions.html
>
> Bob
> k5qwg
>

2482. Re: Which Mini Beam ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 02:00:05 UTC
From: AB7RS <ab7rs@arrl.net>
Message-ID: <u5rqqag7vd41b7@corp.supernews.com>
Source record: 149320

The lightning bolt 2 element 5 band quad.TG

"Mike Tatum" <miket@cybatek.fsnet.co.uk> wrote in message
news:a3jjnf$bt0$1@news8.svr.pol.co.uk...
> Hi All,
>
> Looking for personal experiences / info to help me decide which mini beam
to
> buy.
>
> I'd like to operate 10/12/15/17/20m from a single mini beam.
>
> Look forward to getting some replies.
>
> MikeT ...
> M0AWS
>
>

2483. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 02:04:31 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5DEB1B.41C218FE@bellatlantic.net>
Source record: 149321

Nice Discussion. Regarding Ferrite Beads, there are several cheap places (Marlin Jones for one), that sell these clamp on (they're split in half) ferrite chokes used primarily for CRT monitor video cables. There is one with a half inch ID. You think these would work well? Certainly cheaper than the real McCoy.

'73 KI4Z

Ken wrote:

> Is it because the center conductor induces a current in the sheathing,
> or because the sheathing picks up RF from the dipole antenna?
>
> Why put the coil of coax (choke) near the antenna feed? Why not at
> the radio? Why not at both places?
>
> I have 100 ft of RG-8X between my 10 meter dipole and the radio. I
> have coiled up the coax as per the ARRL Handbook (7 turns in a 4"
> diameter circle) at the antenna. My feed line is still radiating RF
> big time, as are my microphone and radio chassis. My SWR is 1.10. Do
> I need a 1:1 balun? What else can I do? Should I care?
>
> Ken
> (to reply via email
> remove "zz" from address)

2484. Re: Wanted 6 meter antenna advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 02:08:13 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna5rr8h.r3c.QSB@animas.frontier.net>
Source record: 149322

On Sun, 03 Feb 2002 23:02:38 GMT, Dennis Kaylor scribbled:
> geee
> down in here florida you cant get a band opening on 6 with out working a
> dozen or so R.I. i think i have worked every ham in FN42 and FN41

Too short for F2, and too many W8's and W9's to wade through for 2xEs.
It'll happen....

Jonesy

2485. Re: installing 2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 02:10:29 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5DEC82.293249F9@bellatlantic.net>
Source record: 149323

I'd vote for the switch, pick whichever one gives the best signal.

hoho@dfg.ca wrote:

> good day on the news,
>
> I own a 16 elements colinear antenna made with coax pieces (omni
> radiation pattern)
> and a yagi antenna. Both antenna are matched to accept 50 ohm coax line.
>
> I would like to know how to connect these two antenna on the same radio
> using only
> coax line.
>
> The purpose is to give a max gain in one direction and have a good omni
> pattern.
>
> Is there a way to connect some coax to acheive that (I need a 50 ohm
> line for my transceiver).
>
> Thanks,
>
> VA2 KWG

2486. Re: Impressions of the MFJ 1025/1026 Noise Canceller?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 02:12:15 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5DECEB.FBCA5A44@bellatlantic.net>
Source record: 149324

How effective is your ANC-4? Worth investing in one for 80 meter DX
daytime type noise?

Dave Shrader wrote:

> I own an MFJ 1025. I use an ANC-4.
>
> Deacon Dave, W1MCE
>
> Mark Hall wrote:
> >
> > Anyone try either of these? Assuming a good noise antenna, does it
> > work?
> >
> > '73 KI4Z

2487. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 02:15:37 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <eirr5uccr7glb9ivgmce8p45ap9q9c4r2q@4ax.com>
Source record: 149325
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

On Sun, 03 Feb 2002 23:19:09 GMT, Dennis Kaylor <k4oxg@tampabay.rr.com>
wrote:

>telling the housiung
>nazis that it is an antifungal strip what do they know...grin

---

They know that if it really is an antenna, you could be in big trouble.

Read the CC&R's very carefully, including the part about you paying
attorney's fees and penalties.

Best to use an indoor antenna. Properly done, they work quite well.

Bill, W7TI

2488. Re: Impressions of the MFJ 1025/1026 Noise Canceller?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 02:34:07 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5DF20C.D2D3C88A@bellatlantic.net>
Source record: 149327

Guess that says it all.. I really prefer JPS products anyway.

'73 KI4Z

Dave Shrader wrote:

> I own an MFJ 1025. I use an ANC-4.
>
> Deacon Dave, W1MCE
>
> Mark Hall wrote:
> >
> > Anyone try either of these? Assuming a good noise antenna, does it
> > work?
> >
> > '73 KI4Z

2489. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 02:49:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5DF6BC.23E96FB1@eznec.com>
Source record: 149328

That's very interesting. In my whole career, I worked with only one female hardware design engineer. She was an ME and unfortunely not much good (which in no way do I attribute to her sex). There were quite a number of female software engineers where I worked. I didn't work closely with any of them, but as far as I know they were competent.

One thing I do know for sure is that computer antenna analysis is a guy thing. Fewer than one in a thousand EZNEC customers are female. (There's always the chance, though, of something like I saw in a grade B movie not long ago -- the main female character went by "Jimmy". When someone finally asked what it was short for, she replied, "James. My parents really wanted a boy.")

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Thread:
>
> An interesting story...
>
> Although the percentage of women in Engineering is not very high, for some
> reason unknown to me, I personally have
> enjoyed the opportunity to work with several very fine female Engineers.
> . . .

2490. Re: TAHOE/YUKON ANTENNA IDEAS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 02:52:16 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.16c7973e415a6a679896af@news.onlynews.com>
Source record: 149329

In article <3c5df29d$1_2@grouper.exis.net>, n4xyz@exis.net says...
> Just got a new Chevy Tahoe. Would like to mount 2m/440 antenna but she will
> not let me drill holes. Shared experiences would be appreciated?
>
> TNX
>
> de Dave, N4XYZ

I was just looking at one of those. Can't believe they now punch a hole
in the roof (in a really dumb position) to permanently mount an On-Star
antenna.

Do you have the roof rack? How about a bracket off that?

Steve

2491. Re: Impressions of the MFJ 1025/1026 Noise Canceller?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 03:00:03 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c5df932$1@news.bnb-lp.com>
Source record: 149330

For some phenomenal noise reduction on all bands / all modes try the ClearSpeech DSP Base Unit Noise Filter. Ever since installing mine a few months ago on my TS450S/AT it has been like having a brand new radio...or maybe better said it is like having new Ham bands to enjoy. The outstanding effectiveness of this product stems from the licensed and proprietary algorithm that is used. No one else has it including the HF rig manufacturers themselves.

My friend AC6AA uses one with his FT-1000MP and leaves his built-in DSP in the Yaesu turned "off" because the ClearSpeech unit is so much more effective. There several reviews of this base unit and also the available mobile speaker version at this URL....

http://www.eham.net/reviews/products/6

I am posting this as a possible alternative method to solve noise problems....photos and description and technical data on the ClearSpeech DSP base unit on my web site listed below...

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message news:3C5DF20C.D2D3C88A@bellatlantic.net...
> Guess that says it all.. I really prefer JPS products anyway.
>
> '73 KI4Z
>
> Dave Shrader wrote:
>
> > I own an MFJ 1025. I use an ANC-4.
> >
> > Deacon Dave, W1MCE
> >
> > Mark Hall wrote:
> > >
> > > Anyone try either of these? Assuming a good noise antenna, does it

> > > work?
> > >
> > > '73 KI4Z
>

2492. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 03:20:14 UTC
From: richardharrison@webtv.net
Message-ID: <5534-3C5DFDEE-75@storefull-116.iap.bryant.webtv.net>
Source record: 149335

Ken wrote:
"It still sounds kind of circular, because it does not explain why the current finds the outside of the sheathing a suitable path to follow."

There is a difference of potential between the inside and the outside of the coax sheathing at the point where the dipole is fed, so current flows between the connected points of differing potential.

Suppose the outside of the sheathing is well grounded at the radio, and it measures 1/2-wave at the signal frequency. At the dipole feedpoint the potential will be almost the same as the ground potential. The potential inside the coax sheathing will be different because the velocity of propagation is about 2/3 of the velocity on the outside of the coax. There will be a phase difference between inside and outside of the coax and thus a voltage difference.

The 1/2-wave of coax repeats the earth impedance and thus offers a low-impedance to the signal at the dipole feedpoint. Why wouldn`t current flow onto the outside of the sheathing?

Ken also wrote:
"Also, the concept that the inside of a thin good conductor is at one potential while the outside is another is counterintuitive."

Not when "skin-effect" is understood. R-F does not penetrate a thin good conductor if that conductor is not too thin. It doesn`t take much thickness with a good conductor to bar r-f current from flowing through the thickness of the conductor. The thickness of the coax sheathing was chosen to prevent penetration to prevent ingress or egress of signals directly through the coax sheathing. It works. Coax, as a result, doesn`t care much how it is routed.

Best regards, Richard Harrison, KB5WZI

2493. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 03:22:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5DFE81.4B474EBE@IEEE.org>
Source record: 149331

Ken wrote:
> Current travels the inside
> of the sheath but at the antenna feedpoint some of that current fails
> to flow out onto the dipole leg but rather flows down the outside of
> the sheath, whereas all of the center conductor current flows into its
> dipole leg.

See if you can gain access to _The_ARRL_Antenna_Compendium_Vol 1.
"Baluns, What They Do and How They Do It", explains it all in detail.
--
cheers, CAM http://www.qsl.net/w5dxp

2494. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 03:32:25 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C5E017D.7D1B5D76@home.com>
Source record: 149332
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

Check the ARRL site first. They have a lot of current information and
even have a book on the subject. There is also a federal law that says
they have to "make reasonable accommodations" for your antennas. It may
take a court fight to make them comply.

Look around the neighborhood for other antennas. 8 Ft dishes in front
yards or 100 ft CB towers may mean they are not enforcing the CC&Rs.
Read your CC&Rs! This month's QST has an article about a ham that won!

Les, AA4F

"R.U. Amused?" wrote:
>
> Hello All;
>
> I live an a development in California that has CC&R's, restrictive to all
> types of external antennas, including satellite dishes. I need to erect an
> antenna to use with my amateur radio, and I was wondering if anyone else
> went up against CC&R's with an antenna, and what was the ending result.
> CC&R's are part of every new development out here; you can't buy a new house
> without them, effectively eliminating amateurs from operating. My CC&R's are
> not even linked to a homeowners association, so I am wondering how
> enforceable they are.
>
> Any comments or suggestions are appreciated.
>
> James
> n6ttd@arrl.net

2495. Re: Impressions of the MFJ 1025/1026 Noise Canceller?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 03:37:14 UTC
From: Cliff Holloway <cholloway14@attbi.com>
Message-ID: <KIn78.18950$PC.109355@rwcrnsc52.ops.asp.att.net>
Source record: 149333

I have a 1026 and I use it often. My neighbor has a 50" TV that has a noisy switching power supply that registers about S-5 on 17 meters. I used wire on my fence to make a "noise antenna" and feed it into the 1026, I have another run below my TV to do the same (not near as bad). If only one of the TV's are running I can phase the interference completely out, if two down to about 1 S unit. By the way get the 1026 not the 1025 (if you go MFJ) because the 1026 has a preamp that helps greatly (or add one to the 1025).

73 Cliff N0HC
"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message
news:3C5DDC2A.787FB397@bellatlantic.net...
> Anyone try either of these? Assuming a good noise antenna, does it
> work?
>
> '73 KI4Z
>

2496. Re: TAHOE/YUKON ANTENNA IDEAS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 03:38:20 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C5E02DE.7E9889D1@home.com>
Source record: 149334

If there is a roof rack, mount an antenna there and route the wire
through the seal on the back door. You can also mount a through the
glass antenna on the front, side or rear glass if you stay clear if the
defrost wires.

I found a hole already in the roof of my 99 Yukon covered with a rubber
grommet. I routed a wire through the air duct covering down the side
pillar to the floor. pretty easy!

Hope this helps,
Les, AA4F

Beach Bum wrote:
>
> In article <3c5df29d$1_2@grouper.exis.net>, n4xyz@exis.net says...
> > Just got a new Chevy Tahoe. Would like to mount 2m/440 antenna but she will
> > not let me drill holes. Shared experiences would be appreciated?
> >
> > TNX
> >
> > de Dave, N4XYZ
>
> I was just looking at one of those. Can't believe they now punch a hole
> in the roof (in a really dumb position) to permanently mount an On-Star
> antenna.
>
> Do you have the roof rack? How about a bracket off that?
>
> Steve
>
>

2497. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 03:47:11 UTC
From: Cliff Holloway <cholloway14@attbi.com>
Message-ID: <3vn78.15460$ym3.54043@rwcrnsc51.ops.asp.att.net>
Source record: 149336
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

HI James,
I have had in this situation for about 10 years.. check out my site for
some ideas... http://www.geocities.com/n0hc/
73 & Good Luck
Cliff N0HC
"R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
news:1pj78.13909$S06.50196@rwcrnsc53...
> Hello All;
>
> I live an a development in California that has CC&R's, restrictive to all
> types of external antennas, including satellite dishes. I need to erect an
> antenna to use with my amateur radio, and I was wondering if anyone else
> went up against CC&R's with an antenna, and what was the ending result.
> CC&R's are part of every new development out here; you can't buy a new
house
> without them, effectively eliminating amateurs from operating. My CC&R's
are
> not even linked to a homeowners association, so I am wondering how
> enforceable they are.
>
> Any comments or suggestions are appreciated.
>
> James
> n6ttd@arrl.net
>
>
>

2498. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 05:07:46 UTC
From: "R.U. Amused?" <n6ttd@spamsuxarrl.net>
Message-ID: <CGo78.19507$PC.113748@rwcrnsc52.ops.asp.att.net>
Source record: 149337
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

Thanks guys. It seems to me that the CC&R's have been "abandoned" in my area (at least that is what my argument will be), based on the fact that they are not enforcing the ban on satellite dishes, cars parked in the streets, basketball hoops left in the street, odd window decorations, etc. They can't be selective about only enforcing my violation.

James

"Cliff Holloway" <cholloway14@attbi.com> wrote in message news:3vn78.15460$ym3.54043@rwcrnsc51.ops.asp.att.net...
> HI James,
> I have had in this situation for about 10 years.. check out my site for
> some ideas... http://www.geocities.com/n0hc/
> 73 & Good Luck
> Cliff N0HC
> "R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
> news:1pj78.13909$S06.50196@rwcrnsc53...
> > Hello All;
> >
> > I live an a development in California that has CC&R's, restrictive to
all
> > types of external antennas, including satellite dishes. I need to erect
an
> > antenna to use with my amateur radio, and I was wondering if anyone else
> > went up against CC&R's with an antenna, and what was the ending result.
> > CC&R's are part of every new development out here; you can't buy a new
> house
> > without them, effectively eliminating amateurs from operating. My CC&R's
> are
> > not even linked to a homeowners association, so I am wondering how
> > enforceable they are.
> >
> > Any comments or suggestions are appreciated.
> >
> > James
> > n6ttd@arrl.net
> >
> >
> >
>
>

2499. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 05:20:56 UTC
From: NM5K <NSnm5k@wt.net>
Message-ID: <3C5E1A38.E5C@wt.net>
Source record: 149338

Ken wrote:
>
> On 03 Feb 2002 16:16:35 GMT, k9sqg@aol.com (K9SQG) wrote:
> >Even without the ZZ the email address is not reconized as valid by AOL. Unable
> >to get my reply through.
>
> I received the email copy [reply] of this. Apparently, AOL gives a
> spurious error message. Maybe it got confused by the "(Ken)" my
> Newsgroup client sticks on to the address. I only wish the spammers
> were so easily confused.
>
> Ken
> (to reply via email
> remove "zz" from address)

I finally had to quit posting from google. The spammers were eating me alive. I finally had to break down and go back to this slow feed ISP server, and cloak my e-mail. The spam dropped 85% the first day. MK
--
Remove NS from mail address to reply
http://web.wt.net/~nm5k

2500. Re: Increase life with 0.1 uF capacitors.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 05:21:44 UTC
From: John O'Flaherty <wewelcomespam@blackhole.net>
Message-ID: <3C5E1A68.2DF1A55F@blackhole.net>
Source record: 149339

Reg Edwards wrote:
>
> > If there is DC flowing into or out of the ground, do we want to block it ?
> ======================
> Well I would. Its a sure sign electroysis is occurring. Cells last much
> longer when the're left open circuit.

I wonder if that dc current would be measurable with a meter, and if
you could null it or reverse it with a dc source through a selected
resistance?

--
john

2501. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 05:26:13 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <bb6s5uslg9jhsc6pl04fnh6lttvdh2hqgk@4ax.com>
Source record: 149340

You may have a good argument here. However, forget the satellite dishes unless they are the big ones (BUD.) If you live in a private residence, the Telecommunications Act of 1996 pre-empts CC&R's concerning small satellite dishes and TV antennas. Focus your argument on the other issues.

Dick Hughes

On Mon, 04 Feb 2002 05:07:46 GMT, "R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote:

>Thanks guys. It seems to me that the CC&R's have been "abandoned" in my area
>(at least that is what my argument will be), based on the fact that they are
>not enforcing the ban on satellite dishes, cars parked in the streets,
>basketball hoops left in the street, odd window decorations, etc. They can't
>be selective about only enforcing my violation.
>
>James

2502. TAHOE/YUKON ANTENNA IDEAS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 05:32:10 UTC
From: Dave Knight <n4xyz@exis.net>
Message-ID: <3c5df29d$1_2@grouper.exis.net>
Source record: 149326

Just got a new Chevy Tahoe. Would like to mount 2m/440 antenna but she will not let me drill holes. Shared experiences would be appreciated?

TNX

de Dave, N4XYZ

2503. Re: Wanted 6 meter antenna advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 07:03:37 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020204020337.08039.00001303@mb-mu.aol.com>
Source record: 149341

>Running just 9.5 watts here with a 3 el beam (up at 7,745'), I've
>worked 49 states. Still chasing the elusive R.I.

I worked RI on both 2m SSB and 6m SSB. Of course, living there for 1 1/2 years
kinda helps! :)
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

2504. Re: Affect of limbs and leaves on wire antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 07:07:57 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C5E334A.C3734B51@icok.net>
Source record: 149342

Mike,
The tuning of the antenna will change with the seasons and
the foliage. May not be very much, but it does happen. Using
insulated wire isn't going to make much difference but certainly
can't hurt.
'Doc

2505. Re: Tuners - Heath SA 2040 or Murch 2000a?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 07:12:02 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C5E343F.2E27E453@icok.net>
Source record: 149343

Scott,
It's more a matter of personal 'taste' than performance.
Both tuners work okay, so do you want matching styling or to
save a buck or two?
'Doc

2506. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 07:56:11 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <4CVo5+Db6jX8EA3Z@ifwtech.com>
Source record: 149352

Reg Edwards wrote:
>Ian, when a balanced 1/2-wave dipole is fed with coax, what fraction of
>system input power is radiated from the feedline ?
>
I don't know, because I have never seen a truly balanced dipole fed with coax. It only exists in people's imagination, like the Emperor's New Clothes.

The general case is that there *will* be surface currents. They only go through a minimum in one very, very special case, but they never go completely to zero.

>Compare that with what is radiated from the dipole and ask yourself what is
>the likelihood of the unbalanced feedline being the source of any TVI which
>somewhat rarely might exist in the neighbourhood.

I do know that surface currents can cause RFI - either in the shack, in the house or to neighbors. Unlike the radiated component, they have the advantage of a hard-wired connection.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2507. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 10:16:38 UTC
From: Daniel Indyk <danindyk@mail.bigpond.com>
Message-ID: <m7t78.87051$HW3.123452@newsfeeds.bigpond.com>
Source record: 149344
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:a3knbs$3l9$1@slb7.atl.mindspring.net...
> ehsjr:

and a bunch of others all of whom i repect and from who i've learned much,
have really shoved this poor kid's nose in the shit. heck, if he doesn't
understand things properly then he hasn't been taught properly. when one
learns introductory filters one usually starts with passive filters. L type
T type PI type. M derived etc.......then active filters.....up to that point
the configuration of each type was different. Now he's learning active
filters and it wasn't explained that the component configuration can be the
same for different transfer characterisitics, depending on component values!
big bloody deal. these ngs are a wonderful medium for learning and really
should not be used to show how bloody clever we all are. grow up. i'm
surprised at u!

2508. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 10:46:24 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3loq0ggq11@quark.scn.rain.com>
Source record: 149345
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

In rec.radio.amateur.antenna Leland Cox <lcox107@home.com> wrote:
> Check the ARRL site first. They have a lot of current information and
> even have a book on the subject. There is also a federal law that says
> they have to "make reasonable accommodations" for your antennas. It may
> take a court fight to make them comply.

This does not apply to CC&Rs - only to local/state laws and regulations.

> Look around the neighborhood for other antennas. 8 Ft dishes in front
> yards or 100 ft CB towers may mean they are not enforcing the CC&Rs.
> Read your CC&Rs! This month's QST has an article about a ham that won!

It would be nice if the courts were consistant in such rulings. But
this is the first, if it is indeed about beating some CC&R.

--
Bill Nelson (billn@peak.org)

2509. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 10:48:00 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3lot0ggq12@quark.scn.rain.com>
Source record: 149346
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

In rec.radio.amateur.antenna R.U. Amused? <n6ttd@spamsuxarrl.net> wrote:
> Thanks guys. It seems to me that the CC&R's have been "abandoned" in my area
> (at least that is what my argument will be), based on the fact that they are
> not enforcing the ban on satellite dishes, cars parked in the streets,
> basketball hoops left in the street, odd window decorations, etc. They can't
> be selective about only enforcing my violation.

That is exactly true. Either they all have to be enforced - or none can
be enforced. Of course, you might have to spend a bunch of money in court
to get relief.

--
Bill Nelson (billn@peak.org)

2510. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 10:56:05 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C5E68BD.7D4FD83E@icok.net>
Source record: 149347

Dick,
If you don't mind the 'stop and change taps' thing,
then try a 'BugCatcher'. It is the most efficient of
all the mobile antennas (although you'll get an argument
about that, it's still true).
'Doc

2511. Help wanted - Quagi Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 11:41:15 UTC
From: Radio Jav <antispamradiojav@bigfoot.com>
Message-ID: <Dnu78.13914$N31.646027@ozemail.com.au>
Source record: 149348

Hello from the land down under (Australia).

I have a question for you antenna gurus out there, my question pertains to the design of Quagi antennas. I am looking to design a Quagi for use on 477Mhz, a community, citizens band frequency, not to dissimilar from HF CB Radio.

How does one go about designing a Quagi antenna? Does one use a JavaScript quad calculator for REF and D/E measurements and spacings, then use a Yagi modelling program, such as YAGIMAX to design a Yagi for the given frequency, then use the quad REF and D/E on the Yagi? (did I say all that in one breath? Hi hi...)

I am not a technical wizard when it comes to mathematics, but love to experiment with antennas and the like.

Many people operate on 477Mhz with Yagis with very good to excellent results. I have read all about the Quagi antenna and would love to tinker with one on my current frequency of choice.

I am currently studying for my Amateur licence and feel that building this antenna would put a lot of theory into practice. I am looking at building a 10 element and 16 element version of this marvellous antenna.

My last question pertains to co-phasing a pair of these antennas. Does anyone have a phasing harness diagram that can assist. I have found a Phasing harness diagram for 4 co-phased, but not two.

Thanks for your time, many warmest regards to you all.

Please either post to the NG or direct to my email address, just remove antispam first.

Thank you in advance

73 de Troy (VK2 Soon2Be)

2512. READ THE WEB-SITE THAT THE KIKES TRY TO CENSOR

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 11:43:35 UTC
From: Dianna Smith-Nice <ijucpyw@aqyxp.edu.pe>
Message-ID: <PQlWHHORC$1tN.456424@news.wanadoo.fr>
Source record: 149357
Cross-posted to: rec.radio.amateur.antenna,soc.history.what-if

WWW.GIWERSWORLD.ORG
THE SITE WHERE ALL KIKES ARE LAMPSHADES

PROUDLY PRESENTED BY

MATTHIAS GIWER
14205 N. NEBRASKA AVE
TAMPA FLORIDA

813-977-7380

jull43@tampabay.rr.com
matt@giwersworld.org

PROUDLY HOSTED BY:

DREAMHOST WEB HOSTING

213-947-1032

She wants to live full shopkeepers within Raoul's summer. The bucket among the brave room is the goldsmith that teases furiously. One more good hot butchers admiringly explain as the lean forks answer. Both combing now, Tommy and Roger cleaned the noisy ladders near bizarre dust. Get your eerily moving disk behind my night. A lot of units will be wide open dryers. She'd rather irrigate weekly than nibble with Thomas's kind elbow. It might mould long bowls, do you judge them?

Other raw wet painters will wander wistfully towards lentils. Almost no young counters are outer and other weird figs are strong, but will Bernice lift that? Don't waste the shoes dully, believe them tamely. Some candles promise, cook, and help. Others stupidly dream. We smell the clever orange. The boats, hens, and desks are all sharp and bitter. Tell Henry it's cosmetic loving near a sauce. It will taste slowly if Casper's dog isn't fat. Are you proud, I mean, changing outside blank cups? Otherwise the code in Norris's carpenter might grasp some poor farmers. If you'll learn Betty's camp with films, it'll smartly receive the sauce. I was improving jackets to solid Kathy, who's dying beside the diet's ocean. Mel joins the tag at hers and quietly kicks. They are solving among smart, without healthy, around worthwhile doses. Every unique sweet floor opens weavers through Simone's dull tape.

Let's burn around the pretty mirrors, but don't seek the polite ulcers. We pour them, then we lovingly recommend Jeff and Linette's

deep coconut. No dry balls laugh Ophelia, and they stupidly measure Sheri too. It might simply care empty and recollects our thin, abysmal books through a hall. Where did Woodrow talk at all the cats? We can't fill gardners unless Walt will globally reject afterwards.

He should will gently look on Linette when the upper trees pull below the stupid monument. It might eventually call among tired lower dorms. To be humble or hollow will cover rural wrinkles to believably excuse. For Amber the tailor's ugly, near me it's sick, whereas in back of you it's scolding inner. Some angry pickles in the active sign were ordering towards the filthy barn.

2513. Re: Impressions of the MFJ 1025/1026 Noise Canceller?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 12:01:31 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <3C5E781D.9621E6D8@earthlink.net>
Source record: 149349

I live within 100 meters of three (3) sets of electrical New England Power Grid power lines [> 100,000 KV]. Sometimes they get very noisy.

The ANC-4 will reduce the noise by up to 8 S units. Works great on MAN-MADE noise.

The ANC-4 class of noise reduction is much more effective than any DSP based reduction because the noise doesn't get into the rf or if amplifiers or AGC system. No noise inside the radio, therefore, no need for DSP noise reduction.

Atmospheric absorption/noise on 80/75 meters during the daytime is not man made noise!!

73, Deacon Dave, W1MCE

Mark Hall wrote:
>
> How effective is your ANC-4? Worth investing in one for 80 meter DX
> daytime type noise?
>
> Dave Shrader wrote:
>
> > I own an MFJ 1025. I use an ANC-4.
> >
> > Deacon Dave, W1MCE
> >
> > Mark Hall wrote:
> > >
> > > Anyone try either of these? Assuming a good noise antenna, does it
> > > work?
> > >
> > > '73 KI4Z

2514. Re: Impressions of the MFJ 1025/1026 Noise Canceller?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 12:33:33 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C5E7E7D.65289729@bellatlantic.net>
Source record: 149350

So you're saying the ANC-4 doesn't help much for daytime 80 meter atmospheric noise? That's my major problem here. Thanks..

'73 KI4Z

Dave Shrader wrote:

> I live within 100 meters of three (3) sets of electrical New England
> Power Grid power lines [> 100,000 KV]. Sometimes they get very noisy.
>
> The ANC-4 will reduce the noise by up to 8 S units. Works great on
> MAN-MADE noise.
>
> The ANC-4 class of noise reduction is much more effective than any DSP
> based reduction because the noise doesn't get into the rf or if
> amplifiers or AGC system. No noise inside the radio, therefore, no need
> for DSP noise reduction.
>
> Atmospheric absorption/noise on 80/75 meters during the daytime is not
> man made noise!!
>
> 73, Deacon Dave, W1MCE
>
> Mark Hall wrote:
> >
> > How effective is your ANC-4? Worth investing in one for 80 meter DX
> > daytime type noise?
> >
> > Dave Shrader wrote:
> >
> > > I own an MFJ 1025. I use an ANC-4.
> > >
> > > Deacon Dave, W1MCE
> > >
> > > Mark Hall wrote:
> > > >
> > > > Anyone try either of these? Assuming a good noise antenna, does it
> > > > work?
> > > >
> > > > '73 KI4Z

2515. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 12:59:53 UTC
From: Philip de Cadanet <phil@invest.fsbusiness.co.uk>
Message-ID: <ngPhoAAJXoX8EwW5@invest.fsbusiness.co.uk>
Source record: 149351

Reg,

>Do women make as good engineers as men ?

Yes they do.

There used to be a west coast US broadcast engineer by the name of Amor powers (no pun) who frequented several newsgroups.

She won several engineering awards in the industry. It was nothing for her to design and help install 50Kw stations from scratch.

Amor had an ex school bus with a 40m DDIR on the roof and 'a very powerful' amplifier on-board.

You'll also find many female experienced engineers in the former soviet union!

Phil G4ZOW

2516. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 13:55:43 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C5E92DE.6FF7168D@crosslink.net>
Source record: 149353

Mark Tetrault wrote:
>
> OK, So I have a presently broken TJ (BB3) screwdriver and would like
> to replace it with another screwdriver.....
> ... I really want the 80m in the RV.
>

But why use a screwdriver on a stationary (from another post) RV?
They're FB for mobile in a car or truck but there are perforce
compromises to get that mobility; compromises which may be unnecessary
in your application. For example, on Field Day we used a homebrew 1/4
wave vertical for 20M and put a pully on top so we could pull up an
inverted V cut for 40m that also worked 15m ... all made out of free
junk ... plus a tuner we'd bought for $40 at a hamfest. Another RVing
Ham does the same using a collapsable flag pole he got from Camping
World.
Longer is better!
73 KA3DWW

2517. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 14:22:40 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C5E9930.9F1309A8@crosslink.net>
Source record: 149354
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Malcontent wrote:
>
> > Don't blame the ARRL. While I have little use for the organization, it
> > was the screaming by Hams to get rid of the CW requirement that generated
> > the restructuring.

Don't blame them either, they're simply being logical. Blame technology
for making CW obsolete.

> > I also believe that the written tests should be made more rigorous again.
> > They are trivial to pass, right now.

Second that

>
> ..... As a 13 wpm General I feel
> slighted that a 5 wpm tech is to be shoved into my slot without ever having
> to pound a key. ....

Jeeze, I suppose I otta resent people who didn't have to get smallpox
vaccinations or worry about polio, or take their driving exam in a
"stick shift" car, or ... etc. CW was a necessary evil left over from
the days before modulation was invented. Next you'll be sniviling about
kids who do not have to walk 10 miles to school every day thru 12 foot
snow drifts. Do you keep a cow around for milk and bake all your own
bread too?
KA3DWW

2518. Re: installing 2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 14:48:25 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C5E9F39.3290EEC4@crosslink.net>
Source record: 149355

hoho@dfg.ca wrote:
>
> no the purpose is only to accentuate a little in one direction, keeping the
> omni pattern
>
> resuming that , I only want to connect 2 antenna on the same radio, transmit
> and receive on both antenna at the same time...

Sure (wink), CBrs "cophase" their antennae all the time. It can be done
within a narrow freq band by using specially cut lengths of coax. Sorry,
I don't remember the formula but somebody here otta know how to
calculate the lengths. You might have to use 75 ohm coax.
73 KA3DWW

2519. Re: TAHOE/YUKON ANTENNA IDEAS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 14:58:54 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C5EA1AE.F26B783C@crosslink.net>
Source record: 149356

Dave Knight wrote:
>
> .. Would like to mount 2m/440 antenna but she will not let me...

I dated a girl like that ... once.

KA3DWW

2520. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 15:05:57 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3m96n$18q8b6$2@ID-124126.news.dfncis.de>
Source record: 149358

Ian, what may be picked up and re-radiated due to an assymetrical feedline
is the same whatever form of construction the feedline might be and can be
left out of the comparison.

Here we are concerned only with the fraction of Tx output power radiated
from the feedline due to the 1/2-wave dipole being fed with unbalanced coax
rather than balanced-twin.

Regards, Reg.

--
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****
Ian White, G3SEK <G3SEK@ifwtech.com> wrote in message
news:4CVo5+Db6jX8EA3Z@ifwtech.com...
> Reg Edwards wrote:
> >Ian, when a balanced 1/2-wave dipole is fed with coax, what fraction of
> >system input power is radiated from the feedline ?
> >
> I don't know, because I have never seen a truly balanced dipole fed with
> coax. It only exists in people's imagination, like the Emperor's New
> Clothes.
>
> The general case is that there *will* be surface currents. They only go
> through a minimum in one very, very special case, but they never go
> completely to zero.
>
> >Compare that with what is radiated from the dipole and ask yourself what
is
> >the likelihood of the unbalanced feedline being the source of any TVI
which
> >somewhat rarely might exist in the neighbourhood.
>
> I do know that surface currents can cause RFI - either in the shack, in
> the house or to neighbors. Unlike the radiated component, they have the
> advantage of a hard-wired connection.
>
> --
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

2521. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 15:47:46 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5EAD22.4E10C4F2@IEEE.org>
Source record: 149359

Reg Edwards wrote:
>
> Ian, what may be picked up and re-radiated due to an assymetrical feedline
> is the same whatever form of construction the feedline might be and can be
> left out of the comparison.
>
> Here we are concerned only with the fraction of Tx output power radiated
> from the feedline due to the 1/2-wave dipole being fed with unbalanced coax
> rather than balanced-twin.

There are two conductors in a balanced feedline. With coax, there is
effectively a third conductor. If you hung a separate conductor down
from one side of a dipole fed with balanced line, don't you think it
would radiate? Especially if it were a resonant length?
--
cheers, CAM http://www.qsl.net/w5dxp

2522. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 15:59:05 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3mbek$a6j$1@slb4.atl.mindspring.net>
Source record: 149360

Reg:

Heh, heh... That fraction is indeed small and would be determined by the Common Mode Rejection Ratio of the antenna "system".

In most any kind of system, let alone an amateur antenna installation, the measurement of CMRR is problematic, and usually beyond the kinds of metrology that a typical amateur can muster. Measuring the CMRR of a simple transformer or differential amplifier is difficult enough.

That said, from long experience measuring CMRR in various situations at various frequencies using professional equipment and methods, I'd hazzard a guess that for a typical amateur installation, the CMRR for a given low frequency band might be on the order of 15-20dB at least. Could be more could be less. Probably less on the upper HF frequencies, the higher you go in frequency the more difficult commom mode control becomes.

Say the CMRR of the antenna "system" is CMRR = 15dB, then the "fraction" of which you speak is 1/(10**3/2) = 1/31.6 -or- around 3%.

The amateur using a 100 Watt transmitter to push 100 Watts into that antenna system with a 15dB CMRR will be pushing about 97 Watts into the differential modes and 3 Watts into the common modes.

Reg, depending upon the impedance levels of course, 3 Watts has a non-negligible effect when placed at the terminals of a sensitive receiver or across a pair of moist lips touching a metallic microphone grill, or a bare hand touching a Morse key.

Best,

--Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a3m96n$18q8b6$2@ID-124126.news.dfncis.de...
> Ian, what may be picked up and re-radiated due to an assymetrical feedline
> is the same whatever form of construction the feedline might be and can be
> left out of the comparison.
>
> Here we are concerned only with the fraction of Tx output power radiated
> from the feedline due to the 1/2-wave dipole being fed with unbalanced
coax
> rather than balanced-twin.
> ---
> Regards, Reg.
>
>

>
> --
> **************************
> Regards, Reg G4FGQ
> Free Radio Modelling Software
> Http://www.g4fgq.com
> **************************
> Ian White, G3SEK <G3SEK@ifwtech.com> wrote in message
> news:4CVo5+Db6jX8EA3Z@ifwtech.com...
> > Reg Edwards wrote:
> > >Ian, when a balanced 1/2-wave dipole is fed with coax, what fraction of
> > >system input power is radiated from the feedline ?
> > >
> > I don't know, because I have never seen a truly balanced dipole fed with
> > coax. It only exists in people's imagination, like the Emperor's New
> > Clothes.
> >
> > The general case is that there *will* be surface currents. They only go
> > through a minimum in one very, very special case, but they never go
> > completely to zero.
> >
> > >Compare that with what is radiated from the dipole and ask yourself
what
> is
> > >the likelihood of the unbalanced feedline being the source of any TVI
> which
> > >somewhat rarely might exist in the neighbourhood.
> >
> > I do know that surface currents can cause RFI - either in the shack, in
> > the house or to neighbors. Unlike the radiated component, they have the
> > advantage of a hard-wired connection.
> >
> > --
> > 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> > 'In Practice' columnist for RadCom (RSGB)
> > http://www.ifwtech.com/g3sek
>
>

2523. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 16:04:58 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3mbfi$1r3$1@nntp9.atl.mindspring.net>
Source record: 149361
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Daniel:

What's that old saying, "If you can't run with the big dogs then stay on the porch!"

From the porch, it's just possible that a little dog might learn something if it pays attention.

Have *you* seen Jason's WWW site?

Go have a look see! It seems that he can teach all of us something, even you!

Best,

--Peter K1PO

"Daniel Indyk" <danindyk@mail.bigpond.com> wrote in message news:m7t78.87051$HW3.123452@newsfeeds.bigpond.com...
>
> "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
> news:a3knbs$3l9$1@slb7.atl.mindspring.net...
> > ehsjr:
>
> and a bunch of others all of whom i repect and from who i've learned much,
> have really shoved this poor kid's nose in the shit. heck, if he doesn't
> understand things properly then he hasn't been taught properly. when one
> learns introductory filters one usually starts with passive filters. L type
> T type PI type. M derived etc.......then active filters.....up to that point
> the configuration of each type was different. Now he's learning active
> filters and it wasn't explained that the component configuration can be the
> same for different transfer characterisitics, depending on component values!
> big bloody deal. these ngs are a wonderful medium for learning and really
> should not be used to show how bloody clever we all are. grow up. i'm
> surprised at u!
>
>

2524. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 17:18:23 UTC
From: Zoran Brlecic <WA7AA@attbi.com>
Message-ID: <3C5EC263.EB0D56FF@attbi.com>
Source record: 149362
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Vito wrote:

> CW was a necessary evil left over from
> the days before modulation was invented.

And ham radio is probably a necessary evil left over from the days before cellphones and Internet were invented?

73 .... Zoran WA7AA

2525. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 17:22:15 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <brz78.1548$oj3.313430@paloalto-snr1.gtei.net>
Source record: 149363

"Vito" <vito@crosslink.net> wrote in message news:3C5E92DE.6FF7168D@crosslink.net...
> Mark Tetrault wrote:
> >
> > OK, So I have a presently broken TJ (BB3) screwdriver and would like
> > to replace it with another screwdriver.....
> > ... I really want the 80m in the RV.
> >
>
> But why use a screwdriver on a stationary (from another post) RV?
> They're FB for mobile in a car or truck but there are perforce
> compromises to get that mobility; compromises which may be unnecessary
> Longer is better!
> 73 KA3DWW

You must not be too familiar with RVing!

Sure, SOMETIMES an RVer IS fortunate enough to be in a site where larger antennas can be used - but
usually NOT! We aren't talking about field day type operation here, but ham operation in situations
where your RVing neighbors (NON-ham!) are all within a few feet all around you! The LAST thing you
want is any more intrusion into the "ambiance" of the setting than necessay - NOR do you want a
steady stream of RF-related complaints as your ham setup is clearly visible from MANY areas of the
campground. Even an ordinary screwdriver is too much of a stretch in many such scenarios! SOOooo,
sometimes (ususlly...) you are forced to use the best available compromise in order to use your ham
stuff.

Gary - KJ6Q

2526. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 17:32:33 UTC
From: Pie`` IK2VTJ <picarusoNONVOGLIOSPAM@writeme.com>
Message-ID: <a3mgjm$19iaa9$1@ID-83989.news.dfncis.de>
Source record: 149364

"Roy Lewallen" <w7el@eznec.com> ha scritto nel messaggio
news:3C589408.603EF49C@eznec.com...
> I won't comment on the antenna, but a balun is very important for this
> application. It prevents the feedline from picking up some of the signal
> and feeding it to your receiver. For direction finding, you want to be
> using the antenna, not the feedline, to figure out where the signal's
> coming from.
>
> Roy Lewallen, W7EL

Hi Roy,

thanks for your suggestion.
As I said in another post, I'm using a three element yagi 'flexible', but
without any balun.
Since the radiating element is a folded dipole, I only matched its impedance
(about 100 + j 10 Ohms) with a quarter w/l of 75 Ohms TV cable.
Do you think I really need a balun? If yes(as I think) can you send me a
schematic for a balun 2:1? I have the wonderfull book by W2FMI, but I
couldn't find anything for VHF.
Thanks in advance.
--
73 de IK2VTJ, Piero.

http://www.qsl.net/ik2vtj
http://www.ardf.it

Togli / Remove
NONVOGLIOSPAM
dall'indirizzo / from address

2527. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 17:46:53 UTC
From: k3roj@k3roj.com
Message-ID: <cfa544dd.0202040946.32d2a75a@posting.google.com>
Source record: 149365

Well, from my experience in amateur radio over the many years, I have found that most negroids cannot learn anything that requires math. I know that sounds very biggoted but our Zionist government is pushing them to be among the white middle class people and breed with our kind. As far as Colon Powell goes, he is just a token black to appease the black population. He didn't even finish high school I understand.

OldBiker <vito@crosslink.net> wrote in m
essage
news:<3C595905.E4BE3400@crosslink.net>...
> KU4YP wrote:
> >
> > > > So, yes, a lot of Scots, Irish and English came here in chains and
> under worse
> > > > conditions than did the African slaves.
> >
> > yes, that is correct. but no one seems to care to remember that.
>
> Or that the first English colony (Roanoke Island) disappeared entirely,
> every man woman and child lost, or that 4 in 5 died in the next
> (Jamestown), or that there were more slaves in N.Y.C. than in Richmond
> circa 1800 or that ... etc.
>
> That's not PC!
>
> OTOH, but for the movement led by Dr King, we wouldn't have people like
> Colin Powell today.
> KA3DWW

2528. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 18:08:18 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5ECE12.12D126C8@IEEE.org>
Source record: 149368

Gary - KJ6Q wrote:
> ... NOR do you want a
> steady stream of RF-related complaints as your ham setup is clearly visible from MANY areas of the
> campground.

My worst trailer park RFI experience was when I fired up on 10m on field day and someone's room slide-out started sliding in.
--
cheers, CAM http://www.qsl.net/w5dxp

2529. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 18:12:58 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C5ECF2A.CCBE013C@coqui.net>
Source record: 149367

AL Alexander wrote:
>
>
> kind. As far as Colon Powell goes, he is just a token black to appease
> the black population. He didn't even finish high school I understand.

Clearly, you don't understand well.

Education: B.S. in Geology, City College of New York; M.B.A., George
Washington
University.

2530. Re: Tuners - Heath SA 2040 or Murch 2000a?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 18:22:29 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a3mjdc$1kso$1@news1.tribune.com>
Source record: 149171

If you want vintage, and want a Highly efficient inherently balanced antenna tuner, Look for a Johnson Matchbox. The pretty ones are $100 on Ebay and the "previously modified" ones are around $50. I used mine on a 210 foot horzontal loop on all bands (including warc). I used 300 ohm ribbon line for the feed.
John
KA9CAR

Scott <GAEL79@Peoplepc.com> wrote in message
news:u5r3id27t1i1f4@corp.supernews.com...
> Hi,
> I am just starting to set up my first HF station (10 - 80 meter). I just
> set up an 80 meter, 1 wavelength horizontal loop antenna. So far, all of
my
> HF gear is Heathkit, around the same vintage. I am now looking for a
tuner
> for the loop antenna. I was originally going to stay Heathkit, and go
with
> the SA 2040, but I have read some O.K. reviews of the Murch UT 2000A, and
it
> looks like they run a little cheaper on the used market. Can anyone help
me
> to "Get off the fence" and pick a tuner?
>
> Any comments from users of one or the other or both of these will help me
to
> decide.
>
> Thank you for your input.
>
> Scott
>
>

2531. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 18:24:19 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <adkt5u4lja4uif7d9h12nrcfu6k653d23v@4ax.com>
Source record: 149169

Now that is really funny!

Dick

On Mon, 04 Feb 2002 12:08:18 -0600, CAM <Cecil.A.Moore@IEEE.org>
wrote:

>Gary - KJ6Q wrote:
>> ... NOR do you want a
>> steady stream of RF-related complaints as your ham setup is clearly visible from MANY
areas of the
>> campground.
>
>My worst trailer park RFI experience was when I fired up on 10m on field
>day and someone's room slide-out started sliding in.

2532. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 18:27:05 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C5ED279.84495A88@crosslink.net>
Source record: 149170

Gary - KJ6Q wrote:
>
> "Vito" <vito@crosslink.net> wrote
> > But why use a screwdriver on a stationary (from another post) RV?
>
> You must not be too familiar with RVing!

You're right. I've only owned my MH for 3 years. We did full-time for 3+ years but that was circa 1980 and in the USA vs PRK.
>
> Sure, SOMETIMES an RVer IS fortunate enough to be in a site where larger antennas can be used - but
> usually NOT! We aren't talking about field day type operation here, but ham operation in situations
> where your RVing neighbors (NON-ham!) are all within a few feet all around you! The LAST thing you
> want is any more intrusion into the "ambiance" of the setting than necessay -

I question the sanity of semi(?) permanently parking where there were neighbors "within a few feet all around you!", a-la the Flying-J, let alone worrying about the ambience of such a setting; but then I don't live in an apartment either.

> ....NOR do you want a
> steady stream of RF-related complaints as your ham setup is clearly visible from MANY areas of the
> campground. Even an ordinary screwdriver is too much of a stretch in many such scenarios! SOOooo,
> sometimes (ususlly...) you are forced to use the best available compromise in order to use your ham
> stuff.
>

1) the screwdrivers I've seen are as obtrusive as many alternatives, including my buddy's "flagpole" or the 16.75' piece of tapered alumunum I put on my ladder for field day. 2) when full timing I had 30' of TV mast holding up my V/UHF and an inverted V cut for 40m. In 3 years nobody even commented on it, let alone complained (They thot the V was guying the mast). Last but not least, a Toyota minivan isnt considered a MH outside Ca. I have a plain whip and automatic tuner for actual travel and for over-nighting in truck/rest stops but it is a major compromise. That's why I'm looking at running some wire just off the 8x32' rubber roof. There's enough room for an invisible 20m Horizontal dipole up there! :o) Try it, you'll like it.
Vito

2533. Re: Which Mini Beam ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 18:34:33 UTC
From: Dave <wd0hwx@nospamplease.swbell.net>
Message-ID: <ZuA78.8960$IK1.3188218006@newssvr11.news.prodigy.com>
Source record: 149172

Though Cushcraft has had a number of customer support complaints,
this particular antenna (MA5B) is very well liked:

http://www.eham.net/reviews/detail/340 (eham.net product reviews)

If I was looking for one, that might very well be the choice.

"Tony Angerame" <tangeram@lucent.com> wrote in message
news:3C5EDC88.795032BF@lucent.com...
> The Cushcraft MA5 is much, much better than the Butternut. See my prior
> posting.
> Good construction, solid engineering, quality parts. Performance is very
good
> null off the side is 3-4 S units with the antenna not yet at full height
(Only
> 12 feet above flat roof at 18 feet. I expect it will be much better at
it's
> full height of 30 feet above the roof.
>
>
> AB7RS wrote:
>
> > The lightning bolt 2 element 5 band quad.TG
> >
> > "Mike Tatum" <miket@cybatek.fsnet.co.uk> wrote in message
> > news:a3jjnf$bt0$1@news8.svr.pol.co.uk...
> > > Hi All,
> > >
> > > Looking for personal experiences / info to help me decide which mini
beam
> > to
> > > buy.
> > >
> > > I'd like to operate 10/12/15/17/20m from a single mini beam.
> > >
> > > Look forward to getting some replies.
> > >
> > > MikeT ...
> > > M0AWS
> > >
> > >
>

2534. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 18:43:59 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C5ED66F.7E4346DC@crosslink.net>
Source record: 149173
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Zoran Brlecic wrote:
>
> Vito wrote:
>
> > CW was a necessary evil left over from
> > the days before modulation was invented.
>
> And ham radio is probably a necessary evil left over from the days before
> cellphones and Internet were invented?
>
No, it's a hobby, and CW is no longer needed to enjoy it. We are allowed
to do things that could QRM others -things others are not allowed to do
- so it is reasonable for governments to require us to have know how to
avoid that. It *was* reasonable for governments to require CW when that
was the only way to communicate; but that day is long past.

There is nothing wrong with *enjoying* CW for it's own sake but it is a
serious character flaw to feel that everybody should suffer every
discomfort that we did.

2535. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 18:50:41 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <a3mlbg$198aq1$1@ID-105647.news.dfncis.de>
Source record: 149174
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

If that's going to be your argument, and not being a lawyer I don't know how legal it'll be, make sure to DOCUMENT all of that BEFORE you take any other action. Take lots and lots of photos, preferably ones with the date showing in the corner if you have one of those type cameras.

Also, you might look into efforts to get PRB-1 rulings enacted as state law in your area. Your ARRL section leaders might have more info on this.

Robert / N4IXT

"R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
news:CGo78.19507$PC.113748@rwcrnsc52.ops.asp.att.net...
> Thanks guys. It seems to me that the CC&R's have been "abandoned" in my
area
> (at least that is what my argument will be), based on the fact that they
are
> not enforcing the ban on satellite dishes, cars parked in the streets,
> basketball hoops left in the street, odd window decorations, etc. They
can't
> be selective about only enforcing my violation.
>
> James
>
> "Cliff Holloway" <cholloway14@attbi.com> wrote in message
> news:3vn78.15460$ym3.54043@rwcrnsc51.ops.asp.att.net...
> > HI James,
> > I have had in this situation for about 10 years.. check out my site for
> > some ideas... http://www.geocities.com/n0hc/
> > 73 & Good Luck
> > Cliff N0HC
> > "R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
> > news:1pj78.13909$S06.50196@rwcrnsc53...
> > > Hello All;
> > >
> > > I live an a development in California that has CC&R's, restrictive to
> all
> > > types of external antennas, including satellite dishes. I need to
erect
> an
> > > antenna to use with my amateur radio, and I was wondering if anyone
else
> > > went up against CC&R's with an antenna, and what was the ending
result.
> > > CC&R's are part of every new development out here; you can't buy a new

> > house
> > > without them, effectively eliminating amateurs from operating. My
CC&R's
> > are
> > > not even linked to a homeowners association, so I am wondering how
> > > enforceable they are.
> > >
> > > Any comments or suggestions are appreciated.
> > >
> > > James
> > > n6ttd@arrl.net
> > >
> > >
> > >
> >
> >
>
>

2536. 10 GHZ

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 18:59:40 UTC
From: k3roj@k3roj.com
Message-ID: <cfa544dd.0202041059.139a9cf7@posting.google.com>
Source record: 149175

I just finished installing my 10GZ DB6NT transverter with 2 watt
amplifier on my tower using a weather proof box and 144 mhz for the
IF.
I know this may seem a dumb question but what frequency is used at
10368 MHZ. Is it 10368.1 or 10368.2 for narrowband CW and SSB? Thanks
AL K3ROJ

2537. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 19:09:48 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <E8cHmgA8xtX8EAzu@ifwtech.com>
Source record: 149183

Reg Edwards wrote:
>Ian, what may be picked up and re-radiated due to an assymetrical
>feedline is the same whatever form of construction the feedline might
>be and can be left out of the comparison.
>
>Here we are concerned only with the fraction of Tx output power
>radiated from the feedline due to the 1/2-wave dipole being fed with
>unbalanced coax
>rather than balanced-twin.

The original question was about coax, and why a single choke coil didn't seem to solve the problem. By all means start another thread on this new topic of yours, but let's not complicate this one.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2538. Re: Which Mini Beam ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 19:10:00 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <3C5EDC88.795032BF@lucent.com>
Source record: 149366

The Cushcraft MA5 is much, much better than the Butternut. See my prior posting.
Good construction, solid engineering, quality parts. Performance is very good null off the side is 3-4 S units with the antenna not yet at full height (Only 12 feet above flat roof at 18 feet. I expect it will be much better at it's full height of 30 feet above the roof.

AB7RS wrote:

> The lightning bolt 2 element 5 band quad.TG
>
> "Mike Tatum" <miket@cybatek.fsnet.co.uk> wrote in message
> news:a3jjnf$bt0$1@news8.svr.pol.co.uk...
> > Hi All,
> >
> > Looking for personal experiences / info to help me decide which mini beam
> to
> > buy.
> >
> > I'd like to operate 10/12/15/17/20m from a single mini beam.
> >
> > Look forward to getting some replies.
> >
> > MikeT ...
> > M0AWS
> >
> >

2539. Stealth antenna feedline?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 19:17:00 UTC
From: Marty <nfn04028@naples.net>
Message-ID: <M6B78.9297$3E5.742016@newsread2.prod.itd.earthlink.net>
Source record: 149176

I now live in a place where outside antennas can't be used. The usual flagpole, birdbath, attic, and all those exotic alternatives are not feasible. And inside antennas are practically useless because the building is constructed with concrete, rebar and steel studs.

The only place that might be used is inside of a porch, adjacent to a screen (non-metallic). The screen frame (aluminum) measures 21ft across and 10ft high. I would like to put up something usable on 20M and am considering a drooping dipole, the ends hanging down about 7ft. I've used this configuration before at a different location but with ladder line and a balun which made it easy to match.

Now I'd like to use a feedline that is much less visible. I'd appreciate any suggestions and general comments on the whole idea.

Marty K1FHR

2540. Re: Stealth antenna feedline?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 19:29:46 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C5EE123.779EF908@shaw.ca>
Source record: 149177

Marty wrote:
>
> I now live in a place where outside antennas can't be used. The usual
> flagpole, birdbath, attic, and all those exotic alternatives are not
> feasible. And inside antennas are practically useless because the building
> is constructed with concrete, rebar and steel studs.
>
> The only place that might be used is inside of a porch, adjacent to a
> screen (non-metallic). The screen frame (aluminum) measures 21ft across and
> 10ft high. I would like to put up something usable on 20M and am
> considering a drooping dipole, the ends hanging down about 7ft. I've used
> this configuration before at a different location but with ladder line and a
> balun which made it easy to match.
>
> Now I'd like to use a feedline that is much less visible. I'd appreciate
> any suggestions and general comments on the whole idea.
>
> Marty K1FHR

If I had my druthers, I'd try to split the screen frame at
the bottom, and
use epoxy to fill in the gap. Then I'd feed that gap with
open wire line and use the frame as a loop (fed through a
tuner). This assumes that the scteen frame itself is
isolated from anything metallic.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2541. Re: ₹

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 19:47:49 UTC
From: NM5K <NSnm5k@wt.net>
Message-ID: <3C5EE565.568A@wt.net>
Source record: 149178

ï¿½ï¿½ï¿½ï¿½ï¿½ wrote:
>
> ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Ó¦ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Æ·Ïµï¿½ï¿½ï¿½ï¿½Ï¿ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Å·ï¿½ ï¿½Ïµï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Ïµï¿½ï¿½ï¿½ï¿½Ö¤ï¿½ï¿½
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> Ã¿ï¿½ï¿½/15Ôª 3ï¿½ï¿½ï¿½ï¿½ï¿½Ï£ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½2001 Ã¿ï¿½ï¿½/0.6Ôª
3ï¿½ï¿½ï¿½ï¿½ï¿½Ï£ï¿½ï¿½ï¿½ï¿½ï¿½2025
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> ï¿½ç»°ï¿½ï¿½0312-3600552 3883313 13803126033 01081202261
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> ï¿½ï¿½Ïµï¿½Ë£ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½
> ï¿½ï¿½Ö·ï¿½ï¿½www.bfmm.iscute.com ï¿½ï¿½ï¿½ä£ºhausen@88miaomu.com

```
Thats easy for you to say....MK
--
Remove NS from mail address to reply
http://web.wt.net/~nm5k
```

2542. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 19:48:21 UTC
From: Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna5tpe3.1ag.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 149025

On Sat, 02 Feb 2002 07:03:03 +1100, Owen Duffy <owen@oda.com.au> wrote:
> A very important factor is whether you encourage galvanic corrosion by
> connecting dissimilar metallic electodes.

> More importantly, your choice of electrode material (copper, copper clad
> steel, galvanised steel, stainless, stainless clad steel are all readily
> available and used for eathing here) should be influenced strongly by
> other earthed metal that will be bonded to the system and which might
> cause significant galvanic currents (eg premises water service, power
> supply earth, power supply earthing system (eg MEN)). It is a mistake to

Ooh. Hadn't thought of the other grounded metals with earth-contact.

My electrical service is grounded thru a single driven copper-clad
rod. The house and well are all done with galvanized steel pipe. I
wonder if my 25 year old plumbing or ground rod is corroding away...
Running new pipe from well to house will be _extremely_ unpleasant.

I was just about to bond three or four more copper-clad rods to the
existing ground rod (2/3 driven, wire run 3/4 of the way around the
house, 3rd rod waiting to be driven, 4th is a maybe).

I suppose before I bond to the existing rod I can check for galvanic
potential between new electrodes and old ground system. A big
current flow might accelerate deterioration of the well casing+pipe.

> Although in many installations, earth electrodes last a very long time,
> one should expect to make periodic inspections and measurements to
> ensure that they continue to be fully effective.

Decent, meaningful ground measurement is a pain.

sdb
--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

2543. mono multifreq antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 19:56:29 UTC
From: aunwin@fgi.net
Message-ID: <c4becf19.0202041156.7992f3a5@posting.google.com>
Source record: 149179

Hi,
I see there is another three element antenna on the market
on a 18 foot boom.(Fluidmotion)
Specs give mono band style results by changing element
lengths to suit frequency of operation.
Having piddled many years with this approach using wire
inside fibre glass fishing poles I was never able to get
monoband specs with fixed element spacing.
Is it possible to get good specs on a fixed element position
and boom by just changing the element length without phasing
or the addition of varying loads and without a tuner?
I am aware that glass fibre enclosed elements provide for
shorter radiators but I am just curious as to what the
other variables are involved other than varying the element
lengths.

2544. Re: Screwdriver antenna ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 19:58:14 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <3ppt5usedg32cdmcrpvi4s6mpd8uphc583@4ax.com>
Source record: 149180

Well today finally got warm enough. I took the outer cover off the
BB3 and found that the finger stock was unsoldered for about 1/4 of
the circumference. May have pulled it loose when I did the driving
into the garage without removing the whip trick. I didn't think I was
ever going to get out from under the garage door. Looks like a trip
to the factory.

Dick - W6CCD

On Sun, 03 Feb 2002 18:51:55 -0700, Dick Hughes
<rhughes33@cableone.net> wrote:

>Thanks for the ideas. (And thank you too Cecil.) I went through some
>really bad weather last month, and drove into the garage with the whip
>still on before that (Ouch, ouch.) That's why I think either the
>toroid is swimming inside the box, or I broke something in the whip.
>Could have damaged the coil fingers as well. I just have to get out
>there and check everything out. It did work fine before all that.
>
>Dick

2545. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 19:59:57 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <1LB78.1996$oj3.441966@paloalto-snr1.gtei.net>
Source record: 149181

"Vito" <vito@crosslink.net> wrote in message news:3C5ED279.84495A88@crosslink.net...
> That's why I'm looking at running some wire just off the 8x32' rubber
> roof. There's enough room for an invisible 20m Horizontal dipole up
> there! :o) Try it, you'll like it.
> Vito

I *have* tried it, and seen others who also have - and have YET to see such an "invisible" antenna
supported mere inches above an RV roof - metal or otherwise - that would perform as well as a
mediocre standard monoband mobile vertical!

Again I use/have used hamsticks, screwdrivers, hustlers, Master mobile, and frequently use an SGC
computerized autotuner with random length endfed "invisible" wires...

When I am fortunate enough to be in a more wilderness or lightly populated CG, the SGC and random
wire are great - but not too practical to be seen skulking thru CG underbrush with a
slingshot/spinning reel trying to shoot a line into a tree when it's crowded and cramped... So,
then, the various compromises come into play... and the absolute WORSE of those, is usually some
wire or loop antenna supported just above an RV or vehicle roof...

Gary - KJ6Q

2546. Re: Mobile HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 20:04:58 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <s7qt5usdqeqh072ek6v4tr1mu5n4ut1hud@4ax.com>
Source record: 149182

After bragging about how my BB3 has operated for 7 years without a problem, this morning I found the finger stock unsoldered for about 1-1/2" and moving up and down with the coil. No wonder I couldn't get it to resonate. Guess it will be going back to Farmington.

Dick - W6CCD
Remove 33 from address

On Fri, 01 Feb 2002 15:26:39 GMT, "Charlie" <ham@aol.com> wrote:

>I had a BB3 and the fingerstock kept breaking off. I love my High Sierra.
>If the stainless steel spring does wear out it takes just 5 minutes to
>replace. With the BB3, I had to ship it back to them three times. Stick
>with the HS. Their recommended maintenance is good advice. Do it, and the
>antenna will last for many years.
>
>73, Robert
>
>

2547. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 20:46:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5EF315.9CC2622B@eznec.com>
Source record: 149184

Coax doesn't have a "third conductor" any more than twinlead does. The currents on the two conductors of twinlead can be mathematically separated into differential mode currents, which are equal and opposite on the two conductors and cause no radiation, and a third, common mode current which is equal and in the same direction on the two conductors and does radiate. In a coax, they're physically separated, with the currents inside the coax being pure differential currents and the current on the outside pure common mode. But the effect is exactly the same.

Feeding a dipole with twinlead doesn't at all guarantee balanced currents on the two conductors. Unless you have a truly balanced tuner or a balun at the rig end, exactly the same spillover effect will occur as with coax. It'll just happen at the rig instead of at the antenna. The result will be unbalanced currents on the twinlead conductors -- that is, the presence of a common mode current -- that will radiate just like the current on the outside of a coax feedline.

Roy Lewallen, W7EL

CAM wrote:
>
> Reg Edwards wrote:
> >
> > Ian, what may be picked up and re-radiated due to an assymetrical feedline
> > is the same whatever form of construction the feedline might be and can be
> > left out of the comparison.
> >
> > Here we are concerned only with the fraction of Tx output power radiated
> > from the feedline due to the 1/2-wave dipole being fed with unbalanced coax
> > rather than balanced-twin.
>
> There are two conductors in a balanced feedline. With coax, there is
> effectively a third conductor. If you hung a separate conductor down
> from one side of a dipole fed with balanced line, don't you think it
> would radiate? Especially if it were a resonant length?
> --
> cheers, CAM http://www.qsl.net/w5dxp

2548. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 20:48:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5EF39E.9FE3DB65@eznec.com>
Source record: 149185

It's really very simple to measure the current on each conductor of a feedline and to measure the common mode current. The method is described in "Baluns: What They Do and How They Do It", in the _ARRL Antenna Compendium_, Vol. 1.

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Reg:
>
> Heh, heh... That fraction is indeed small and would be determined by the
> Common Mode Rejection Ratio of the antenna "system".
>
> In most any kind of system, let alone an amateur antenna installation, the
> measurement of CMRR is problematic, and usually beyond the kinds of
> metrology that a typical amateur can muster. Measuring the CMRR of a
> simple transformer or differential amplifier is difficult enough.
> . . .

2549. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 20:51:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5EF444.A8EA8656@eznec.com>
Source record: 149186

Yes, any time an impedance is a signficant fraction of a wavelength long, it shoud be modeled as a distributed load as you've done. I tend to use small ferrite toroids for my baluns, which are physically short. They also have a resistive rather than inductive impedance, so I model them as a single fixed resistance.

Roy Lewallen, W7EL

Dan Richardson wrote:
>
> Hi Roy,
>
> Here's something I discovered for modeling a bead type balun For
> 2-meters. Such a balun is around 8" long. Therefore I modeled wire
> representing the outside shield using 2" long segments. Then I placed
> four 250-Ohm inductive loads - one on each of the first four segments
> at the antenna end. This produces a model which, I feel, more closely
> represents the actually installation. The results were notably better
> than using a single load on one segment.
>
> 73
> Danny, K6MHE

2550. Re: I would like your Opinion on DF Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 20:56:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5EF599.B297382C@eznec.com>
Source record: 149187

Your matching system is fine. If I were you I'd simply wind some of that coax through a large ferrite core, 5-7 turns or so, near the antenna. Or string a half dozen or so cores over the outside of the coax. Type 43 ferrite or similar would be about the best kind to use, although 70 series would be fine too.

Roy Lewallen, W7EL

"Pieï¿½ï¿½ IK2VTJ" wrote:
> Hi Roy,
>
> thanks for your suggestion.
> As I said in another post, I'm using a three element yagi 'flexible', but
> without any balun.
> Since the radiating element is a folded dipole, I only matched its impedance
> (about 100 + j 10 Ohms) with a quarter w/l of 75 Ohms TV cable.
> Do you think I really need a balun? If yes(as I think) can you send me a
> schematic for a balun 2:1? I have the wonderfull book by W2FMI, but I
> couldn't find anything for VHF.
> Thanks in advance.
> --
> 73 de IK2VTJ, Piero.
>
> http://www.qsl.net/ik2vtj
> http://www.ardf.it
>
> Togli / Remove
> NONVOGLIOSPAM
> dall'indirizzo / from address

2551. Re: mono multifreq antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 21:08:51 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3C5EF863.8CD82668@iquest.net>
Source record: 149188

Certainly can optimize the element lengths based on the fixed positions of the elements. The F/B and gain will shift as freq. is adjusted....not a huge issue. The concept is good, the practical applications have been attempted in the past and the guys in Washington seem sincere with the offering of a unique yagi. The composite glass element tubing would be of more interest/concern in the electrical and UV properties areas. Of course if the PIC goes and/or the servo's loose sync, it would pose a major problem. Moving parts usually wear and are more prone to failure than static ones.

Bandwidth isn't an issue since the element length is adjusted for unity at whatever freq. you choose.

Download a copy of YagiMax or Elnec Demo and play with element lengths. Monitor the effects on pattern changes. You'll get a grasp of the gain and F/B shifting as the freq changes but not element positions. Pretty minor in most situations providing minimal spacing is met (and 18 foot boom does that).

Bests,

Patrick
W9GTA

Art Unwin KB9MZ wrote:
>
> Hi,
> I see there is another three element antenna on the market
> on a 18 foot boom.(Fluidmotion)
> Specs give mono band style results by changing element
> lengths to suit frequency of operation.
> Having piddled many years with this approach using wire
> inside fibre glass fishing poles I was never able to get
> monoband specs with fixed element spacing.
> Is it possible to get good specs on a fixed element position
> and boom by just changing the element length without phasing
> or the addition of varying loads and without a tuner?
> I am aware that glass fibre enclosed elements provide for
> shorter radiators but I am just curious as to what the
> other variables are involved other than varying the element
> lengths.

2552. Re: Stealth antenna feedline?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 21:28:46 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C5EFCEA.42698D26@tampabay.rr.com>
Source record: 149189

geez marty
why did you move into such a restricted community ?
a friend of mine is house hunting and he is playing it smart he goes and looks
at the place his wife likes and he asks what the deed restrictions are and when
he finds out he turns it down there was one community that wouldnt even allow
ANY!!!! ham transmitters at all
sounds like from what you discribe you may need a new hobby
good luck hope the drooper works just keep it far enough away from the aluminum
frame and use ladder line or 300 ohm line and paint it to match the background

Marty wrote:

> I now live in a place where outside antennas can't be used. The usual
> flagpole, birdbath, attic, and all those exotic alternatives are not
> feasible. And inside antennas are practically useless because the building
> is constructed with concrete, rebar and steel studs.
>
> The only place that might be used is inside of a porch, adjacent to a
> screen (non-metallic). The screen frame (aluminum) measures 21ft across and
> 10ft high. I would like to put up something usable on 20M and am
> considering a drooping dipole, the ends hanging down about 7ft. I've used
> this configuration before at a different location but with ladder line and a
> balun which made it easy to match.
>
> Now I'd like to use a feedline that is much less visible. I'd appreciate
> any suggestions and general comments on the whole idea.
>
> Marty K1FHR

2553. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 21:29:37 UTC
From: James <kb7tbt@qsl.net>
Message-ID: <53D78.10952$Xk4.694895@news1.east.cox.net>
Source record: 149190
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

TAKE PICTURES OF ALL THE OTHER VIOLATIONS BEFORE YOU PUT ANYTHING UP..

Then that will stand up in court..otherwise it goes back to the old adage:
"If one person jumps off a bridge does that mean you can too?"

--

KB7TBT Home Page
http://www.qsl.net/kb7tbt

American Red Cross - Grand Canyon Chapter
http://www.arizonaredcross.org

Arizona Amateurs On Television
http://www.w7atv.com

KB7TBT - 146.840 441.200
NCI - 3890

ICQ - 1507679
AIM - KB7TBT

"R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
news:CGo78.19507$PC.113748@rwcrnsc52.ops.asp.att.net...
> Thanks guys. It seems to me that the CC&R's have been "abandoned" in my
area
> (at least that is what my argument will be), based on the fact that they
are
> not enforcing the ban on satellite dishes, cars parked in the streets,
> basketball hoops left in the street, odd window decorations, etc. They
can't
> be selective about only enforcing my violation.
>
> James
>
> "Cliff Holloway" <cholloway14@attbi.com> wrote in message
> news:3vn78.15460$ym3.54043@rwcrnsc51.ops.asp.att.net...
> > HI James,
> > I have had in this situation for about 10 years.. check out my site for
> > some ideas... http://www.geocities.com/n0hc/
> > 73 & Good Luck
> > Cliff N0HC
> > "R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
> > news:1pj78.13909$S06.50196@rwcrnsc53...

> > > Hello All;
> > >
> > > I live an a development in California that has CC&R's, restrictive to
> all
> > > types of external antennas, including satellite dishes. I need to
erect
> an
> > > antenna to use with my amateur radio, and I was wondering if anyone
else
> > > went up against CC&R's with an antenna, and what was the ending
result.
> > > CC&R's are part of every new development out here; you can't buy a new
> > house
> > > without them, effectively eliminating amateurs from operating. My
CC&R's
> > are
> > > not even linked to a homeowners association, so I am wondering how
> > > enforceable they are.
> > >
> > > Any comments or suggestions are appreciated.
> > >
> > > James
> > > n6ttd@arrl.net
> > >
> > >
> > >
> >
> >
>
>

2554. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 21:30:30 UTC
From: James <kb7tbt@qsl.net>
Message-ID: <W3D78.10957$Xk4.695061@news1.east.cox.net>
Source record: 149191
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

hmm, I should have read further. but at least someone agrees with me..:}

--

KB7TBT Home Page
http://www.qsl.net/kb7tbt

American Red Cross - Grand Canyon Chapter
http://www.arizonaredcross.org

Arizona Amateurs On Television
http://www.w7atv.com

KB7TBT - 146.840 441.200
NCI - 3890

ICQ - 1507679
AIM - KB7TBT

"N4IXT" <n4ixt@arrl.net> wrote in message
news:a3mlbg$198aq1$1@ID-105647.news.dfncis.de...
> If that's going to be your argument, and not being a lawyer I don't know
how
> legal it'll be, make sure to DOCUMENT all of that BEFORE you take any
other
> action. Take lots and lots of photos, preferably ones with the date
showing
> in the corner if you have one of those type cameras.
>
> Also, you might look into efforts to get PRB-1 rulings enacted as state
law
> in your area. Your ARRL section leaders might have more info on this.
>
> Robert / N4IXT
>
>
> "R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
> news:CGo78.19507$PC.113748@rwcrnsc52.ops.asp.att.net...
> > Thanks guys. It seems to me that the CC&R's have been "abandoned" in my
> area
> > (at least that is what my argument will be), based on the fact that they
> are
> > not enforcing the ban on satellite dishes, cars parked in the streets,

> > basketball hoops left in the street, odd window decorations, etc. They
> can't
> > be selective about only enforcing my violation.
> >
> > James
> >
> > "Cliff Holloway" <cholloway14@attbi.com> wrote in message
> > news:3vn78.15460$ym3.54043@rwcrnsc51.ops.asp.att.net...
> > > HI James,
> > > I have had in this situation for about 10 years.. check out my site
for
> > > some ideas... http://www.geocities.com/n0hc/
> > > 73 & Good Luck
> > > Cliff N0HC
> > > "R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
> > > news:1pj78.13909$S06.50196@rwcrnsc53...
> > > > Hello All;
> > > >
> > > > I live an a development in California that has CC&R's, restrictive
to
> > all
> > > > types of external antennas, including satellite dishes. I need to
> erect
> > an
> > > > antenna to use with my amateur radio, and I was wondering if anyone
> else
> > > > went up against CC&R's with an antenna, and what was the ending
> result.
> > > > CC&R's are part of every new development out here; you can't buy a
new
> > > house
> > > > without them, effectively eliminating amateurs from operating. My
> CC&R's
> > > are
> > > > not even linked to a homeowners association, so I am wondering how
> > > > enforceable they are.
> > > >
> > > > Any comments or suggestions are appreciated.
> > > >
> > > > James
> > > > n6ttd@arrl.net
> > > >
> > > >
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>
>

2555. Multi frequency monoband antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 21:45:19 UTC
From: aunwin@fgi.net
Message-ID: <c4becf19.0202041345.2d68de22@posting.google.com>
Source record: 149194

After reading about "stretchable antennas
(fluidmotion) I tried to model a three
element beam on a 18 foot boom for multi
frequency use using AO with element length
being a variable.
I did not take into account element shortening
because of dielectric effect (fishing pole support)
but I could not find a fixed driver position that
would provide mono band performance from 20 thru 10,
either in practice or in the fall back position of
faulty computor use.
Anybody have any insight as to what the fixed driver
position should be,and of any other variables that
should be taken into account such as using coax for
elements or folded elements?
(I also tried driving one and all elements
even tho it couldn't then be called a yagi !)

2556. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 21:45:35 UTC
From: Mark Tetrault <tetrault@mv.mv.com>
Message-ID: <b30u5u4rb4vo260e369ccp8orumc0dg9a9@4ax.com>
Source record: 149192

Vito <vito@crosslink.net> wrote:

>Mark Tetrault wrote:
>>
>> OK, So I have a presently broken TJ (BB3) screwdriver and would like
>> to replace it with another screwdriver.....
>> ... I really want the 80m in the RV.
>>
>
>But why use a screwdriver on a stationary (from another post) RV?
>They're FB for mobile in a car or truck but there are perforce
>compromises to get that mobility; compromises which may be unnecessary
>in your application. For example, on Field Day we used a homebrew 1/4
>wave vertical for 20M and put a pully on top so we could pull up an
>inverted V cut for 40m that also worked 15m ... all made out of free
>junk ... plus a tuner we'd bought for $40 at a hamfest. Another RVing
>Ham does the same using a collapsable flag pole he got from Camping
>World.
>Longer is better!
>73 KA3DWW

I need something I can set up in 2 minutes, not string ropes or wires anywhere (Campground rules etc) and minimally obtrusive. The screwdriver fits that bill.

Mark

2557. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 21:49:08 UTC
From: Mark Tetrault <tetrault@mv.mv.com>
Message-ID: <od0u5uogpkbv8vo0ohb1cd77obu45gcc2k@4ax.com>
Source record: 149193

"Gary - KJ6Q" <davison7@gte.net> wrote:

>You must not be too familiar with RVing!
>
>Sure, SOMETIMES an RVer IS fortunate enough to be in a site where larger antennas can be used - but
>usually NOT! We aren't talking about field day type operation here, but ham operation in situations
>where your RVing neighbors (NON-ham!) are all within a few feet all around you! The LAST thing you
>want is any more intrusion into the "ambiance" of the setting than necessay - NOR do you want a
>steady stream of RF-related complaints as your ham setup is clearly visible from MANY areas of the
>campground. Even an ordinary screwdriver is too much of a stretch in many such scenarios! SOOooo,
>sometimes (ususlly...) you are forced to use the best available compromise in order to use your ham
>stuff.
>
>Gary - KJ6Q

Couldn't a sed it bettah m'self!

Mark

2558. Re: installing 2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 21:53:01 UTC
From: hoho@dfg.ca
Message-ID: <3C5F02BD.C352F551@dfg.ca>
Source record: 149197

thats is what I want thanks ,

waiting an other advice

Vito a écrit :

> hoho@dfg.ca wrote:
> >
> > no the purpose is only to accentuate a little in one direction, keeping the
> > omni pattern
> >
> > resuming that , I only want to connect 2 antenna on the same radio, transmit
> > and receive on both antenna at the same time...
>
> Sure (wink), CBrs "cophase" their antennae all the time. It can be done
> within a narrow freq band by using specially cut lengths of coax. Sorry,
> I don't remember the formula but somebody here otta know how to
> calculate the lengths. You might have to use 75 ohm coax.
> 73 KA3DWW

2559. Re: TAHOE/YUKON ANTENNA IDEAS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 21:55:27 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <3C5F034D.4290F366@earthlink.net>
Source record: 149195

I married one 38 years ago!!

Hmmm? Been hamming for almost 50 years!

Must be an answer someplace!

W1MCE

Vito wrote:
>
> Dave Knight wrote:
> >
> > .. Would like to mount 2m/440 antenna but she will not let me...
>
> I dated a girl like that ... once.
>
> KA3DWW

2560. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 21:57:04 UTC
From: Dal Wheeler <dwheeler@insightek.com>
Message-ID: <u5u0vbhmrmjkcc@corp.supernews.com>
Source record: 149196
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Daniel Indyk <danindyk@mail.bigpond.com> wrote in message
news:m7t78.87051$HW3.123452@newsfeeds.bigpond.com...
> [snip]
> and a bunch of others all of whom i repect and from who i've learned much,
> have really shoved this poor kid's nose in the shit. heck, if he doesn't
> understand things properly then he hasn't been taught properly. when one
> learns introductory filters one usually starts with passive filters. L
type
> T type PI type. M derived etc.......then active filters.....up to that
point
> the configuration of each type was different. Now he's learning active
> filters and it wasn't explained that the component configuration can be
the
> same for different transfer characterisitics, depending on component
values!

> big bloody deal. these ngs are a wonderful medium for learning and really
> should not be used to show how bloody clever we all are. grow up. i'm
^^^^^^^^^^^^^^^^^^^^^^^^

Heck, I thought that this was the main use of NGs. Of the 30+ replies, only
2 actually addressed the actual question. Sounds about right. :')

2561. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 22:10:25 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3n0sidnq1@slb6.atl.mindspring.net>
Source record: 149198
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Dal, Dan:

Youse guys gotta hang around here more.

And mebbe... try a little harder to become NG "saints" yourselves, heh, heh...

BTW... young Jason, God love him, gets plenty of help from this particular NG crew, he has in the past, and he will in the future.

But you misjudge him, Jason is one of the *BIG* experts around here. Go have a look at his www site, and see.

He has set up there as a teacher and and all around "factotum", he has lots of tutorials and white papers there for anyone to learn from.

Go see for yourselves... BTW... the stuff on Jason's site is worth exactly what you pay for it... and...

BTW... whatcha get on this NG's is also free and worth exactly what you pay for it!

Got a problem with that?

Best,

--Peter K1PO

"Dal Wheeler" <dwheeler@insightek.com> wrote in message news:u5u0vbhmrmjkcc@corp.supernews.com...
>
> Daniel Indyk <danindyk@mail.bigpond.com> wrote in message
> news:m7t78.87051$HW3.123452@newsfeeds.bigpond.com...
> > [snip]
> > and a bunch of others all of whom i repect and from who i've learned much,
> > have really shoved this poor kid's nose in the shit. heck, if he doesn't
> > understand things properly then he hasn't been taught properly. when one
> > learns introductory filters one usually starts with passive filters. L
> type
> > T type PI type. M derived etc.......then active filters.....up to that
> point
> > the configuration of each type was different. Now he's learning active
> > filters and it wasn't explained that the component configuration can be
> the
> > same for different transfer characterisitics, depending on component
> values!

>
>
> > big bloody deal. these ngs are a wonderful medium for learning and
really
> > should not be used to show how bloody clever we all are. grow up. i'm
> ^^^^^^^^^^^^^^^^^^^^^^^^
> Heck, I thought that this was the main use of NGs. Of the 30+ replies,
only
> 2 actually addressed the actual question. Sounds about right. :')
>
>
>
>

2562. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 22:21:21 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5F0961.B82BF1BC@IEEE.org>
Source record: 149199

Roy Lewallen wrote:
> Coax doesn't have a "third conductor" any more than twinlead does.

I was quoting you, Roy. From: "Baluns, What They Do and How They Do It"

"When a balanced antenna is fed with coaxial cable (Fig. 1), the
outside of the shield appears as an extra, *separate conductor*
connected to the right side of the antenna at the feed point."
--
cheers, CAM http://www.qsl.net/w5dxp

2563. Re: ¡ï¹©ËÙÉúÑîÃçÄ¾×îÐÂÆ·ÖÖ¡ï

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 22:25:28 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C5F0A58.4F7AB4E5@IEEE.org>
Source record: 149200

NM5K wrote:
>
> ï¿½ï¿½ï¿½ï¿½ï¿½ wrote:
> >
> > ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Ó¦ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Æ·Ïµï¿½ï¿½ï¿½ï¿½Ïï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Å·ï¿½ï¿½ï¿½Ïµï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Ö¤ï¿½ï¿½
> > ï¿½È£ï¿½ï¿½Û¸ï¿½ï¿½ï¿½×£ï¿½Å·ï¿½ï¿½107 Ã¿ï¿½ï¿½/0.5Ôª 3ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Ï£ï¿½Å·ï¿½ï¿½108 Ã¿ï¿½ï¿½
> > /1.5Ôª 3ï¿½ï¿½ï¿½ï¿½ï¿½Ï£ï¿½Å·ï¿½ï¿½109 Ã¿ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½/1.5Ôª 15ï¿½ï¿½ï¿½×£ï¿½Å·ï¿½ï¿½110
> > Ã¿ï¿½ï¿½/15Ôª 3ï¿½ï¿½ï¿½ï¿½ï¿½Ï£ï¿½ï¿½ï¿½ï¿½ï¿½2001 Ã¿ï¿½ï¿½/0.6Ôª 3ï¿½ï¿½ï¿½ï¿½ï¿½Ï£ï¿½ï¿½ï¿½ï¿½ï¿½2025
> > Ã¿ï¿½ï¿½/5Ôª 3ï¿½ï¿½ï¿½ï¿½ï¿½Ï£ï¿½ï¿½ï¿½ï¿½ï¿½2050 Ã¿ï¿½ï¿½/5Ôª 3ï¿½ï¿½ï¿½ï¿½ï¿½Ï¡ï¿½ï¿½ï¿½ï¿½Ï¾ï¿½Îª»
> > ï¿½ï¿½ï¿½ï¿½Ç¤ï¿½ï¿½ï¿½ç£¬ï¿½ó²¿·Ö¶ï¿½ï¿½ï¿½4ï¿½ï¿½ï¿½ï¿½ï¿½Ò£ï¿½ï¿½ï¿½ï¿½ï¿½Òªï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Ïµ.
> > ï¿½ç»°ï¿½ï¿½0312-3600552 3883313 13803126033 01081202261
> > ï¿½ï¿½Î»ï¿½ï¿½ï¿½Ó±ï¿½Ê¡ï¿½ï¿½ï¿½ï¿½ï¿½Ð»ï¿½ÉÅ©Òµï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½Þ¹ï¿½Ë¾ï¿½ï¿½Ä¾ï¿½ï¿½ï¿½ï¿½ï¿½Æ¹ï¿½ï¿½Ø£ï¿½
> > ï¿½ï¿½Ïµï¿½Ë£ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½ï¿½
> > ï¿½ï¿½Ö·ï¿½ï¿½www.bfmm.iscute.com ï¿½ï¿½ï¿½ä£ºhausen@88miaomu.com
>
> Thats easy for you to say....MK

```
I see lots of this stuff on the internet. Is this some sort
of cheap encryption with the high order ASCII bit set?
--
cheers, CAM http://www.qsl.net/w5dxp
```

2564. February Specials from Sauder Electronics at www.sauderelectronics.com!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 22:39:13 UTC
From: specials@sauderelectronics.com
Message-ID: <8614bb9a.0202041439.7f97e2c5@posting.google.com>
Source record: 149201

Hello everyone,

Just a note to let everyone know that we have new specials up for our Internet customers on the website. Here are the current specials:

http://www.sauderelectronics.com

__Pack of 10 Silver Teflon PL259s__
Pack of 10 Silver teflon PL259 with gold tip for RG8 coax (accepts reducer for smaller cable).
* ONLY $8.00 *

__3 ft. RG8X Jumper w/PL259__
$1.00 off 3ft. RG8X jumper cable w/PL259 connector. American made w/95% braid. Reg. $5.00.
* NOW ONLY $4.00 *

__SMA Dual Band HT Antenna__
Dual Band antenna for SMA handhelds. 2M and 440MHz antenna fits the newer handheld radios like Yaesu VX-5 and many others requiring the SMA type connection. Very flexible.
Regularly sells for $14.00.......now ONLY $12.00!

PLUS A FREE GIFT with any order over $25.00!!

No one beats our prices on accessories and connectors!

Thanks for looking,

Sauder Electronics
http://www.sauderelectronics.com

2565. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 22:46:34 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <5025707EB46D9208.0D962A3E26516FCB.EC8C6E8744BD0C61@lp.airnews.net>
Source record: 149202

On Mon, 04 Feb 2002 16:45:35 -0500, Mark Tetrault <tetrault@mv.mv.com>
wrote:

>I need something I can set up in 2 minutes, not string ropes or wires
>anywhere (Campground rules etc) and minimally obtrusive. The
>screwdriver fits that bill.

That's not a campground, it's a parking lot.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net

2566. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 22:55:59 UTC
From: Tim Randa <randas@mindspring.com>
Message-ID: <3C5F117F.89884DB8@mindspring.com>
Source record: 149203
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

So does everyone who disagrees with you have a "serious character flaw" ??
You need to take a look in the mirror on this one friend.
de Kï¿½FL

Vito wrote:

> Zoran Brlecic wrote:
> >
> > Vito wrote:
> >
> > > CW was a necessary evil left over from
> > > the days before modulation was invented.
> >
> > And ham radio is probably a necessary evil left over from the days before
> > cellphones and Internet were invented?
> >
> No, it's a hobby, and CW is no longer needed to enjoy it. We are allowed
> to do things that could QRM others -things others are not allowed to do
> - so it is reasonable for governments to require us to have know how to
> avoid that. It *was* reasonable for governments to require CW when that
> was the only way to communicate; but that day is long past.
>
> There is nothing wrong with *enjoying* CW for it's own sake but it is a
> serious character flaw to feel that everybody should suffer every
> discomfort that we did.

2567. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 22:59:42 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <ynE78.2901$oj3.580020@paloalto-snr1.gtei.net>
Source record: 149205

"Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net> wrote in message
news:5025707EB46D9208.0D962A3E26516FCB.EC8C6E8744BD0C61@lp.airnews.net...
> On Mon, 04 Feb 2002 16:45:35 -0500, Mark Tetrault <tetrault@mv.mv.com>
> wrote:
>
> >I need something I can set up in 2 minutes, not string ropes or wires
> >anywhere (Campground rules etc) and minimally obtrusive. The
> >screwdriver fits that bill.
>
> That's not a campground, it's a parking lot.
>
>
>
> Joe Bramblett, KD5NRH
> kd5nrh@kd5nrh.net

AHHhhhh - another "I don't RV very much" response - fact IS, MOST current "RV campgrounds" aren't
much but parking lots with landscaping - and MANY don't even add the landscaping!

The best RV CGs we use are the remote, wilderness type - no hookups, and few frills, but more room
and "natural" surroundings. But for those expecting or demanding full-feature CGs, expect that you
will ALSO get the crowding and lack of privacy that goes WITH it... Modern CGs aren't really geared
for use as a "final destination", but rather just a place to stay overnite, or while you then drive
to the REAL nearby attraction you came to see...

Gary - KJ6Q

2568. R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 23:02:56 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u5u4oobppkm0d9@corp.supernews.com>
Source record: 149204
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Let's presume some simple antennas --

a rod or whip of finite diameter over a theoretically infinite ground plane

a simple dipole of finite diameter far away from any conducting earth.

What are the simplified formulas for calculating R and X at the feed point of these antennas, factoring in the finite width of the elements? If this is posted on a website somewhere (the actual formulas, not the formulas hidden inside a file) a pointer to the url would be most appreciated.

(I know I've got these formulas around this pigsty somewhere, but I've been looking for four hours now without finding them. Neither Krause, nor Jasik, nor the MIT RadLab series are particularly good sources of information on simple structures.)

Jim

2569. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 23:19:45 UTC
From: Jim <kg4enu@carolina.rr.com>
Message-ID: <ic5u5u83qjo1n13go4299euoud0svjnf6f@4ax.com>
Source record: 149206
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

who gives a S---t about flaws...do away with the code..but make the
tests more than a breeze.

Jim-kg4enu

On Mon, 04 Feb 2002 17:55:59 -0500, Tim Randa <randas@mindspring.com>
wrote:

>So does everyone who disagrees with you have a "serious character flaw" ??
>You need to take a look in the mirror on this one friend.
>de Kï¿½FL
>
>Vito wrote:
>
>> Zoran Brlecic wrote:
>> >
>> > Vito wrote:
>> >
>> > > CW was a necessary evil left over from
>> > > the days before modulation was invented.
>> >
>> > And ham radio is probably a necessary evil left over from the days before
>> > cellphones and Internet were invented?
>> >
>> No, it's a hobby, and CW is no longer needed to enjoy it. We are allowed
>> to do things that could QRM others -things others are not allowed to do
>> - so it is reasonable for governments to require us to have know how to
>> avoid that. It *was* reasonable for governments to require CW when that
>> was the only way to communicate; but that day is long past.
>>
>> There is nothing wrong with *enjoying* CW for it's own sake but it is a
>> serious character flaw to feel that everybody should suffer every
>> discomfort that we did.

2570. Re: P5/4L4FN

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 23:36:52 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c5f1b14$1@news.bnb-lp.com>
Source record: 149207
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Murray,
Thanks for the notice. For those that may want to actually visit the
web site you mentioned here is the URL for the 4L4FN/P5 operation....

http://www.amsatnet.com/p5.html

I "thought" I had worked N. Korea last year when I snagged HM40DX...but
alas a slim.....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

"Murray Green" <mgreen@erols.com> wrote in message
news:3C5F2196.5C7EB2F0@erols.com...
> Ed, P5/4L4FN has been without power for the past 2 days. He will
> be on field duty for the next 2 weeks, possibly longer, before
> returning and resuming P5 operations. (Source: KK5DO P5 Web page.)
>
> 73, Murray, K3BEQ

2571. Re: ¡ï¹©ËÙÉúÑîÃçÄ¾×îÐÂÆ·ÖÖ¡ï

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-04 23:41:33 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C5F1C2D.931B63BD@coqui.net>
Source record: 149208

CAM wrote:
>

> > Thats easy for you to say....MK
>
> I see lots of this stuff on the internet. Is this some sort
> of cheap encryption with the high order ASCII bit set?
> --
> cheers, CAM http://www.qsl.net/w5dxp

This example is Chinese as seen when viewed with a Western character
set.
-Bill

2572. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 00:12:16 UTC
From: Mark Tetrault <tetrault@mv.mv.com>
Message-ID: <an8u5uol4u3006gdlljcbvstssc7g443r2@4ax.com>
Source record: 149209

"Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net> wrote:

>On Mon, 04 Feb 2002 16:45:35 -0500, Mark Tetrault <tetrault@mv.mv.com>
>wrote:
>
>>I need something I can set up in 2 minutes, not string ropes or wires
>>anywhere (Campground rules etc) and minimally obtrusive. The
>>screwdriver fits that bill.
>
>That's not a campground, it's a parking lot.
>
>
>
>Joe Bramblett, KD5NRH
>kd5nrh@kd5nrh.net

Not true. In fact I spend a LOT of time in campgrounds and prefer
rustic campgrounds as opposed to concrete slabs in a row.

Campground owners will NOT allow ropes, wires in trees, and elaborate
antenna setups. They will allow a sat TV antenna and a "CB" antenna
(my screwdriver) looks like a CB antenna to them.

Mark

2573. Re: New Setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 00:41:17 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <qNF78.101474$h31.6713329@e420r-atl1.usenetserver.com>
Source record: 149210

Hi Ed,
I'm no expert but I'll give it a whack as I understand it. Your ground should definitely be as short as possible. That's easy enough. I believe the electrical code dictates that there should be only one ground system in your home. I have heard that things like grounding to a pipe or the grounding post in a wall socket can cause problems. Piping might not be metal all the way down or could make a pathway that you've not expected or intended. For example, what if somewhere else the same pipe is grounded by the existing system? In my opinion, you might consider any extra length to run a ground to the rod(s) used in the house's existing system. The issue as you probably already know is that an above ground, ground wire could be resonant and act like an antenna, causing QRN or (worse) bringing that energy back at you in the form of mic burn. Somebody correct me if I'm wrong or elaborate if my explanation is a little confusing.
Now for the ground buss. When folks say, "don't daisy chain" your equipment, they mean to avoid a ground loop. Your ground strap/wire may be connected to a bar or plate so as to make it easier to make multiple connections to it vice a single, tiny wire that's expected to handle a current that may be too much. Up to this point, you've got a simple rod>wire or strap>buss. Now, you should run an single ground wire/strap from each piece of equipment to the buss. This way, each piece of equipment has it's own path to ground.
Example: xcvr > buss, tuner > buss, controller > buss, etc.
You can see that each piece has a simple path to ground and, taking the path of least resistance, doesn't want to effect everything in your station. The ground setup is like an upside down tree with the roots as ground wires from each individual piece of equipment and the tree top is the ground rod. The daisy chained setup (bad) is where you'd hook these things in series and might look like this:
power supply > xcvr > tuner > controller > etc. > ground
What's gonna happen if the xcvr needs to go to ground? Bam! You guessed it, through the tuner, the controller, the etc. because it might not have any choice. Of course, the longer path and other factors might even make your hands on the mic a more favorable path to ground exiting through your feet (though not likely since you're on the second floor). This kind of "round robin" circuit should be avoided. It's also possible to unintentionally make this kind of deal if you're grounding through the grounding pole of a light socket. As a rule of thumb, try to plug all your equipment in to the same circuit in your house (i.e. don't plug a power supply in to the garage, and the xcvr in to an outlet in the office.
When looking at grounding paths, I try to see all the avenues thinking of them as water pipes that water can flow both ways through. You'll hear a lot of the more knowledgeable hams explaining the myriad of ways current and RF can find a way into your shack and some of them are really surprising

since we don't think of them inside our little warm box. One of the most interesting ways I've heard in a long time was a lightning ground strike that actually was believed to have entered through the ground wire and exited (I think) though the power lines damaging the ham's rig in the middle. That's obviously outside our normal paradigm:)
Based on the length of my reply, chances are that I've said something wrong or possibly confused an issue. That's sure to draw another post:)
Haha! Anyway, I hope this helps you to draw closer to the creamy center of ham radio:)
Best Regards to ya Ed,
Drink, WP3JQ
"Ed Strungis" <ed.strungis@verizon.net> wrote in message news:AOf78.12935$pb.6603@nwrddc01.gnilink.net...
> Hello,
> Kind of a long post. I'm in the process of setting up a a brandy new
> station/shack. Good news I have a whole room to myself.(Kids moved out.)
> Semi good news, it's on the second floor. My question has to do with
> grounding both for RF and lightening. In what I've read, most sources call
> for a ground run to be as short as possible. In my case about 20 feet. Also,
> some sources say multiple ground rods, about 8 feet apart bonded
> together.Does this add into the length of a ground run? As for bonding, some
> sources say that all your grounds (Cable TV, Telephone, electrical service,
> etc.) should be bonded together. Other sources say that the shack ground
> should be isolated (Don't use the electrical outlet ground, or a nearby cold
> water piper for example.) I've read that your equipment ground connections
> can be all terminated on a grounded copper buss bar. Others say never
> daisy-chain your equipment. Very confusing for a newbie. Any advice,
> steering in the right direction, etc. would be greatly appreciated.
> Thanks,
> Ed S
>
>

2574. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 00:46:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5F2B64.85CB6EC1@eznec.com>
Source record: 149211

And, shortly later, discussing twinlead feedline:

"However, when we connect the rig to ground, . . we've again provided a
third conductor in parallel with the right side of the feed line, and
the same problem occurs as with the coaxial cable."

In both the article and my postings I'm trying to convey the fact that
the type of feedline -- coax or twinlead -- doesn't determine balance or
radiation. Coax can be balanced and twinlead unbalanced.

Roy Lewallen, W7EL

CAM wrote:
>
> Roy Lewallen wrote:
> > Coax doesn't have a "third conductor" any more than twinlead does.
>
> I was quoting you, Roy. From: "Baluns, What They Do and How They Do It"
>
> "When a balanced antenna is fed with coaxial cable (Fig. 1), the
> outside of the shield appears as an extra, *separate conductor*
> connected to the right side of the antenna at the feed point."
> --
> cheers, CAM http://www.qsl.net/w5dxp

2575. Re: AntiSpam Test

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 01:07:15 UTC
From: "Chip G." <n1mie@NOSPAM.snet.net>
Message-ID: <040220022007167551%n1mie@NOSPAM.snet.net>
Source record: 149212

In article <3C5DB2B8.A77C0047@nowhere.com>, ac6v <me@nowhere.com> wrote:

] AntiSpam Test

Yes, indeed it is true that you've drawn no spam ... until now ...

:)

--
N1MIE - FN31xm

2576. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 01:55:44 UTC
From: richardharrison@webtv.net
Message-ID: <23536-3C5F3BA0-214@storefull-111.iap.bryant.webtv.net>
Source record: 149214

Roy Lewallen wrote:
"Coax doesn`t have a "third conductor" any more than twinlead does."

Wrong. Coax has an insuleted center conductor. Coax has an inside surface of its shield. Coax has an outside surface of its shield. The voltages on all three of these conductors is usually different from each other.
Skin effect isolates the inside surface from the outside surface of the coax shield.

Quoting from the underused ARRL Antenna Book 19th edition page 26-4:

"Stated briefly, the unbalance with coaxial line is caused by the fact that the outside surface of the outer braid is not coupled to the antenna in the same way as the inner conductor and the inner surface of the outer braid."

There is a phase difference caused by the difference in velocities of the waves traveling inside the cable and traveling outside the cable.

Then there is the infamous Fig 24 on page 26-16 of the ARRL Antenna Book, which is worth 1000 words.

Best regards, Richard Harrison, KB5WZI

2577. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 01:58:16 UTC
From: Zoran Brlecic <WA7AA@attbi.com>
Message-ID: <3C5F3C33.754ED490@attbi.com>
Source record: 149213
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Vito wrote:

> There is nothing wrong with *enjoying* CW for it's own sake but it is a
> serious character flaw to feel that everybody should suffer every
> discomfort that we did.

"Suffer", "discomfort"... I remember when I took a course in ham-radio as well as the lessons in Morse code, even though it's been 24 years now; my experience has been an enjoyable one, so I am sorry, but I can't relate to your pain and suffering. By the same token, shouldn't we eliminate any testing because it causes discomfort to some people? After all, electronics theory is a necessary evil from the time factory made rigs and antennas were not being made.

73 ..... Zoran WA7AA

2578. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 02:20:53 UTC
From: richardharrison@webtv.net
Message-ID: <23539-3C5F4185-36@storefull-111.iap.bryant.webtv.net>
Source record: 149217

Roy Lewallen wrote:
"However, when we connect the rig to ground...we`ve again provided a third conductor in parallel with the right side of the feedline and the same problem occurs as with coax cable."

What third conductor with twinlead? What you see is what you get.

A balanced circuit is balanced at both ends. In the case of twinlead connecting a sender with a balanced dipole, the sender must be balanced and the balanced line must remain balanced enroute. OK, conversions to and from unbalanced segments can be made enroute, but that`s another issue.

There is no third conductor in twinlead. Common-mode current is shared on both conductors of twinlead.

Best regards, Richard Harrison, KB5WZI

2579. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 02:25:06 UTC
From: kb0pyo <kb0pyo@redred.com>
Message-ID: <3C5F4282.A4704511@redred.com>
Source record: 149215
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna

Take rec.radio.swap off the list unless you are selling something!!!!!!!

Zoran Brlecic wrote:
>
> Vito wrote:
>
> > There is nothing wrong with *enjoying* CW for it's own sake but it is a
> > serious character flaw to feel that everybody should suffer every
> > discomfort that we did.
>
> "Suffer", "discomfort"... I remember when I took a course in ham-radio as well
> as the lessons in Morse code, even though it's been 24 years now; my experience
> has been an enjoyable one, so I am sorry, but I can't relate to your pain and
> suffering. By the same token, shouldn't we eliminate any testing because it
> causes discomfort to some people? After all, electronics theory is a necessary
> evil from the time factory made rigs and antennas were not being made.
>
> 73 ..... Zoran WA7AA

2580. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 02:47:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5F47D8.8D8C5695@eznec.com>
Source record: 149216

Richard Harrison wrote:

> . . .
> There is a phase difference caused by the difference in velocities of
> the waves traveling inside the cable and traveling outside the cable.
> . . .

A good point. There's an exactly analagous situation between the differential and common mode currents on a two conductor line. They also propagate at different velocities. Like the differential (inner) and common mode (outer) currents of a coaxial cable, the differential mode currents propagate more slowly than the common mode current, since the differential field encompasses more dielectric.

Roy Lewallen, W7EL

2581. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 02:48:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3nj5p$18poup$1@ID-124126.news.dfncis.de>
Source record: 149219

Dear Ian,

On the same thread -

At this juncture I am severely tempted to say I am laughing my head off at the reams and reams of mental contortions, and the enormous extent to which some people will go to evade admitting they havn't understood what they have been preaching about for years.

But I won't. ;o)

Point 1. As you have no idea of the power radiated from the braid of a coaxial line when it is feeding (wthout a choke) the centre of a 1/2-wave dipole, the remainder of your arguments carry no weight.

Point 2. The only person on the right track was Cecil when he asked what's the input impedance (seen looking into the top end) of the coaxial braid when the braid is 1/2-wavelength long and is grounded at the bottom end. (Actually, it's a function of the radiation resistance.)

Regards, Reg, G4FGQ
==========

Ian White said -

> The original question was about coax, and why a single choke coil didn't
> seem to solve the problem. By all means start another thread on this new
> topic of yours, but let's not complicate this one.

2582. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 03:02:49 UTC
From: dindyk@energy.com.au
Message-ID: <53c6ac34.0202041902.54866e04@posting.google.com>
Source record: 149218
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:<a3mbfi$1r3$1@nntp9.atl.mindspring.net>...
> Daniel:
>
> What's that old saying, "If you can't run with the big dogs then stay on the
> porch!"
>
> From the porch, it's just possible that a little dog might learn something
> if it pays attention.

agreed

> Have *you* seen Jason's WWW site?

nope

> Go have a look see!

love to. can u tell me the URL pls

>It seems that he can teach all of us something, even
> you!

hey, let's get it right, i was defending him, not attacking him like
the others for his lack of knowledge about filters.

> Best,
>
> --Peter K1PO

likewise,

danny

> "Daniel Indyk" <danindyk@mail.bigpond.com> wrote in message
> news:m7t78.87051$HW3.123452@newsfeeds.bigpond.com...
> >
> > "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
> > news:a3knbs$3l9$1@slb7.atl.mindspring.net...
> > > ehsjr:
> >
> > and a bunch of others all of whom i repect and from who i've learned much,
> > have really shoved this poor kid's nose in the shit. heck, if he doesn't
> > understand things properly then he hasn't been taught properly. when one
> > learns introductory filters one usually starts with passive filters. L
> type
> > T type PI type. M derived etc.......then active filters.....up to that

> point
> > the configuration of each type was different. Now he's learning active
> > filters and it wasn't explained that the component configuration can be
> the
> > same for different transfer characterisitics, depending on component
> values!
> > big bloody deal. these ngs are a wonderful medium for learning and really
> > should not be used to show how bloody clever we all are. grow up. i'm
> > surprised at u!
> >
> >

2583. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 03:10:21 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <uoiu5u896udk9q9k70i1bv4ptgqcg2ctn2@4ax.com>
Source record: 149222

Humm,

Well I could use say 150 Ohms resistive and 150 Ohms reactive for the
loads that would roughly equal 250 Ohms impedance for each load.
Which, as you suggest, could be more accurate. That sould better
approximate ferrite beads have the Q of 1. Will get around to it and
see if there is any noticeable difference in the results.

My thinking at the moment is that a string of beads are a little
easier to do than making two toridal wound baluns. But no big deal
ether way.

73
Danny

On Mon, 04 Feb 2002 12:51:16 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Yes, any time an impedance is a signficant fraction of a wavelength
>long, it shoud be modeled as a distributed load as you've done. I tend
>to use small ferrite toroids for my baluns, which are physically short.
>They also have a resistive rather than inductive impedance, so I model
>them as a single fixed resistance.
>
>Roy Lewallen, W7EL
>
>Dan Richardson wrote:
>>
>> Hi Roy,
>>
>> Here's something I discovered for modeling a bead type balun For
>> 2-meters. Such a balun is around 8" long. Therefore I modeled wire
>> representing the outside shield using 2" long segments. Then I placed
>> four 250-Ohm inductive loads - one on each of the first four segments
>> at the antenna end. This produces a model which, I feel, more closely
>> represents the actually installation. The results were notably better
>> than using a single load on one segment.
>>
>> 73
>> Danny, K6MHE

2584. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 03:26:05 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <u5uk80fibd7g62@corp.supernews.com>
Source record: 149220

I once ran a 103 inch whip on a Bug Catcher on a Hustler base mounted on the
front edge of the trunk of a 1968 Pontiac.
Drove it with a Swan. Worked great but too damned tall. It was Summer 1971.
At least you could buy real ball mounts and springs back then.
Now I just use a Hustler peaked for field strength, a 706 and a tuner.
Best? I once heard a guy towing a trailer with a dipole on it.
YMMV

H.
WA5IGW

"'Doc" <w5lz@icok.net> wrote in message news:3C5E68BD.7D4FD83E@icok.net...
> Dick,
> If you don't mind the 'stop and change taps' thing,
> then try a 'BugCatcher'. It is the most efficient of
> all the mobile antennas (although you'll get an argument
> about that, it's still true).
> 'Doc

2585. Re: Stealth antenna feedline?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 03:31:43 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <u5ukietmq0puc2@corp.supernews.com>
Source record: 149221

ANY?

KMA!

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:3C5EFCEA.42698D26@tampabay.rr.com...
> geez marty
> why did you move into such a restricted community ?
> a friend of mine is house hunting and he is playing it smart he goes and
looks
> at the place his wife likes and he asks what the deed restrictions are and
when
> he finds out he turns it down there was one community that wouldnt even
allow
> ANY!!!! ham transmitters at all
> sounds like from what you discribe you may need a new hobby
> good luck hope the drooper works just keep it far enough away from the
aluminum
> frame and use ladder line or 300 ohm line and paint it to match the
background
>
> Marty wrote:
>
> > I now live in a place where outside antennas can't be used. The usual
> > flagpole, birdbath, attic, and all those exotic alternatives are not
> > feasible. And inside antennas are practically useless because the
building
> > is constructed with concrete, rebar and steel studs.
> >
> > The only place that might be used is inside of a porch, adjacent to a
> > screen (non-metallic). The screen frame (aluminum) measures 21ft across
and
> > 10ft high. I would like to put up something usable on 20M and am
> > considering a drooping dipole, the ends hanging down about 7ft. I've
used
> > this configuration before at a different location but with ladder line
and a
> > balun which made it easy to match.
> >
> > Now I'd like to use a feedline that is much less visible. I'd
appreciate
> > any suggestions and general comments on the whole idea.
> >
> > Marty K1FHR
>

2586. Re: New Setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 03:34:20 UTC
From: richardharrison@webtv.net
Message-ID: <11384-3C5F52BC-184@storefull-117.iap.bryant.webtv.net>
Source record: 149223

Ed Strungis wrote:
"---most sources call for a ground run to be as short as possible."

Good advice.

"Also some sources say multiple ground rods, about 8 feet apart bonded together."

More good advice, as paralleled connections have lower impedance. NEC requires all ground connections be bonded together. The purpose is to minimize the potential difference between ground connections.

The separate ground for your shack is to prevent lightning current involving your antenna system producing a large voltage drop across household grounding wires and the appliances connected to them.

It is advisable to have a separate shack ground cable to the ground connection for your electrical service.

You should have a ground connection outside for your outside antenna system. This ground must also be connected with the electrical service ground point, be it metalic water piping, ground rod, or both.

The aim in grounding is to avoid potential differences between grounded objects. Voltage drops across pretty small impedances can be large when huge currents from lightning are involved.

If everything has its own short wire to a common groundpoint (the electric service ground) there is small chance of a large voltage difference between these things.

Unfortunately your house wiring isn`t usually done this way. Those electrical outlets are usually daisy chained. Salvation is in the short distances involved and in the limited exposure of the connected devices to lightning. A ham rig is not in the same category as an electric clock.

Best regards, Richard Harrison, KB5WZI

2587. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 04:07:01 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <18mu5ucgf6dhaqi7f0c1egvpgv84cnvqqo@4ax.com>
Source record: 149224

When I was stationed at Harlingen Texas in the 50's, I used a 3'
bottom section below a Master Mobile 75-meter coil, then an 8' whip
above it with a 16" capacity hat. I had 40 watts AM out from an Elmac
A-54H and used a Gonset Tri-Band converter as a receiver. I had
nooooo problem working out on 75-meters with that setup. Used fishing
line to keep it upright.

73, Dick - W6CCD

On Mon, 4 Feb 2002 21:26:05 -0600, "H. Adam Stevens"
<solo@totalaccess.net> wrote:

>I once ran a 103 inch whip on a Bug Catcher on a Hustler base mounted on the
>front edge of the trunk of a 1968 Pontiac.
>Drove it with a Swan. Worked great but too damned tall. It was Summer 1971.
>At least you could buy real ball mounts and springs back then.
>Now I just use a Hustler peaked for field strength, a 706 and a tuner.
>Best? I once heard a guy towing a trailer with a dipole on it.
>YMMV
>
>H.
>WA5IGW
>
>"'Doc" <w5lz@icok.net> wrote in message news:3C5E68BD.7D4FD83E@icok.net...
>> Dick,
>> If you don't mind the 'stop and change taps' thing,
>> then try a 'BugCatcher'. It is the most efficient of
>> all the mobile antennas (although you'll get an argument
>> about that, it's still true).
>> 'Doc
>

2588. Re: Impressions of the MFJ 1025/1026 Noise Canceller?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 04:08:27 UTC
From: n8blk@aol.com
Message-ID: <20020204230827.14797.00000178@mb-cg.aol.com>
Source record: 149225

In article <3C5DDC2A.787FB397@bellatlantic.net>, Mark Hall
<vze2mhvc@bellatlantic.net> writes:

>Anyone try either of these? Assuming a good noise antenna, does it
>work?

I have an MFJ1026. It works for removing the constant noise for the commuter rail nearby. What it won't do is remove things like thunderstorms and other annoyances associated with life. In other words if you have a source that you can pinpoint, it can likely make receive bearable by nulling out the noise. I'm told the apparently no longer produced ANC4 works pretty well, but the MFJ product is still available and works for me. It's not perfect, but it does allow me to get on HF and hear folks that I otherwise would not be able to.
-art clemons-

2589. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 04:16:04 UTC
From: richardharrison@webtv.net
Message-ID: <27700-3C5F5C84-218@storefull-118.iap.bryant.webtv.net>
Source record: 149226

Reg wrote:
"The only person on the right track was Cecil when he asked what`s the input impedance (seen looking into the top end) of coaxial braid when the braid is 1/2-wavelength long and is grounded at the bottom end. (Actually it`s a function of the radiation resistance.)

Yes. It is a function of the radiation resistance, but a 1/2-wave grounded vertical antenna may have a drivepoint impedance of about 700 ohms.

I stand corrected. There is not a low impedance on the outside of the coax at the drivepoint as I mistakenly said.

It finally dawns upon me why I`ve gotten away with not using baluns with countless installations of coax feeding balanced dipoles with apparently no ill effects.

I appreciate the relevation.

Best regards, Richard Harrison, KB5WZI

2590. Info on LATTIN multiband antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 04:49:06 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C5F64F8.6D16A067@home.com>
Source record: 149227

I am looking for some information on the LATTIN multi band dipole. I have found a drawing and it looks simple enough. The antenna was designed by W4JRW and
he holds a patent on the design. I have also read some comments that some builders have never been able to get it to work.

Any information would be appreciated.

Link to drawing. www.g3ycc.karoo.net/lattin.html

Les, AA4F

2591. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 05:17:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3nq7g$194kko$1@ID-124126.news.dfncis.de>
Source record: 149228

>> What is best Mobile Hf Antenna ?

A very broad question. But from the radiating efficiency and long-term durability, reliability point of view the best is what you pay the most money for. (Unless you are one of those unfortunate people born every minute who have never bought one before.)

If you want to barter money for time then make your own antenna. You will also gain more satisfaction, suffer less agro, live a more contented life, and so prolong longevity.

Furthermore, your family, friends and associates will participate in the benefits of you being easier to live with.

I wish you the very best of mobile DXing but don't drink and drive otherwise the other fellow will be wondering why you suddenly switched off.
--
****
Regards, Reg G4FGQ
Radio Modelling Software.
Help yourself to a free sample
Http://www.g4fgq.com
****

Dick Hughes <rhughes33@cableone.net> wrote in message news:18mu5ucgf6dhaqi7f0c1egvpgv84cnvqqo@4ax.com...
> When I was stationed at Harlingen Texas in the 50's, I used a 3'
> bottom section below a Master Mobile 75-meter coil, then an 8' whip
> above it with a 16" capacity hat. I had 40 watts AM out from an Elmac
> A-54H and used a Gonset Tri-Band converter as a receiver. I had
> nooooo problem working out on 75-meters with that setup. Used fishing
> line to keep it upright.
>
> 73, Dick - W6CCD
>
> On Mon, 4 Feb 2002 21:26:05 -0600, "H. Adam Stevens"
> <solo@totalaccess.net> wrote:
>
> >I once ran a 103 inch whip on a Bug Catcher on a Hustler base mounted on the
> >front edge of the trunk of a 1968 Pontiac.
> >Drove it with a Swan. Worked great but too damned tall. It was Summer 1971.
> >At least you could buy real ball mounts and springs back then.
> >Now I just use a Hustler peaked for field strength, a 706 and a tuner.
> >Best? I once heard a guy towing a trailer with a dipole on it.

> >YMMV
> >
> >H.
> >WA5IGW
> >
> >"'Doc" <w5lz@icok.net> wrote in message
news:3C5E68BD.7D4FD83E@icok.net...
> >> Dick,
> >> If you don't mind the 'stop and change taps' thing,
> >> then try a 'BugCatcher'. It is the most efficient of
> >> all the mobile antennas (although you'll get an argument
> >> about that, it's still true).
> >> 'Doc
> >
>

2592. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 05:34:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C5F6F03.C704F985@eznec.com>
Source record: 149229

Dan Richardson wrote:
>
> My thinking at the moment is that a string of beads are a little
> easier to do than making two toridal wound baluns. But no big deal
> ether way.

That's the attraction of a string of beads -- it's easier to implement than a toroid, especially with large diameter coax. It also provides better heat dissipation if that's a problem. The disadvantage is that it takes a lot more ferrite to get a high impedance. 5 turns around one core gives you as much impedance as 25 cores strung along the coax (assuming comparable magnetic cross section/path length ratios).

Roy Lewallen, W7EL

2593. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 06:16:57 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <v1uu5uoqdbqspv0vd7mgvushcqaju0jbts@4ax.com>
Source record: 149230

On Mon, 4 Feb 2002 20:20:53 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Roy Lewallen wrote:
>"However, when we connect the rig to ground...we`ve again provided a
>third conductor in parallel with the right side of the feedline and the
>same problem occurs as with coax cable."
>
>What third conductor with twinlead? What you see is what you get.
>
>A balanced circuit is balanced at both ends. In the case of twinlead
>connecting a sender with a balanced dipole, the sender must be balanced
>and the balanced line must remain balanced enroute. OK, conversions to
>and from unbalanced segments can be made enroute, but that`s another
>issue.
>
>There is no third conductor in twinlead. Common-mode current is shared
>on both conductors of twinlead.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

The third wire is going to ground, not up into the sky. In an
unbalanced output, the right side (as I understand it) is equipment
ground which has inherited a wire in parallel at the drive point (not
physical parallel).

73's
Richard Clark, KB7QHC

2594. Re: How do I classify filters WITHOUT looking at the transfer function?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 06:26:59 UTC
From: dindyk@energy.com.au
Message-ID: <53c6ac34.0202042226.1c7184fe@posting.google.com>
Source record: 149231
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:<a3n0sidnq1@slb6.atl.mindspring.net>...
> Dal, Dan:
>
> Youse guys gotta hang around here more.

sorry, it was x posted on alt.engineering.electrical

> And mebbe... try a little harder to become NG "saints" yourselves, heh,
> heh...

but my halo keeps falling off!

> BTW... young Jason, God love him, gets plenty of help from this particular
> NG crew, he has in the past, and he will in the future.
>
> But you misjudge him, Jason is one of the *BIG* experts around here. Go
> have a look at his www site, and see.

hmm.....yes....i c wot u mean. maybe he didn't get enuf help from u guys :(

> He has set up there as a teacher and and all around "factotum", he has lots
> of tutorials and white papers there for anyone to learn from.
>
> Go see for yourselves... BTW... the stuff on Jason's site is worth exactly
> what you pay for it... and...

the links on his web site that he DIDN'T write are actually quite good

> BTW... whatcha get on this NG's is also free and worth exactly what you pay
> for it!
>
> Got a problem with that?

can't argue with the truth

> --Peter K1PO
>

2595. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 06:29:03 UTC
From: n7ws@yahoo.com
Message-ID: <3c5f7b2d.53637151@news.triconet.org>
Source record: 149232

On 4 Feb 2002 09:46:53 -0800, k3roj@k3roj.com (AL Alexander) wrote:

|... I have
|found that most negroids cannot learn anything that requires math.

Tell that to Dr. Thomas Sowell.

2596. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 07:10:14 UTC
From: k7itm@aol.com
Message-ID: <3200347.0202042310.6da09528@posting.google.com>
Source record: 149233
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

New book due out next month:

Cylindrical Antennas and Arrays

King, Ronold W.P., Fikioris, George J. and Mack, Richard B.

In general, if you can find works by Prof. King, they are likely to
have what you want. An introduction can be found in King, Mimno and
Wing, "Transmission Lines, Antennas and Waveguides," not surprisingly
in the Antennas chapter. There _is_ a formula there, but you might
not like the form it's in; but there are lots of useful graphs in that
chapter. Prof. King was certainly one of the leaders in understanding
linear antennas, and I suspect many would put him above all others in
that area. I personally have a lot of respect for the clarity of his
writing.

Cheers,
Tom

"Jim Weir" <jim@rst-engr.com> wrote in message news:<u5u4oobppkm0d9@corp.supernews.com>...
> Let's presume some simple antennas --
>
> a rod or whip of finite diameter over a theoretically infinite ground plane
>
> a simple dipole of finite diameter far away from any conducting earth.
>
>
> What are the simplified formulas for calculating R and X at the feed point
> of these antennas, factoring in the finite width of the elements? If this
> is posted on a website somewhere (the actual formulas, not the formulas
> hidden inside a file) a pointer to the url would be most appreciated.
>
> (I know I've got these formulas around this pigsty somewhere, but I've been
> looking for four hours now without finding them. Neither Krause, nor Jasik,
> nor the MIT RadLab series are particularly good sources of information on
> simple structures.)
>
>
> Jim

2597. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 07:16:32 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3o16r$19mm92$1@ID-124126.news.dfncis.de>
Source record: 149235

Richard said -
> I appreciate the relevation.
==========

Economics always wins in the end.

Unfortunately Economics is a much-too-neglected subject in the modern Western engineer's training and education.

When George Stevenson designed the first steam locomotive to draw passenger trains, the Rocket, around 1825 he took into account the cost of coal and the expected price of railway tickets-to-ride.

But, like you, George was fortunate his first design did not explode with a burst boiler during the first competitive trials.

Same applies to chokes in feedlines. If it works, don't fix it.

Incidentally, the very first passenger train to run ran over and killed the member of the Westminster parliament who had been invited to officially open the railway passenger line from Rainhill, near Liverpool, to Manchester.

He stood in the middle of the track in front of the engine and said "I now have the great pleasure of decaring this very first passenger railway line open" and waved a green flag followed by blowing a whistle which was the last thing he ever did of his own volition.

In this emergency the engine was uncoupled from the passenger coaches containing the Lord Mayor and Dignatories of Liverpool and the unfortunate member of parliament was conveyed in the engine cab to a hospital near the railway line at Eccles near Manchester.

Although the engine broke the then-existing speed record it could not be included in the Guiness Book of Records because it was not drawing any wagons or coaches at the time.

The member of parliament was pronounced DOA at the hospital. But he did get into the records as the very first person on Earth to be run over and killed by a scheduled passenger train. There's a statue to him somewhere whereas, otherwise, he would probably have been forgotten..

Another severely neglected subject in the modern Western engineer's education is elementary statistical analysis. Some bright young things are actually proud of their declared ignorance of what, if they took a little trouble to discover, is itself an essential source of beautiful, reassuring engineering design tools.

****

Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

2598. Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 07:18:24 UTC
From: J Titcomb <kimoloka@hawaii.rr.com>
Message-ID: <4HL78.13177$lb.2741039@typhoon.hawaii.rr.com>
Source record: 149234
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Aloha, anyone got any suggestions for soldering weathered stranded wire? I'm trying to revive my G5RV which blew down during the last storm here. I've tried wire brushing it, sanding it, using flux...none of these work. Is there some homebrew secret for cleaning corrosion from copper wire, making it like new so it can be soldered? Some acid wash or something? Mahalo, I appreciate the help.

Jim KH6IX

2599. 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 07:27:17 UTC
From: Rick Karlquist <richard@karlquist.removethis.com>
Message-ID: <pPL78.23345$Ri2.75328@rwcrnsc54>
Source record: 149236

FYI

I have posted a description of my 7 element electrically steerable

vertical phased array on my web site: www.n6rk.com

at the following URLs:

http://www.n6rk.com/7_hex_array.pdf

http://www.n6rk.com/driving_the_7_hex.pdf

http://www.n6rk.com/7_hex_eznec.html

It has 8 to 9 dB gain over an individual vertical and can

be aimed in any of 12 directions. A 40 meter version has

been put on the air, and an 80 meter version is currently

under construction. It occupies a hexagon 3/4 wavelength

from vertex to vertex.

Rick N6RK

2600. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 07:27:22 UTC
From: "." <sp@m.not>
Message-ID: <3C5F8997.B0ADB57B@m.not>
Source record: 149237
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Years ago I had a paste that you would dip the wire into and then remove it with an industrial wipe.. From the way I remember it stinging if you got some on your hand it was acid based. I'm not sure how good an idea it would be to use it on stranded wire but it worked great for removing varnish off solid wire when I worked doing electronic assembly and had to wire transformer leads to a circuit board.

I suspect some would cringe at this but I'd probably try a bit of diluted pool acid (HCl - muriatic acid) and then wash it well with water and dry it. I think rubber gloves and eye protection would be a VERY GOOD idea if doing this.

J Titcomb wrote:

> Aloha, anyone got any suggestions for soldering weathered stranded wire? I'm
> trying to revive my G5RV which blew down during the last storm here. I've
> tried wire brushing it, sanding it, using flux...none of these work. Is
> there some homebrew secret for cleaning corrosion from copper wire, making
> it like new so it can be soldered? Some acid wash or something? Mahalo, I
> appreciate the help.
>
> Jim KH6IX

2601. Can You Believe these CC&Rs?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 07:41:58 UTC
From: "Al Lorona, Jr." <al_lorona@agilent.com>
Message-ID: <3C5F8CC6.A5A349CC@agilent.com>
Source record: 149140

Aren't you glad you don't live in Southern California? In case you need a little more justification, here are some excerpts from my association's Declaration of Restrictions:

"This Declaration of Restrictions made this 12th day of March, 1940, by Rancho Santa Anita Inc., a California Corporation,..."

"1. No part of any of said realty shall ever be sold , conveyed, leased, or rented to any person not of the white or Caucasian race.

"2. No part of any of said realty shall ever at any time be used or occupied or be permitted to be used or occupied by any person not of the white or Caucasian race, except such as are in the employ of the resident owners or resident tenants of said property."

The document goes on to list all of the prohibited structures and actions, and then this:

"11. If at any time any of said paragraphs numbers 1 to 10, inclusive, or any part thereof, shall be adjudged or held to be illegal or invalid, such illegality or invalidity shall in no wise affect or render illegal or invalid any of the other terms, conditions, covenants, and restrictions of said paragraph, or of any other paragraph or part thereof, but each and all of said other terms, conditions, covenants, and restrictions, notwithstanding said illegality or invalidity, shall be and remain in full force and effect."

How do you like that?

Al W6LX

2602. Re: Help wanted - Quagi Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 08:25:33 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3o4ts$f85$8@quark.scn.rain.com>
Source record: 149238

Radio Jav <antispamradiojav@bigfoot.com> wrote:

> I have a question for you antenna gurus out there, my question pertains to
> the design of Quagi antennas. I am looking to design a Quagi for use on
> 477Mhz, a community, citizens band frequency, not to dissimilar from HF CB
> Radio.

> How does one go about designing a Quagi antenna? Does one use a JavaScript
> quad calculator for REF and D/E measurements and spacings, then use a Yagi
> modelling program, such as YAGIMAX to design a Yagi for the given frequency,
> then use the quad REF and D/E on the Yagi? (did I say all that in one
> breath? Hi hi...)

I know what I would do. I would get a Ham 440 MHz antenna - then trim it
to work on 477 MHz.

A many element design would basically be just extra directors added to
a design with only two or three directors.

--
Bill Nelson (billn@peak.org)

2603. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 08:32:43 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3o5bb$f85$9@quark.scn.rain.com>
Source record: 149239
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In rec.radio.amateur.antenna J Titcomb <kimoloka@hawaii.rr.com> wrote:
> Aloha, anyone got any suggestions for soldering weathered stranded wire? I'm
> trying to revive my G5RV which blew down during the last storm here. I've
> tried wire brushing it, sanding it, using flux...none of these work. Is
> there some homebrew secret for cleaning corrosion from copper wire, making
> it like new so it can be soldered? Some acid wash or something? Mahalo, I
> appreciate the help.

Wire brushing to shiny copper should be sufficient - as should sanding.
The problem may be the solders they sell these days, that contain little
or no lead.

You might try talking to a plumber, and see what they use - although
their fluxes may be acid, which you really wouldn't want on an electrical
circuit.

I have several pounds of 60:40 tin/lead solder. I have never had any problem
soldering copper with it, even copper that has an oxide coating.

--
Bill Nelson (billn@peak.org)

2604. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 08:40:31 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <IZMfvEH$p5X8EA1y@ifwtech.com>
Source record: 149242

Reg Edwards wrote:
>Dear Ian,
>
>On the same thread -
>
>At this juncture I am severely tempted to say I am laughing my head off at
>the reams and reams of mental contortions, and the enormous extent to which
>some people will go to evade admitting they havn't understood what they have
>been preaching about for years.
>
>But I won't. ;o)
>
>Point 1. As you have no idea of the power radiated from the braid of a
>coaxial line when it is feeding (wthout a choke) the centre of a 1/2-wave
>dipole, the remainder of your arguments carry no weight.
>
Actually, I have a very good idea. I've measured coax surface currents in real life, wherever the coax is accessible to clamp a probe on, and modeled a number of situations to understand what happens up there where I can't reach. (Have you?)

Not surprisingly, feedline surface currents can vary a lot, but they can often be a significant fraction of the main "antenna" current (tens of percent). If you're happy with possibly tens or hundreds of milliamps of RF on the coax surface, flowing off to cause trouble who-knows-where-else, then so be it. I'm not.

>Point 2. The only person on the right track was Cecil when he asked what's
>the input impedance (seen looking into the top end) of the coaxial braid
>when the braid is 1/2-wavelength long and is grounded at the bottom end.
>(Actually, it's a function of the radiation resistance.)

Go on, I'd never have guessed... We know that some antenna/feedline situations are worse than others for surface-current effects (coax) or common-mode effects (twin-lead), and we understand why. That knowledge is almost as old as radio - the "Marconi Effect" in doublet antennas" - and Roy's classic article demonstrates how it works.

But that isn't the main problem.

The main problem is wishful thinking on the part of amateurs when we use the word "balanced"... as if it was a magic word that would make all our problems go away.

Here are some unpleasant truths:

1. There is no such thing as a perfectly balanced antenna-feedline layout. It is an ideal that only exists in your head. Zero surface or common-mode current is only achieved when two large antenna currents are exactly equal and opposite - and that doesn't happen in real life.

2. Antenna/feedline systems don't "want" to be balanced. There is nothing in Nature that pulls them towards a balanced configuration. You have to shove them, and they'll often fight back.

When we talk about "balanced feedline", that's all it is - just talk. Talk and wishful thinking don't make it happen.

3. Coax will happily support surface currents; most of us know that. Twin feeder will equally happily support both differential (balanced) currents and common-mode currents - but most of us don't know that. We tend to call it "balanced line" and believe (wishfully) that naming it makes it true. It isn't.

4. What we can do, is to *force* the situation more towards the way we'd like it. We can force coax surface currents down by using a choke, and force common-mode currents on twin feeder down by using a balun at the transmitter end (we can also choke common-mode currents on twin feeder, but that's more rarely done).

5. Whatever we try, if the antenna/feedline layout is physically unbalanced, it will fight back to keep those unwanted currents flowing. The best we can do is force those currents down below the level where they cause trouble (and that also depends on our power level - the more power we use, the harder we have to work to keep those currents down).

6. "Physically UNbalanced" applies to every antenna you can ever build. This includes:

a) Any antenna fed with coax, because the feedpoint is fundamentally asymmetrical. One side of the antenna is connected only to one conductor (the center conductor). The other side is connected to two conductors: the inner and outer surfaces of the sleeve.

A coax-fed antenna can only ever be "near-enough balanced", or "so close to balanced that the difference doesn't matter"... but don't ever believe that it is truly balanced, because it fundamentally can not be. If you don't actively choke surface currents to prevent them from flowing, they *will* flow.

b) Any antenna that has deliberately asymmetrical wires (off-center-fed types being the obvious example).

c) Any antenna that is in asymmetrical surroundings - in other words, *all* real-world antennas! For example, you can make a horizontal dipole with exactly equal leg lengths, but if one end is close to a house or a metal mast and the other end is not, the surroundings are asymmetrical so the antenna will be unbalanced.

Once again, the surroundings can only ever be "near-enough symmetrical", or "so close to symmetrical that the difference doesn't matter"...

because the world around your antenna is not in fact perfectly symmetrical.

d) *Every* vertical antenna - because every vertical is asymmetrical with respect to ground. The same applies to antennas that slope with respect to ground.

The only differences between cases a) through d) are the degree to which each particular system is UNbalanced.

I'm sorry for those bucketfuls of cold water, but it's important to understand that a balanced antenna has as much reality as the Tooth Fairy. Fortunately we understand the Tooth Fairy a little better: we know that unless we do a few small practical things to help the magic along, she isn't going to call.

In the same way, understand that your antenna won't be anywhere near balanced unless *you* do a few small practical things to make it so. If you don't, the Balance Fairy won't call.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2605. Re: Info on LATTIN multiband antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 08:51:08 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C5F9CF2.A1206CAD@shaw.ca>
Source record: 149240

Leland Cox wrote:
>
> I am looking for some information on the LATTIN multi band dipole. I
> have found a drawing and it looks simple enough. The antenna was
> designed by W4JRW and
> he holds a patent on the design. I have also read some comments that
> some builders have never been able to get it to work.
>
> Any information would be appreciated.
>
> Link to drawing. www.g3ycc.karoo.net/lattin.html
>
> Les, AA4F

"Multiband Antennas Using Decoupling Stubs" by William J.
Lattin W4JRW QST December 1960.
Had a friend, VE6TE, Bob, now a silent key, who used on on
80/40/20/10 made from twin lead.
I can't say for sure, but he always had a good signal on 80,
and never complained about it much -- and we talked about
antennas quite a bit. I have one cut and ready to go up --
when I get around to it -- I've got a whole bunch of
antennas ready to go up -- if I ever get around to 'em!!

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2606. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 08:57:55 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <3c5f9c42.3665305@news.freeserve.net>
Source record: 149248
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Tue, 5 Feb 2002 08:32:43 +0000 (UTC), Bill Nelson
<billn@spock.peak.org> wrote:

>In rec.radio.amateur.antenna J Titcomb <kimoloka@hawaii.rr.com> wrote:
>> Aloha, anyone got any suggestions for soldering weathered stranded wire? I'm
>> trying to revive my G5RV which blew down during the last storm here. I've
>> tried wire brushing it, sanding it, using flux...none of these work. Is
>> there some homebrew secret for cleaning corrosion from copper wire, making
>> it like new so it can be soldered? Some acid wash or something? Mahalo, I
>> appreciate the help.
>
>Wire brushing to shiny copper should be sufficient - as should sanding.
>The problem may be the solders they sell these days, that contain little
>or no lead.
>
>You might try talking to a plumber, and see what they use - although
>their fluxes may be acid, which you really wouldn't want on an electrical
>circuit.
>
Plumbers flux is acidic, some more than others (IIRC eutectic is the
nastiest one) but all are neutralised by water.
I too have experienced problems with corroded copper aerial wire and I
tried plumbers flux, as I were one and had some old stock of the
stuff. It did'nt work no how, even when shiney clean. For some reason
the wire just wont tin, and yes I was using 60/40 I also tried
plumbers 'wiping' solder which is a slightly different melting point.
I've given up on trying and just waiting for the next rally to buy
replacement HD Copper.
not much help, sorry. Mike W, G8NXD, M3MSM qthr

2607. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 09:07:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3o7nk$19k26p$1@ID-124126.news.dfncis.de>
Source record: 149241
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

The input impedance, R+jX, of a vertical wire above ground of height H and diameter D at any frequency F can be found directly by using programs ENDFEED, BOTLOAD and others. They are values which come out in the wash on the way to calculating (the primary purpose) more useful practical values.

Most of these programs include the effects of ground-loss resistance and RF skin resistance of the wire itself.

The feedpoint impedance of an isolated dipole is *exactly* double the value of a vertical wire above a perfect ground with height equal to half the length of the dipole.

Programs DIPOLE2 and others deal directly, as the name implies, with a balanced-about-ground dipole.

You seem to have had difficulty with finding R+jX. This is because the 'experts' and 'gurus', the book-writers, are usually academics, university profs, rather than practicing engineers. They don't appreciate what it is YOU want to know or why YOU should want to know it.

True engineers, dedicated to their work and knowing what it's all about, learning up to the very last minute, don't have time to write books.

To calculate the feedpoint impedance of an antenna it is necessary to mathematically model it as a transmission line with impedance Zo = Ro+jXo and to distribute the equivalent radiation resistance + wire loss resistance uniformly along its length. There is no simplified way of going about it. No simple formulas. There are one or two approximating short cuts.

But let's face it, you are not directly interested in Zin = R+jX. You only want to know Zin so you can select the values of L and C in the tuner and other practical values.

Programs ENFDEED and DIPOLE2, and some of the others, not only calculate Zin but L uH and C pF, antenna loss, feeder loss, tuner loss, ground loss, etc.

If you should ask from where I obtained the formulae incorporated in the programs, I worked then out for myself. If anyone should think from measurements any of them are in error then please advise me. I have done much checking myself. Results are more than sufficiently accurate for the intended purposes.

Download ENDFEED, BOTLOAD and DIPOLE2 from website below. Each is one self contained file. Takes only a few seconds. No unzipping inconvenience. Run and enter data immediately. No 2-week training course needed on program operating procedures.

--
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****
Jim Weir <jim@rst-engr.com> wrote in message
news:u5u4oobppkm0d9@corp.supernews.com...
> Let's presume some simple antennas --
>
> a rod or whip of finite diameter over a theoretically infinite ground
plane
>
> a simple dipole of finite diameter far away from any conducting earth.
>
>
> What are the simplified formulas for calculating R and X at the feed point
> of these antennas, factoring in the finite width of the elements? If this
> is posted on a website somewhere (the actual formulas, not the formulas
> hidden inside a file) a pointer to the url would be most appreciated.
>
> (I know I've got these formulas around this pigsty somewhere, but I've
been
> looking for four hours now without finding them. Neither Krause, nor
Jasik,
> nor the MIT RadLab series are particularly good sources of information on
> simple structures.)
>
>
> Jim
>
>
>

2608. Req. UHF Log periodical antenna (LPA) spreadsheet

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 10:28:24 UTC
From: "J.L.F. Bos" <jlfbos@hotmail.com>
Message-ID: <a3obpl$s18$1@reader1.tiscali.nl>
Source record: 149243

Dear friends,

I am looking for a spreadsheet to calculate and construct a UHF LPA.

Suggestions are highly appreciated.

Pse qsl to jlfbos@iclass.nl

73's

John
PA0AAX
Netherlands

2609. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 10:39:43 UTC
From: VK2KCE <vk2kce@dingoblue.net.au>
Message-ID: <3c5fb5ca$0$27725$afc38c87@news.optusnet.com.au>
Source record: 149244
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have used a mixture of vinegar and salt, soak the wire end in the mixture
and the corrosion will be dissolved!! wash off the mixture with water and
solder it!! Easy!!
John McLean
VK2KCE

"J Titcomb" <kimoloka@hawaii.rr.com> wrote in message
news:4HL78.13177$Ib.2741039@typhoon.hawaii.rr.com...
> Aloha, anyone got any suggestions for soldering weathered stranded wire?
I'm
> trying to revive my G5RV which blew down during the last storm here. I've
> tried wire brushing it, sanding it, using flux...none of these work. Is
> there some homebrew secret for cleaning corrosion from copper wire, making
> it like new so it can be soldered? Some acid wash or something? Mahalo, I
> appreciate the help.
>
> Jim KH6IX
>
>

2610. Re: Info on LATTIN multiband antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 11:35:05 UTC
From: carkenord@juno.com
Message-ID: <4346b55e.0202050335.1f050585@posting.google.com>
Source record: 149245

> I am looking for some information on the LATTIN multi band dipole.
> Les, AA4F

Les.....the Lattin has been discussed here more than once. As far as I know, no one in this group has been successful in building a Lattin. I tried, several times....used up a lot of wire, but had confusing results......non-satisfactory results.

You might try searching this group using keyword "lattin" ......
You will get several "hits", and those hits, if read, will more or less summarize the efforts and interest of this group in the Lattin antenna.

I still wonder......if a knowledgeable person, using a combination of antenna modelling.....and one of those "Antenna Analyzers"......might that person successfully build a Lattin? I would sure like to see that happen. I have been intrigued by the Lattin antenna for a REAL long time.

Lee Carkenord KA0FPJ

2611. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 11:36:27 UTC
From: KC8JBO <kc8jbo@alt.net>
Message-ID: <a3ohmm$al6$0@pita.alt.net>
Source record: 149247
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"J Titcomb" <kimoloka@hawaii.rr.com> wrote in message
news:4HL78.13177$Ib.2741039@typhoon.hawaii.rr.com...
> Aloha, anyone got any suggestions for soldering weathered stranded wire?
I'm
> trying to revive my G5RV which blew down during the last storm here. I've
> tried wire brushing it, sanding it, using flux...none of these work. Is
> there some homebrew secret for cleaning corrosion from copper wire, making
> it like new so it can be soldered? Some acid wash or something? Mahalo, I
> appreciate the help.
>
> Jim KH6IX

Did you try Brasso?

2612. Re: Info on LATTIN multiband antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 11:37:06 UTC
From: carkenord@juno.com
Message-ID: <4346b55e.0202050337.300e9558@posting.google.com>
Source record: 149246

>>> I am looking for some information on the LATTIN multi band dipole

The following is some of the info I gathered in my attempts to understand and build a Lattin. As I said in my previous post, I was never able to get it to work as Mr. Lattin described.

It has been patented, filed Feb 13, 1948. Patent # 2,535,298 My local library had the patent on microfiche, and I was able to get it copied. I have a copy of his patent, with illustrations/drawings, on file here.

Lattin described this antenna in QST in December of 1960.

July 1960 issue of "CQ" mag has a related antenna project, by Richmond, W1CEJ, called "A Portable Dipole"

Vincent Lear, G3TKN has also worked with the Lattin design, and was published in RSGB.

July 1992 issue of "73" mag has another article "Six-band linear trap antenna" by Brumbaugh KB4ZGC.....using approx the same idea.

September 1986 issue of "73" mag has Lattin type antenna project described...."The Texas Tango Antenna" by Garrett K5BTV.

Maybe the above info will stimulate some more experimentation with the Lattin. I sure hope so.

Lee Carkenord KA0FPJ

2613. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 12:50:40 UTC
From: richardharrison@webtv.net
Message-ID: <23540-3C5FD520-15@storefull-111.iap.bryant.webtv.net>
Source record: 149250

Richard Clark wrote:
"The third wire is going to ground not up in the sky."

That is reasonable. Wires to ground have no effect on balance if there is balanced feed to and from the transmission line and the balance is maintained enroute.

An example is found in the lack of hum and other noise in balanced telephone lines. Ground either wire and the noise is overpowering.

Best regards, Richard Harrison, KB5WZI

2614. Re: TAHOE/YUKON ANTENNA IDEAS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 13:01:45 UTC
From: Bill Hall <bhallc21@flash.net>
Message-ID: <3C5FD7CC.F9329320@flash.net>
Source record: 149249

Hi Dave:

Had the same situation with my Ford Explorer and put a little "G.I. Ingenuity" to work and have developed an answer to the problem. This mounting bracket works well, with a 13" Comet ant. I can get in/out of the garage, and will be ideal for "Leased " SUV,s (where visible holes are a no-no!). It will be custom built for individual makes/models, and will handle longer ant. if garaging is not a concern. Best of all, when finally removed, there is no easily detected sign it was ever installed.
If you're interested , e-mail me direct.
Regards
Bill

Dave Knight wrote:

> Just got a new Chevy Tahoe. Would like to mount 2m/440 antenna but she will
> not let me drill holes. Shared experiences would be appreciated?
>
> TNX
>
> de Dave, N4XYZ

2615. Re: 10 GHZ

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 13:47:01 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <qbov5ugrfts5i2ldcmh9q6n0k7bbep9s2f@4ax.com>
Source record: 149251

On 4 Feb 2002 10:59:40 -0800, k3roj@k3roj.com (AL Alexander) wrote:

>I just finished installing my 10GZ DB6NT transverter with 2 watt
>amplifier on my tower using a weather proof box and 144 mhz for the
>IF.
>I know this may seem a dumb question but what frequency is used at
>10368 MHZ. Is it 10368.1 or 10368.2 for narrowband CW and SSB? Thanks

It's just 10368.0. You weren't thinking of calling CQ on there, were
you? If you get a response I'll be very surprised.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2616. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 13:47:04 UTC
From: richardharrison@webtv.net
Message-ID: <18911-3C5FE258-312@storefull-114.iap.bryant.webtv.net>
Source record: 149253

Reg wrote:
"Unfortunately Economics is a much-too-neglected subject in the Western engineer`s training and education."

A NASA engineer I know says he is forbidden to consider the price of anything in his designs. That is the opposite of the mass production engineer`s aim. The mass production engineer removes parts one at a time until the design fails. At that point, the engineer replaces the last part removed. Then it goes to production.

Poor old Westminster MP waving a starting flag in front of a train. He must never have seen a bull fight. The US expression is: "You can`t blame the wreck on the train." Maybe the Westminster MP was just dying to get in the record book.

NASA may not be cost sensitive in critical designs, but they must be weight sensitive. That may well require statistical analysis. They need to know their chances of getting off the ground.

Best regards, Richard Harrison, KB5WZI

2617. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 14:09:40 UTC
From: cprstn54zz@att.net
Message-ID: <3c5fe6c7.227487093@news-server.optonline.net>
Source record: 149254

On Mon, 04 Feb 2002 21:34:59 -0800, Roy Lewallen <w7el@eznec.com>
wrote:
>That's the attraction of a string of beads -- it's easier to implement
>than a toroid, especially with large diameter coax. It also provides
>better heat dissipation if that's a problem. The disadvantage is that it
>takes a lot more ferrite to get a high impedance. 5 turns around one
>core gives you as much impedance as 25 cores strung along the coax
>(assuming comparable magnetic cross section/path length ratios).

One nice feature of a string of beads is that it is unobtrusive.

BTW, can you point me to a source of information about which beads I
should use on RG-8X (I think F73-801) and how many (or what length) I
need for a broadband choke?

Ken
(to reply via email
remove "zz" from address)

2618. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 14:11:56 UTC
From: cprstn54zz@att.net
Message-ID: <3c5fe7e1.227768796@news-server.optonline.net>
Source record: 149252

On Mon, 4 Feb 2002 22:16:04 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:
>It finally dawns upon me why I`ve gotten away with not using baluns with
>countless installations of coax feeding balanced dipoles with apparently
>no ill effects.

Well, I can't say that the light has gone on for me too, but you
answered one of my initial questions: It doesn't matter if your feed
line radiates a bit.

Ken
(to reply via email
remove "zz" from address)

2619. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 14:12:48 UTC
From: richardharrison@webtv.net
Message-ID: <18911-3C5FE860-314@storefull-114.iap.bryant.webtv.net>
Source record: 149255

Ian, G3SEK wrote:
"When we talk about "balanced feedline", that`s all it is - just talk."

For practical purposes they are balanced. I worked for years in a commercial shortwave broadcast plant. We had miles of 600-ohm oper-wire lines. A dozen high-power transmitters fed a cross-bar switch arranged so that any transmitter could use any of dozens of balanced antennas. We never had five minutes trouble with imbalance.

Ian is too pessimistic.

Best regards, Richard Harrison, KB5WZI

2620. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:06:48 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C5FF508.3D44EC81@crosslink.net>
Source record: 149257

AL Alexander wrote:
>
> Well, from my experience in amateur radio over the many years, I have
> found that most negroids cannot learn anything that requires math....

You may well be right. But even if that is true, those who 'can' deserve the opportunity to 'do' and thus to contribute their individual 'best' to our society and country. That's what made us #1 in the world. Assuming that any one person cannot do something well just because most cannot has the effect of throwing that persons potential contributions away unused. We barely beat Germany to the A-bomb thanks to a handful of individuals. If any one of them had been denied the opportunity to contribute ... :o(

And as far as mixing goes my advise is get used to it. Our lives are too short to waste worrying over things like that. Besides, it might be the best thing. The whole problem goes away if everybody is tan :o).

73 KA3DWW

2621. Re: Another Shorty Forty question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:08:47 UTC
From: Val <val_a20@hotmail.com>
Message-ID: <3C5FF57F.D6FE0C86@hotmail.com>
Source record: 149256

Patrick Gardella wrote:
>
> Interesting! Then the image that's in the ARRL antenna book is wrong
> as well. I ignored the text of that web page, since it was opposite
> of what the image showed, as well as what was in the ARRL book.

If the drawings are similar, also ARRL is wrong (which is rare, but it
does happen!).

>
> Should the shield be connected to the coil (after I remove the center
> conductor), while I'm testing the resistance?

Should not make any difference....

Good Luck!
73 de V.

>
> While I'm at it, any other pointers on this kind of antenna?

Nah.. You should be aware that if You win something (space) You lose
something else (efficiency). Radiated power will be less than from a
dipole.

73 de V.

>
> Patrick
>
> Val <val_a20@hotmail.com> wrote in message news:<3C59108D.E5CF1E4F@hotmail.com>...
> > No he has not found the problem AFAI understand.
> >
> > Quote:
> > "If I attach the shield to ground, I get no signal."
> >
> > He must again remove the centre conductor at the
> > antenna end. And than, by using an ohm-meter check
> > the resistance between the centre conductor and the
> > shield of the coax.
> >
> > Then, there is this messing around with autotransformer:
> >
> > Antenna -------X
> > X
> > X---------- Shield
> > X---------- Centre conductor

> > Antenna -------X
> >
> > Note that the coax SHIELD is supposed be connected to the tap
> > in the CENTRE of the coil, otherwise this device will NOT work
> > correct! The drawing at
> > http://www.flashwebhost.com/circuit/shortant.php
> > is WRONG!
> > However, You should detect a signal, also if the antenna
> > is made according to the link. And You should be able to
> > transmit power, but Your coax will radiate, too (which is
> > not the purpouse of a koax), and this might produce TVI
> > and other unwanted phenomenons (RF ewerywhere in the
> > shack...)
> >
> > The autotransformer thingamajig in the middle of Your antenna
> > has TWO purpouses (correctly connected) it this particular
> > case:
> >
> > 1) Shortening the dipole inductively
> > 2) Act as a BALUN- transformer
> >
> > 73 de V.
> >
> >
> > 'Doc wrote:
> > >
> > > Patrick,
> > > In effect, the coil from the connection of the center
> > > conductor
> > > of the coax to the begining of the antenna is to inductively
> > > lengthen
> > > the antenna. From the center conductor connection to ground is
> > > the
> > > part of the coil that 'matches' impedances. Which is all beside
> > > the
> > > point since you found your problem...
> > > 'Doc

2622. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:23:15 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202050723.32848403@posting.google.com>
Source record: 149258

Neat!!!

I actually thought of this idea many years ago, but never got enough 'roundtuits' to actually do it. My hat is off to you, Rick!

I have a keen interest in phased arrays, since I did my MSEE thesis on one. It had 6 elements in a circle and was for receive only. By using DSP algorithms I could form a 'image' of the radio environment---essentially creating many beams all simultaneously.

In response to some statements on your web site FAQ....Yes, you can use parasitic elements. There is no reason why they have to be in a straight line. The easiest way would be to have them all be the same length and put a reactive element at the bottom for tuning. In fact, I have worked out a design in Elnec where you can feed guy wires as parasitic reflectors. Again, I do not have enough roundtuits to pursue it further, although I did install my present guys with this in mind.

Again, congrats on a great idea!

Jim
N8EE

"Rick Karlquist" <richard@karlquist.removethis.com> wrote in message news:<pPL78.23345$Ri2.75328@rwcrnsc54>...
> FYI
>
> I have posted a description of my 7 element electrically steerable
>
> vertical phased array on my web site: www.n6rk.com
>
> at the following URLs:
>
> http://www.n6rk.com/7_hex_array.pdf
>
> http://www.n6rk.com/driving_the_7_hex.pdf
>
> http://www.n6rk.com/7_hex_eznec.html
>
> It has 8 to 9 dB gain over an individual vertical and can
>
> be aimed in any of 12 directions. A 40 meter version has
>
> been put on the air, and an 80 meter version is currently
>

> under construction. It occupies a hexagon 3/4 wavelength
>
> from vertex to vertex.
>
> Rick N6RK

2623. Re: Multi frequency monoband antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:26:17 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202050726.212c01d@posting.google.com>
Source record: 149259

Say what?

Aren't 'multi frequency' and 'monoband' contradictory?

Maybe you should explain some more.

jim
N8EE

aunwin@fgi.net (Art Unwin KB9MZ) wrote in message
news:<c4becf19.0202041345.2d68de22@posting.google.com>...
> After reading about "stretchable antennas
> (fluidmotion) I tried to model a three
> element beam on a 18 foot boom for multi
> frequency use using AO with element length
> being a variable.
> I did not take into account element shortening
> because of dielectric effect (fishing pole support)
> but I could not find a fixed driver position that
> would provide mono band performance from 20 thru 10,
> either in practice or in the fall back position of
> faulty computor use.
> Anybody have any insight as to what the fixed driver
> position should be,and of any other variables that
> should be taken into account such as using coax for
> elements or folded elements?
> (I also tried driving one and all elements
> even tho it couldn't then be called a yagi !)

2624. Re: Screwdrivers/OT

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:26:25 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <zUS78.73726$E4.2876009@e3500-atl2.usenetserver.com>
Source record: 149261

This thread reminds me of the time a couple friends and I took a pop-up down
to the NC
coast for a weekend of fishing, swimming and visiting the battleship USS
North Carolina.
We selected a minimum facilities CG near the mouth of the Cape Fear river,
and after a
Saturday of doing all the above, we were tired out. About 2 in the morning
we were awakened
by a "scrunching" sound as if something was rubbing , or being dragged,
along the ground. We
got up to investigate and were greeted with the sound of deafening diesel
engines being run at
high RPMs. It was a float of barges and a tug that had run aground in the
river. The tide had
gone out, and the skipper picked the wrong time to go upriver! We waded out
into the river,
and the water level was so low we waded to within 10 feet of the tug! They
were shining spot
lights all around, I suppose, to gauge the depth and to see how badly they
were grounded. The
light passed across us, and did a "double take", stopping right on us.
Within a few seconds, the
diesels idled down to a contented purr. A deckhand asked us if we waded or
swam out, and we told him we merely walked out there. Someone in the
background swore a little, we stood
around for about 15 minutes and then waded back to the shore. We slept
soundly, and when
we awoke Sunday morning, the tide was back in and the tug was gone.

Jerry
K4KWH

Gary - KJ6Q <davison7@gte.net> wrote in message
news:ynE78.2901$oj3.580020@paloalto-snr1.gtei.net...
> "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net> wrote in message
> news:5025707EB46D9208.0D962A3E26516FCB.EC8C6E8744BD0C61@lp.airnews.net...
> > On Mon, 04 Feb 2002 16:45:35 -0500, Mark Tetrault <tetrault@mv.mv.com>
> > wrote:
> >
> > >I need something I can set up in 2 minutes, not string ropes or wires
> > >anywhere (Campground rules etc) and minimally obtrusive. The
> > >screwdriver fits that bill.
> >
> > That's not a campground, it's a parking lot.
> >

> >
> >
> > Joe Bramblett, KD5NRH
> > kd5nrh@kd5nrh.net
>
>
> AHHhhhh - another "I don't RV very much" response - fact IS, MOST current
"RV campgrounds" aren't
> much but parking lots with landscaping - and MANY don't even add the
landscaping!
>
> The best RV CGs we use are the remote, wilderness type - no hookups, and
few frills, but more room
> and "natural" surroundings. But for those expecting or demanding
full-feature CGs, expect that you
> will ALSO get the crowding and lack of privacy that goes WITH it... Modern
CGs aren't really geared
> for use as a "final destination", but rather just a place to stay
overnite, or while you then drive
> to the REAL nearby attraction you came to see...
>
> Gary - KJ6Q
>

2625. Cob Web !!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:32:32 UTC
From: Andy M <andrew.markham@virgin.net>
Message-ID: <eVS78.9944$jV2.500632@news2-win.server.ntlworld.com>
Source record: 149260

Hi All

Anybody used and or have the G3TPW Cob Web antenna for the HF bands?.

Thinking of getting one, or maybe a Mini Beam.

Views please.

Andy

2626. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:35:57 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <tpuv5ugspumpiju7f13ppc0ffomto0corj@4ax.com>
Source record: 149262
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Tue, 05 Feb 2002 07:18:24 GMT, "J Titcomb" <kimoloka@hawaii.rr.com>
wrote:

>Aloha, anyone got any suggestions for soldering weathered stranded wire? I'm
>trying to revive my G5RV which blew down during the last storm here.

Sanding or wire brushing down to bare copper should be enough. One
thing to avoid is acid-based flux on stranded wire. The acid will wick
between the strands and will be near impossible to remove completely.

Picture what will happen with acid trapped between the strands over a
period of time. :-(

73, Bill W7TI

2627. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:42:33 UTC
From: richardharrison@webtv.net
Message-ID: <23541-3C5FFD69-3@storefull-111.iap.bryant.webtv.net>
Source record: 149267

Ken wrote:
"Well, I can`t say that the light has gone on for me too,---."

The current traveling on the inside surface of the coax outer conductor has two exits and divides between them depending on their conductivities.

The quarter-wave half-dipole is one of the exits. It is open-circuit at its far end but doesn`t appear infinitely conductive, 1/4-wave back at the drivepoint, because of its imperfection as a transmission line. It is radiating. So, it looks as if its resistance is about 1/2 of 75 ohms.

The half-wave coax exterior is the other exit for interior coax sheath current. Its acceptance of current also depends on the conductivity it presents. Although the 1/2-wave exterior of the coax is grounded at the far end as seen from the dipole drivepoint, it doesn`t look like a short-circuit because of the imperfection of the coax exterior as a transmission line. It too is radiating, however small the amount. Fact is, while impedance presented by the dipole may be 10s of ohms, the impedance presented by the coax exterior may be 100s of ohms. So, most of the current and radiation is on the dipole and little is on the outside of the coax.

Best regards, Richard Harrison, KB5WZI

2628. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:44:52 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <T9T78.73946$E4.2880928@e3500-atl2.usenetserver.com>
Source record: 149263

Hey Dick,

I still have 3 of those old 75 meter Master Mobile coils and one original 3' Master Mobile mast! Two of them are just like new with the MM logo still on them. As you know, at one
time HF mobile kind of fell by the wayside back in the 70s. You could pick up one of those
MM coils for a buck or 2, so everytime I saw one in a 'junk' box, I would pick it up just for
a keepsake. I bought my first MM coil in l966 and literally wore it out.

My first HF mobile experiences were gained thru Civil Air Patrol, and, at the ripe old age of
18, I had a Lettine 240 (about 40 watts), the requisite HV dynamotor, and a receive converter
in a 1967 Chevrolet coupe. I knew zilch about radio, and my "git-out" ability reflected it! But
those early mistakes made a foundation upon which to build, and now I can do a pretty decent
job with mobile DX. I learned really quick about accidentally leaving my filaments on because
that little caper would suck your battery dry in a heartbeat! Hey, I could go down the road at
night, key the mike, and dim the headlights better than using the foot dimmer! LOL!

Incidentally, since you brought up Master Mobile, I wonder what happened to them. I know they folded (early 70s?), and I was just wondering if someone still held "rights", proprietary, and
name rights to MM. They made some pretty good antennas in their day.

73

Jerry
K4KWH

http://www.customersat3.com/s/JJeeyEsE.asp?IID=utirWuWROetOE
Dick Hughes <rhughes33@cableone.net> wrote in message
news:18mu5ucgf6dhaqi7f0c1egvpgv84cnvqqo@4ax.com...
> When I was stationed at Harlingen Texas in the 50's, I used a 3'
> bottom section below a Master Mobile 75-meter coil, then an 8' whip
> above it with a 16" capacity hat. I had 40 watts AM out from an Elmac
> A-54H and used a Gonset Tri-Band converter as a receiver. I had
> nooooo problem working out on 75-meters with that setup. Used fishing
> line to keep it upright.
>

> 73, Dick - W6CCD
>
> On Mon, 4 Feb 2002 21:26:05 -0600, "H. Adam Stevens"
> <solo@totalaccess.net> wrote:
>
> >I once ran a 103 inch whip on a Bug Catcher on a Hustler base mounted on
the
> >front edge of the trunk of a 1968 Pontiac.
> >Drove it with a Swan. Worked great but too damned tall. It was Summer
1971.
> >At least you could buy real ball mounts and springs back then.
> >Now I just use a Hustler peaked for field strength, a 706 and a tuner.
> >Best? I once heard a guy towing a trailer with a dipole on it.
> >YMMV
> >
> >H.
> >WA5IGW
> >
> >"'Doc" <w5lz@icok.net> wrote in message
news:3C5E68BD.7D4FD83E@icok.net...
> >> Dick,
> >> If you don't mind the 'stop and change taps' thing,
> >> then try a 'BugCatcher'. It is the most efficient of
> >> all the mobile antennas (although you'll get an argument
> >> about that, it's still true).
> >> 'Doc
> >
>

2629. Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:48:31 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <hdT78.74003$E4.2878645@e3500-atl2.usenetserver.com>
Source record: 149264

I finally "went and done it"! For those looking to buy screwdriver
antennas, I would like to invite you to visit my website at
www.qsl.net/k4kwh! After a long reluctance, I was talked into
it by a most kind gentleman who helped me get the site up and running.
Please drop by and give the Carolina Cyclone products a look.

Tnx and 73

Jerry
K4KWH

2630. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 15:55:43 UTC
From: richardharrison@webtv.net
Message-ID: <23537-3C60007F-127@storefull-111.iap.bryant.webtv.net>
Source record: 149266

Ken wrote:
"It doesn`t matter if your feedline radiates a bit."

That is true so long as feedline radiation does not produce interference such as TVI, r-f bites and burns, or unpleasant feedback effects in your equipment.

Best regards, Richard Harrison, KB5WZI

2631. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 16:00:28 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C60019C.2ADBDB25@crosslink.net>
Source record: 149265

Gary - KJ6Q wrote:
>
> "Vito" <vito@crosslink.net> wrote
> > That's why I'm looking at running some wire just off the 8x32' rubber....
>
> I *have* tried it, and seen others who also have - and have YET to see such an
"invisible" antenna
> supported mere inches above an RV roof - metal or otherwise - that would perform as well
as a
> mediocre standard monoband mobile vertical!

Thanks for the info Gary but in theory a resonant horizontal dipole at
say 13' otta outperform a hamstick with its tip at the same height.
Parking a nonmetallic MH under the dipole shouldn't make much
difference. What do the antenna models say?

> ....
> When I am fortunate enough to be in a more wilderness or lightly populated CG, the SGC
and random
> wire are great - but not too practical to be seen skulking thru CG underbrush with a
> slingshot/spinning reel trying to shoot a line into a tree when it's crowded and
cramped... So,
> then, the various compromises come into play...

The original post was about replacing a more or less permanently mounted
screwdriver that'd been damaged by weather. For that application, we
agree a wire and tuner would be more efficient than a screwdriver. I
sincerely grieve for the children in Etheopia, No. Korea, and for others
even less fortunate, including those forced to use crowded CGs. I'd
rather stay home where I have more space.

73 KA3DWW

2632. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 16:05:28 UTC
From: richardharrison@webtv.net
Message-ID: <23536-3C6002C8-316@storefull-111.iap.bryant.webtv.net>
Source record: 149268

Bill, W7TI wrote:
"Picture what will happen with acid trapped between the strands over a period of time."

Acid can be easily neutralized.

Best regards, Richard Harrison, KB5WZI

2633. FS:Heathkit SB-220 $325

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 16:20:37 UTC
From: kc6lsp@hotmail.com
Message-ID: <2b727482.0202050820.a184af@posting.google.com>
Source record: 149119

Heathkit SB-220 Linear amplifier in good shape 80-10mtrs.
twin 3-500Z tubes, $325.00 plus shipping
contact:me at KC6LSP@hotmail.com

2634. Re: mono multifreq antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 16:25:08 UTC
From: aunwin@fgi.net
Message-ID: <c4becf19.0202050825.abf87f4@posting.google.com>
Source record: 149120

Thanks for responding Patrick
First, apologies for the repeat posting

I am sure that the designers are sincere
but I was weighing their experiences against my own.
I know that fishing poles can handle the uv and the ice storms
in Illinois, the taper and the flex works just fine.
But when I did a simiar thing using a combination loop
dipole elements where the capacitor was tuned using an
AEA automatic loop tuner I felt that I was obtaining
unity because of the antenna SYSTEM not just the antenna.
(I was able to remove T.V.I by retuning)
I chose the capacitor varing to reduce moving parts and to get
the higher gain at the higher frequencies using the longer
elements (see Moxons book)
But I was not convinced that the feed was not part of the antenna.
Same way with the varing wire lengths inside the fishing poles.
(As I stated earlier the fibre glass greatly affected the element
lenghts and adding to my concerns)
It is for that reason I was looking for the required spacings
since my lousy modelling using the excellent AO program with
element lengths varing did not supply acceptable spacings for
reasonably equal impedances at the antenna for the 14 thru 10.
(bad modelling!)
The tuning of the elements did help for 40 and 80 by allowing
the coax (antenna system) to radiatiate and get on those bands.
If some one could let me know the driver spacing on this
new antenna (fluidtronics) I would really appreciate it
since I, with my setup, was not comfortable without a external
tuner at the antenna
Art

PS
For those who are interested in telescopic fishing poles as
elements they are much cheaper than aluminum and I have also made many
using alum foil on the outside surface
($2 each when buying direct from China and most fishing stores
would be eager to sell same less than retail, approx $10)

Patrick Croft <mai@iquest.net> wrote in message news:<3C5EF863.8CD82668@iquest.net>...
> Certainly can optimize the element lengths based on the fixed positions
> of the elements. The F/B and gain will shift as freq. is adjusted....not
> a huge issue. The concept is good, the practical applications have been
> attempted in the past and the guys in Washington seem sincere with the
> offering of a unique yagi. The composite glass element tubing would be

> of more interest/concern in the electrical and UV properties areas. Of
> course if the PIC goes and/or the servo's loose sync, it would pose a
> major problem. Moving parts usually wear and are more prone to failure
> than static ones.
>
> Bandwidth isn't an issue since the element length is adjusted for unity
> at whatever freq. you choose.
>
> Download a copy of YagiMax or Elnec Demo and play with element lengths.
> Monitor the effects on pattern changes. You'll get a grasp of the gain
> and F/B shifting as the freq changes but not element positions. Pretty
> minor in most situations providing minimal spacing is met (and 18 foot
> boom does that).
>
> Bests,
>
> Patrick
> W9GTA
>
>
> Art Unwin KB9MZ wrote:
> >
> > Hi,
> > I see there is another three element antenna on the market
> > on a 18 foot boom.(Fluidmotion)
> > Specs give mono band style results by changing element
> > lengths to suit frequency of operation.
> > Having piddled many years with this approach using wire
> > inside fibre glass fishing poles I was never able to get
> > monoband specs with fixed element spacing.
> > Is it possible to get good specs on a fixed element position
> > and boom by just changing the element length without phasing
> > or the addition of varying loads and without a tuner?
> > I am aware that glass fibre enclosed elements provide for
> > shorter radiators but I am just curious as to what the
> > other variables are involved other than varying the element
> > lengths.

2635. Re: Req. UHF Log periodical antenna (LPA) spreadsheet

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 16:27:56 UTC
From: n7ws@yahoo.com
Message-ID: <3c6007c1.89630068@news.triconet.org>
Source record: 149121

Try here:

http://f5sdd.free.fr/Logperio.xls

On Tue, 5 Feb 2002 11:28:24 +0100, "J.L.F. Bos" <jlfbos@hotmail.com> wrote:

|Dear friends,
|
|I am looking for a spreadsheet to calculate and construct a UHF LPA.
|
|Suggestions are highly appreciated.
|
|Pse qsl to jlfbos@iclass.nl
|
|73's
|
|John
|PA0AAX
|Netherlands
|
|

2636. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 16:59:06 UTC
From: richardharrison@webtv.net
Message-ID: <23536-3C600F5A-318@storefull-111.iap.bryant.webtv.net>
Source record: 149123

I wrote:
"An example is found in the lack of hum and noise in balanced telephone lines."

Reg is always saying that unless you can express what you are saying in numbers----.

OK. By law, our overall signal to noise ratio had to exceed 50 db. Not bad for open-wire lines on poles. It indicates the common-mode trash in the wires was enervated by line balance
(equal currents in opposite directions through the loads).

Best regards, Richard Harrison, KB5WZI

2637. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 17:03:25 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C60105D.D525A6C0@crosslink.net>
Source record: 149122

Mark Tetrault wrote:
>
> Vito <vito@crosslink.net> wrote:
> >Mark Tetrault wrote:
> >>
> >> OK, So I have a presently broken TJ (BB3) screwdriver and would like
> >> to replace it with another screwdriver.....
> >> ... I really want the 80m in the RV.
> >>
> >
> >But why use a screwdriver on a stationary (from another post) RV?....
>
> I need something I can set up in 2 minutes,....
>
Sorry. I got the impression from another of your posts that you parked
it the same place for longer periods.

2638. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 17:28:33 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C601641.487D005E@crosslink.net>
Source record: 149125

Gary - KJ6Q wrote:
>
> "Joe Bramblett, KD5NRH" wrote
> > Mark Tetrault <tetrault@mv.mv.com> wrote:
> >
> > >I need something I can set up in 2 minutes,.....
> >
> > That's not a campground, it's a parking lot.
> >
> >
> AHHhhhh - another "I don't RV very much" response -

In other words "If you don't call the Walmart lot a campground then you must not RV much.", right?

2639. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 17:30:01 UTC
From: richardharrison@webtv.net
Message-ID: <23536-3C601699-322@storefull-111.iap.bryant.webtv.net>
Source record: 149126

Mike wrote:
"IIRC eutectic is the nastiest one"

Eutectic is the combination of tin and lead with the lowest melting temperature. It is only slightly smaller than a 60/40 ratio.

How well solder takes to metal depends on the flux and its distribution. Acid flux cleans the surface to be soldered much better than rosin flux but must be neutralized or removed to avoid subsequent corrosion.

Best regards, Richard Harrison, KB5WZI

2640. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 17:31:09 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C615A98.E71C670D@worldnet.att.net>
Source record: 149124

Thank You, Ian. Most of that is somewhat intuitive to anyone with enough experience who takes a good close look at the real world, but it sure needed saying.

73, Dick W0EX

"Ian White, G3SEK" wrote:

> Reg Edwards wrote:
> >Dear Ian,
> >
> >On the same thread -
> >
> >At this juncture I am severely tempted to say I am laughing my head off at
> >the reams and reams of mental contortions, and the enormous extent to which
> >some people will go to evade admitting they havn't understood what they have
> >been preaching about for years.
> >
> >But I won't. ;o)
> >
> >Point 1. As you have no idea of the power radiated from the braid of a
> >coaxial line when it is feeding (wthout a choke) the centre of a 1/2-wave
> >dipole, the remainder of your arguments carry no weight.
> >
> Actually, I have a very good idea. I've measured coax surface currents
> in real life, wherever the coax is accessible to clamp a probe on, and
> modeled a number of situations to understand what happens up there where
> I can't reach. (Have you?)
>
> Not surprisingly, feedline surface currents can vary a lot, but they can
> often be a significant fraction of the main "antenna" current (tens of
> percent). If you're happy with possibly tens or hundreds of milliamps of
> RF on the coax surface, flowing off to cause trouble
> who-knows-where-else, then so be it. I'm not.
>
> >Point 2. The only person on the right track was Cecil when he asked what's
> >the input impedance (seen looking into the top end) of the coaxial braid
> >when the braid is 1/2-wavelength long and is grounded at the bottom end.
> >(Actually, it's a function of the radiation resistance.)
>
> Go on, I'd never have guessed... We know that some antenna/feedline
> situations are worse than others for surface-current effects (coax) or
> common-mode effects (twin-lead), and we understand why. That knowledge
> is almost as old as radio - the "Marconi Effect" in doublet antennas" -
> and Roy's classic article demonstrates how it works.

>
> But that isn't the main problem.
>
> The main problem is wishful thinking on the part of amateurs when we use
> the word "balanced"... as if it was a magic word that would make all our
> problems go away.
>
> Here are some unpleasant truths:
>
> 1. There is no such thing as a perfectly balanced antenna-feedline
> layout. It is an ideal that only exists in your head. Zero surface or
> common-mode current is only achieved when two large antenna currents are
> exactly equal and opposite - and that doesn't happen in real life.
>
> 2. Antenna/feedline systems don't "want" to be balanced. There is
> nothing in Nature that pulls them towards a balanced configuration. You
> have to shove them, and they'll often fight back.
>
> When we talk about "balanced feedline", that's all it is - just talk.
> Talk and wishful thinking don't make it happen.
>
> 3. Coax will happily support surface currents; most of us know that.
> Twin feeder will equally happily support both differential (balanced)
> currents and common-mode currents - but most of us don't know that. We
> tend to call it "balanced line" and believe (wishfully) that naming it
> makes it true. It isn't.
>
> 4. What we can do, is to *force* the situation more towards the way we'd
> like it. We can force coax surface currents down by using a choke, and
> force common-mode currents on twin feeder down by using a balun at the
> transmitter end (we can also choke common-mode currents on twin feeder,
> but that's more rarely done).
>
> 5. Whatever we try, if the antenna/feedline layout is physically
> unbalanced, it will fight back to keep those unwanted currents flowing.
> The best we can do is force those currents down below the level where
> they cause trouble (and that also depends on our power level - the more
> power we use, the harder we have to work to keep those currents down).
>
> 6. "Physically UNbalanced" applies to every antenna you can ever build.
> This includes:
>
> a) Any antenna fed with coax, because the feedpoint is fundamentally
> asymmetrical. One side of the antenna is connected only to one conductor
> (the center conductor). The other side is connected to two conductors:
> the inner and outer surfaces of the sleeve.
>
> A coax-fed antenna can only ever be "near-enough balanced", or "so close
> to balanced that the difference doesn't matter"... but don't ever
> believe that it is truly balanced, because it fundamentally can not be.

> If you don't actively choke surface currents to prevent them from
> flowing, they *will* flow.
>
> b) Any antenna that has deliberately asymmetrical wires (off-center-fed
> types being the obvious example).
>
> c) Any antenna that is in asymmetrical surroundings - in other words,
> *all* real-world antennas! For example, you can make a horizontal dipole
> with exactly equal leg lengths, but if one end is close to a house or a
> metal mast and the other end is not, the surroundings are asymmetrical
> so the antenna will be unbalanced.
>
> Once again, the surroundings can only ever be "near-enough symmetrical",
> or "so close to symmetrical that the difference doesn't matter"...
> because the world around your antenna is not in fact perfectly
> symmetrical.
>
> d) *Every* vertical antenna - because every vertical is asymmetrical
> with respect to ground. The same applies to antennas that slope with
> respect to ground.
>
> The only differences between cases a) through d) are the degree to which
> each particular system is UNbalanced.
>
> I'm sorry for those bucketfuls of cold water, but it's important to
> understand that a balanced antenna has as much reality as the Tooth
> Fairy. Fortunately we understand the Tooth Fairy a little better: we
> know that unless we do a few small practical things to help the magic
> along, she isn't going to call.
>
> In the same way, understand that your antenna won't be anywhere near
> balanced unless *you* do a few small practical things to make it so. If
> you don't, the Balance Fairy won't call.
>
> --
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

2641. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 17:54:16 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <hi606u0hmmik6o2p03d5oici551ntgcffd@4ax.com>
Source record: 149127

On Tue, 5 Feb 2002 10:59:06 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>I wrote:
>"An example is found in the lack of hum and noise in balanced telephone
>lines."
>
>Reg is always saying that unless you can express what you are saying in
>numbers----.
>
>OK. By law, our overall signal to noise ratio had to exceed 50 db. Not
>bad for open-wire lines on poles. It indicates the common-mode trash in
>the wires was enervated by line balance
>(equal currents in opposite directions through the loads).
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

You don't go far enough. Especially when you have, I believe, a copy
of LaPort nearby. I've seen power line engineering manuals and
observe they "twist" their line on a regular basis to maintain
balance. I would presume LaPort treats this topic (the one compelling
remembrance of a copy passing through my hands was his treatment of
power distribution). Your 50 dB spec wouldn't be obtainable
otherwise.

Wide spaced lines that run parallel through a field are a prime target
for induced currents.

73's
Richard Clark, KB7QHC

2642. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 17:54:36 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C616018.1D35E894@worldnet.att.net>
Source record: 149128

"R.U. Amused?" wrote:

> Thanks all. I think I am just going to throw it up and see what happens. If
> the neighbors complain, I'll go with the "stealth route".

The problem with that is that when you're caught and ID'ed as a
"troublemaker" you're marked for the future. All the HOA Nazis
will forever have you in their sights. Best go stealth from the start.

(And the HOA *will* be able to use the CCR's against you, whether
or not they are included in the HOA regs.)

Dick

2643. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 17:56:05 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <U0V78.565$0j7.255515@paloalto-snr1.gtei.net>
Source record: 149138

"Vito" <vito@crosslink.net> wrote in message news:3C601641.487D005E@crosslink.net...
> Gary - KJ6Q wrote:
> >
> > "Joe Bramblett, KD5NRH" wrote
> > > Mark Tetrault <tetrault@mv.mv.com> wrote:
> > >
> > > >I need something I can set up in 2 minutes,.....
> > >
> > > That's not a campground, it's a parking lot.
> > >
> > >
> > AHHhhhh - another "I don't RV very much" response -
>
> In other words "If you don't call the Walmart lot a campground then you
> must not RV much.", right?

You might be surprised at the number of "RVers" who plan entire trips around the availability of
Walmart and Flying J parking lots... Funny how they manage to come up with 50 grand or so for an RV
setup - yet can't seem to afford a place to stay that's designed, zoned and established for overnite
stays. THEY like to claim they're "thrifty" - *I* think they are just plain CHEAP! RVers entering
the lifestyle and expecting free parking really aren't much different than a fella getting a ham
ticket - THEN expecting someone to provide them a free station to operate with...

If ya can't accepy and afford the associated expenses of the lifestyle, better take up stamp
collecting or needlepoint...

Gary - KJ6Q

2644. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 17:56:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C601CBB.5BA1ED21@eznec.com>
Source record: 149129

I can only help you out with general information. A type of ferrite that's most common and a good compromise to use for HF is Fair-Rite type 43. Other manufacturers offer similar products. Someone else can probably give you some specific recommendations, or you can visit the Fair-Rite or Amidon web site. Locate cores with large enough inside diameter to fit over the cable. Look at the impedance vs frequency data for the cores and get enough cores to provide at least 500 ohms (1000 might be a bit better) of impedance at the lowest frequency you intend to use it at. All else being equal, longer and thicker cores will have more impedance per core. I think the Wireman and probably other vendors sell kits of cores. I recall seeing some impedance values from Amidon that seemed awfully optimistic, but I haven't measured any of the cores in question to see whether they really are.

If you're running over a kW and/or running a high duty cycle, you might need to replace all or some of the cores with one of the 60 series ferrites to reduce heating. If you do that, you'll need more cores, since the per-core impedance will be lower.

Roy Lewallen, W7EL

Ken wrote:

> . . .

> BTW, can you point me to a source of information about which beads I
> should use on RG-8X (I think F73-801) and how many (or what length) I
> need for a broadband choke?
>
> Ken
> (to reply via email
> remove "zz" from address)

2645. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 17:56:20 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C616082.2EF41AB7@worldnet.att.net>
Source record: 149130
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

Leland Cox wrote:

> Check the ARRL site first. They have a lot of current information and
> even have a book on the subject

Yep, ARRL has a (would you believe) $50 (!) book on CCR's and how to deal with them.

2646. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 18:00:41 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C601DC9.332C5D83@crosslink.net>
Source record: 149132
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Tim Randa wrote:
>
> So does everyone who disagrees with you have a "serious character flaw" ??

I never said that. I said that people who think everybody should be forced to endure every hardship and disease they suffered have a serious character flaw.

I have a bad back. Hurts all the time! Does that mean everybody should have a bad back? Should I denigrate everybody who doesn't share my burden? Should the government break yours so it'd be like mine? I think not.

Kids my generation had to fear Polio because there was no vaccine yet. Does that make it unfair to give kids the vaccine now? Again I think not. Same goes for CW. There was a time when CW was the only practical way to communicate via radio. There was also a time when flint & steel was the only practical way to start a fire. People in those times had to master those skills. Should the law make us do the same out of "fairness" to them? I don't think so.

We might argue over whether everybody ought to learn code because it's so much fun without either of us having a character flaw. You could argue that Morse is needed for emergencies and merely be wrong (tap-code is more common), but not a jerk. OTOH the arguement that everybody should be forced to learn Morse because you or I had to learn Morse is selfishness at its worst.

My $0.02
KA3DWW

2647. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 18:02:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C601E43.B704EAFE@eznec.com>
Source record: 149131

A practical difficulty with using parasitic vertical elements is ground loss. You'll find that it doesn't take much ground loss resistance to pretty much lose any gain you'd get from a parasitic vertical that's a quarter wavelength high or less. It's less of a problem with longer elements, and none at all with elements that are close to a half wavelength long.

Roy Lewallen, W7EL

JLB wrote:
>
> Neat!!!
>
> I actually thought of this idea many years ago, but never got enough
> 'roundtuits' to actually do it. My hat is off to you, Rick!
>
> I have a keen interest in phased arrays, since I did my MSEE thesis on
> one. It had 6 elements in a circle and was for receive only. By
> using DSP algorithms I could form a 'image' of the radio
> environment---essentially creating many beams all simultaneously.
>
> In response to some statements on your web site FAQ....Yes, you can
> use parasitic elements. There is no reason why they have to be in a
> straight line. The easiest way would be to have them all be the same
> length and put a reactive element at the bottom for tuning. In fact,
> I have worked out a design in Elnec where you can feed guy wires as
> parasitic reflectors. Again, I do not have enough roundtuits to
> pursue it further, although I did install my present guys with this in
> mind.
>
> Again, congrats on a great idea!
>
> Jim
> N8EE

2648. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 18:08:12 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <gcV78.576$0j7.263280@paloalto-snr1.gtei.net>
Source record: 149137

Vito" <vito@crosslink.net> wrote in message news:3C60019C.2ADBDB25@crosslink.net...
> Gary - KJ6Q wrote:
> >
> > "Vito" <vito@crosslink.net> wrote
> > > That's why I'm looking at running some wire just off the 8x32' rubber....
> >
> > I *have* tried it, and seen others who also have - and have YET to see such an
"invisible"
antenna
> > supported mere inches above an RV roof - metal or otherwise - that would perform as
well as a
> > mediocre standard monoband mobile vertical!
>
> Thanks for the info Gary but in theory a resonant horizontal dipole at
> say 13' otta outperform a hamstick with its tip at the same height.
> Parking a nonmetallic MH under the dipole shouldn't make much
> difference. What do the antenna models say?
>

DUNNO about the "models" - or whether they even HAVE a program that predicts performance of
antennas
suspended above large structures - metal or otherwise - PLUS, the above original statement
was to a
wire "suspended JUST OFF the roof" - 13 feet or so is hardly "just off" - and *I* was
referring to
an antenna INCHES off, not FEET... And as already pointed out, such antennas I and others
have
tried, they perform quite poorly compared to other alternatives. Sure, some dwellers in
antenna
restricted subdivisions DO run attic antennas, and they WILL work... after a fashion... but
NOTHING
like a decent outside antenna in the clear at even a modest height.

> > ....
> > When I am fortunate enough to be in a more wilderness or lightly populated CG, the SGC
and
random
> > wire are great - but not too practical to be seen skulking thru CG underbrush with a
> > slingshot/spinning reel trying to shoot a line into a tree when it's crowded and
cramped... So,
> > then, the various compromises come into play...
>
> The original post was about replacing a more or less permanently mounted
> screwdriver that'd been damaged by weather. For that application, we
> agree a wire and tuner would be more efficient than a screwdriver. I

> sincerely grieve for the children in Etheopia, No. Korea, and for others
> even less fortunate, including those forced to use crowded CGs. I'd
> rather stay home where I have more space.

I fully agree - and that's why we spend most of our RVing stays in more remote CGs with more privacy
and isolation...

>
> 73 KA3DWW

Gary - KJ6Q

2649. Re: What is best Mobile Hf Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 18:13:37 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <lhV78.584$0j7.267540@paloalto-snr1.gtei.net>
Source record: 149134

JEEZE that sounds familiar!

--
Gary - KJ6Q
****

"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:18mu5ucgf6dhaqi7f0c1egvpgv84cnvqqo@4ax.com...
> When I was stationed at Harlingen Texas in the 50's, I used a 3'
> bottom section below a Master Mobile 75-meter coil, then an 8' whip
> above it with a 16" capacity hat. I had 40 watts AM out from an Elmac
> A-54H and used a Gonset Tri-Band converter as a receiver. I had
> nooooo problem working out on 75-meters with that setup. Used fishing
> line to keep it upright.
>
> 73, Dick - W6CCD
>
> On Mon, 4 Feb 2002 21:26:05 -0600, "H. Adam Stevens"
> <solo@totalaccess.net> wrote:
>
> >I once ran a 103 inch whip on a Bug Catcher on a Hustler base mounted on the
> >front edge of the trunk of a 1968 Pontiac.
> >Drove it with a Swan. Worked great but too damned tall. It was Summer 1971.
> >At least you could buy real ball mounts and springs back then.
> >Now I just use a Hustler peaked for field strength, a 706 and a tuner.
> >Best? I once heard a guy towing a trailer with a dipole on it.
> >YMMV
> >
> >H.
> >WA5IGW
> >
> >"'Doc" <w5lz@icok.net> wrote in message news:3C5E68BD.7D4FD83E@icok.net...
> >> Dick,
> >> If you don't mind the 'stop and change taps' thing,
> >> then try a 'BugCatcher'. It is the most efficient of
> >> all the mobile antennas (although you'll get an argument
> >> about that, it's still true).
> >> 'Doc
> >
>

2650. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 18:23:08 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C60230C.98B12B5F@crosslink.net>
Source record: 149133
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Zoran Brlecic wrote:
>
> "Suffer", "discomfort"... I remember when I took a course in ham-radio as well
> as the lessons in Morse code, even though it's been 24 years now; my experience
> has been an enjoyable one, so I am sorry, but I can't relate to your pain and
> suffering.

I'm glad for you. I would like to be better at Morse than I am but it
has always been very difficult for me (see the article on that subject
on www.arrl.org) and "profound" hearing loss has made it worse.

> By the same token, shouldn't we eliminate any testing because it
> causes discomfort to some people?

Not as long as we are still licensed to do things that other citizens
are not, based on the idea that we're "experts". CBrs cannot legally use
high-powered amps and business licensees must hire licensed techs to do
the things we can do at will. We can legally modify our factory-made
radios to operate out of spec on the assumption that we are learned
enough to do so safely. CBrs (for example) cannot.

It makes sense to require a Morse test to operate Morse on bands set
aside for that purpose, but a Morse test to operate SSB? Oy!

2651. Re: Multi frequency monoband antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 19:01:02 UTC
From: aunwin@fgi.net
Message-ID: <c4becf19.0202051101.28d2adc7@posting.google.com>
Source record: 149135

Hi Jim
First may I apologise for the double posting.
It was the first time I had posted on this forum since before
Google came along. True to past form I tripped over my
own feet and double posted.

Discussing the pro's and cons of my description could well become a
pissing contest over time.
I do not see it as a contradiction of terms.

Many antennas like the 'tri bander' can operate on more than one
frequency
and I suspect the enterprising ham could also transmit on two
frequencies at the same time useing extra transmitters. Thus the term
"band" in its description
even tho it has a somewhat similar appearance to a mono bander
ie three elements.
There are many other three element antennas by appearance where the
appearance may appear the same but it has a electrical/mechanical
variable.
A combination loop/dipole is such an example. At any one time it is a
monobander albiet a highly selective pass band in some cases.
By use of this variable one has a monobander in appearance but with a
'floating' resonant frequency because of the addition of a variable.
ie multi frequency mono bander.
All the above is beside the point since I was asking a totally
different question unfortunately on two different postings.
Regards
Art

ojim.bolinger@lintek.aeroflex.com (JLB) wrote in message
news:<8d5ec8a2.0202050726.212c01d@posting.google.com>...
> Say what?
>
> Aren't 'multi frequency' and 'monoband' contradictory?
>
> Maybe you should explain some more.
>
> jim
> N8EE
>
> aunwin@fgi.net (Art Unwin KB9MZ) wrote in message
news:<c4becf19.0202041345.2d68de22@posting.google.com>...
> > After reading about "stretchable antennas
> > (fluidmotion) I tried to model a three

> > element beam on a 18 foot boom for multi
> > frequency use using AO with element length
> > being a variable.
> > I did not take into account element shortening
> > because of dielectric effect (fishing pole support)
> > but I could not find a fixed driver position that
> > would provide mono band performance from 20 thru 10,
> > either in practice or in the fall back position of
> > faulty computor use.
> > Anybody have any insight as to what the fixed driver
> > position should be,and of any other variables that
> > should be taken into account such as using coax for
> > elements or folded elements?
> > (I also tried driving one and all elements
> > even tho it couldn't then be called a yagi !)

2652. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 19:03:55 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <60b06u4runu2ggpedsmjot5crl50goftdb@4ax.com>
Source record: 149136

On Tue, 5 Feb 2002 10:05:28 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

>Acid can be easily neutralized.

Acid can only be neutralized with alkali. If you get excess alkali, you have alkali in the strands. If you don't use enough, you still have some acid remaining. You can never get the balance exactly perfect and neither condition is desirable.

Best to avoid it in the first place. Thorough cleaning of the outside of the strand bundle followed by soldering with non-corrosive flux should do the job.

73, Bill W7TI

2653. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 19:43:01 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u60ddrbr8adv5f@corp.supernews.com>
Source record: 149139
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

>
> You seem to have had difficulty with finding R+jX. This is because the
> 'experts' and 'gurus', the book-writers, are usually academics,
university
> profs, rather than practicing engineers. They don't appreciate what it is
> YOU want to know or why YOU should want to know it.

Well, Kraus is a pretty practical guy, as is Jasik, Roberts, Hamsher, and a
few other sitting in my library, but either I'm too dumb to understand what
they are telling me (entirely possible) or it is not an intuitive
calculation.

>
> True engineers, dedicated to their work and knowing what it's all about,
> learning up to the very last minute, don't have time to write books.

Terman and a few others might take exception to this. And, while I do have
an antenna book in print, it is of the "Little Golden Cookbook Of Antennas"
class. It wasn't that I had the time to write it, the product that goes
along with it demanded it.

>
> To calculate the feedpoint impedance of an antenna it is necessary to
> mathematically model it as a transmission line with impedance Zo = Ro+jXo
> and to distribute the equivalent radiation resistance + wire loss
resistance
> uniformly along its length. There is no simplified way of going about it.
No
> simple formulas. There are one or two approximating short cuts.

That is possible to do, and then integrate the whole shebang. That ain't
exactly an approximating shortcut, and the integral is messy beyond my
capabilities.

>
> But let's face it, you are not directly interested in Zin = R+jX. You
only
> want to know Zin so you can select the values of L and C in the tuner and
> other practical values.

Uh, no, I want to know R and jx. whether or not it is + or - and which way
it goes. I'm not building tuners. I'm trying to understand the
relationship between the design parameters.

>
> Programs ENFDEED and DIPOLE2, and some of the others, not only calculate

Zin
> but L uH and C pF, antenna loss, feeder loss, tuner loss, ground loss,
etc.

Yessir, and you have done a great service posting these. I could take an educated wild assed guess at the formulas by plotting a large number of data points with these programs, examining the resultant curve, and getting an empirical formula that would match the curves arbitrarily close. My goal was NOT to have an empirical formula, but some sort of foundation on which to believe what my numbers are telling me.

>
> If you should ask from where I obtained the formulae incorporated in the
> programs, I worked then out for myself. If anyone should think from
> measurements any of them are in error then please advise me. I have done
> much checking myself. Results are more than sufficiently accurate for the
> intended purposes.

No, and I wouldn't ask you to share formulas that you worked out for yourself if you choose not to share them. That's any designer's right. I have absolutely no problem with the results obtained from these programs.

>
> Download ENDFEED, BOTLOAD and DIPOLE2 from website below. Each is one self
> contained file. Takes only a few seconds. No unzipping inconvenience. Run
> and enter data immediately. No 2-week training course needed on program
> operating procedures.

And the request (see below) was a pointer to the equations, not formulas hidden inside of programs. Again, thanks for the programs, but I'd like something more than cookbook engineering to work with.

> > of these antennas, factoring in the finite width of the elements? If
this
> > is posted on a website somewhere (the actual formulas, not the formulas
> > hidden inside a file) a pointer to the url would be most appreciated.

Jim

2654. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 19:57:18 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202051157.75502e5@posting.google.com>
Source record: 149141

Sorry....

The one I built had 8 elements, not six. By the way, get copy of
Kraus's Big Ear 2. He briefly mentions it somewhere towards the back.

That was 14 years ago. I'm starting to get the point now where I
can't remember what I have forgot! ;-)

Jim
N8EE

jim.bolinger@lintek.aeroflex.com (JLB) wrote in message
news:<8d5ec8a2.0202050723.32848403@posting.google.com>...
> one. It had 6 elements in a circle and was for receive only. By

2655. Re: Can You Believe these CC&Rs?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 20:02:00 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C603A37.9016B003@tampabay.rr.com>
Source record: 149142

hey al
if this is true what you said is in the CCR you should be able to take them
to court for a minimum of discrimination and racism and if they are illegal
in that area then the entire contract is void

"Al Lorona, Jr." wrote:

> Aren't you glad you don't live in Southern California? In case you need
> a little more justification, here are some excerpts from my
> association's Declaration of Restrictions:
>
> "This Declaration of Restrictions made this 12th day of March, 1940, by
> Rancho Santa Anita Inc., a California Corporation,..."
>
> "1. No part of any of said realty shall ever be sold , conveyed, leased,
> or rented to any person not of the white or Caucasian race.
>
> "2. No part of any of said realty shall ever at any time be used or
> occupied or be permitted to be used or occupied by any person not of the
> white or Caucasian race, except such as are in the employ of the
> resident owners or resident tenants of said property."
>
> The document goes on to list all of the prohibited structures and
> actions, and then this:
>
> "11. If at any time any of said paragraphs numbers 1 to 10, inclusive,
> or any part thereof, shall be adjudged or held to be illegal or invalid,
> such illegality or invalidity shall in no wise affect or render illegal
> or invalid any of the other terms, conditions, covenants, and
> restrictions of said paragraph, or of any other paragraph or part
> thereof, but each and all of said other terms, conditions, covenants,
> and restrictions, notwithstanding said illegality or invalidity, shall
> be and remain in full force and effect."
>
> How do you like that?
>
> Al W6LX

2656. Re: Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 20:02:18 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <uge06uk5glki87dbrlauoqg76g6vj2d437@4ax.com>
Source record: 149143

You need to take that exclamation point off the URL. Won't work with
it in there. I didn't notice it at first.

Dick - W6CCD

On Tue, 5 Feb 2002 10:48:31 -0500, "Jerry Oxendine"
<joxendi@bellsouth.net> wrote:

>I finally "went and done it"! For those looking to buy screwdriver
>antennas, I would like to invite you to visit my website at
>www.qsl.net/k4kwh! After a long reluctance, I was talked into
>it by a most kind gentleman who helped me get the site up and running.
>Please drop by and give the Carolina Cyclone products a look.
>
>Tnx and 73
>
>Jerry
>K4KWH
>
>

2657. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 20:05:35 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <ike06ukmmicf2fi5q5l8rpj643cc5e92pk@4ax.com>
Source record: 149144

There could still be a problem with a non-metallic motorhome. You
could have heating ducts, air conditioning, wiring and even the body
frame could be metal. Just have to try it.

Dick - W6CCD

On Tue, 05 Feb 2002 11:00:28 -0500, Vito <vito@crosslink.net> wrote:

>Gary - KJ6Q wrote:
>>
>> "Vito" <vito@crosslink.net> wrote
>> > That's why I'm looking at running some wire just off the 8x32' rubber....
>>
>> I *have* tried it, and seen others who also have - and have YET to see such an
"invisible" antenna
>> supported mere inches above an RV roof - metal or otherwise - that would perform as well
as a
>> mediocre standard monoband mobile vertical!
>
>Thanks for the info Gary but in theory a resonant horizontal dipole at
>say 13' otta outperform a hamstick with its tip at the same height.
>Parking a nonmetallic MH under the dipole shouldn't make much
>difference. What do the antenna models say?

>73 KA3DWW

2658. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 20:07:55 UTC
From: richardharrison@webtv.net
Message-ID: <2697-3C603B9B-296@storefull-115.iap.bryant.webtv.net>
Source record: 149146

Bill, W7TI wrote:
"You can never get the balance exactly perfect and neither condition is desirable." (Acidic or Alkaline)

There is litmus testing. In alkaline solutions litmus turns blue. In alkaline solutions litmus turns red. Perfection is elusive but close is good enough.

Acid flux is used and has long been successfully used. It`s normally kept away from radio chassis by repairmen to avoid splatter onto fine wires where it may not be removed and may result in the corrosion and failure of these fine wires.

On large antenna wire this is no big problem. I`ve had enduring success with many such applications.

Best regards, Richard Harrison, KB5WZI

2659. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 20:16:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C603D88.689C0C99@eznec.com>
Source record: 149145
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

I'm afraid that an emperical formula based on curve fitting is about as good as you can do. The real formula is Hallen's integral equation, which can only be calculated numerically. The only (almost) closed form approximation I know of is Shelkunoff's approximation for straight wire dipoles, based on a transmission line analog. It's not extremely accurate, but is plenty good enough for most purposes. The equations have quite a large number of terms which include sine and cosine integrals. I said "(almost) closed form" because the sine and cosine integrals have to be evaluated numerically, or by summing terms of an infinite series until the result is close enough. Although complex, it's not a hard equation to implement on a programmable calculator or computer, but it's nothing you can punch numbers into with a non-programmable calculator. I've written implemenations of it for everything from an HP-41 calculator and PDP-11 through modern PCs, and imagine it's what Reg uses in his programs. You can find Schelkunoff's approximation in "Theory of Antennas of Arbitrary Size and Shape", Proceedings of the I.R.E., September 1941, p. 493-521. It's discussed some in Leeson's _Physical Design of Yagi Antennas_, where it's used to calculate a constant-diameter equivalent for a stepped-diameter wire to get around a problem with NEC-2. EZNEC uses Leeson's method for its "stepped diameter correction", but uses something more like Hallen's equation for actually determining antenna impedance.

Roy Lewallen, W7EL

Jim Weir wrote:
> . . .
> Yessir, and you have done a great service posting these. I could take an
> educated wild assed guess at the formulas by plotting a large number of data
> points with these programs, examining the resultant curve, and getting an
> empirical formula that would match the curves arbitrarily close. My goal
> was NOT to have an empirical formula, but some sort of foundation on which
> to believe what my numbers are telling me.

2660. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 20:20:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C603E78.F96843BE@eznec.com>
Source record: 149147
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

One additional note. If you're interested in looking at other approximations, their pros and cons, and comparison to measured data, see "The Thin Cylindrical Antenna: A Comparison of Theories", by David Middleton and Ronold King, J. of Applied Physics, Vol. 17, Apr. 1946.

Roy Lewallen, W7EL

2661. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 20:24:44 UTC
From: richardharrison@webtv.net
Message-ID: <2697-3C603F8C-299@storefull-115.iap.bryant.webtv.net>
Source record: 149148

Richard Clark, KB7QHC wrote:
"Your 50 db spec wouldn`t be obtainable otherwise."

The power distribution lines may not be transposed, but Richard Clark is right. It is Telco practice to frequently transpose open-wire lines to maintain their balance in an unbalanced world. It is the phone company which must guarantee service quality on leased program lines.

Best regards, Richard Harrison, KB5WZI

2662. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 21:38:35 UTC
From: richardharrison@webtv.net
Message-ID: <2709-3C6050DB-47@storefull-115.iap.bryant.webtv.net>
Source record: 149149

I wrote:
"On large antenna wire this is no problem."

I would be remiss as Richard Clark reminds me that I frequently am if I left the impression that solder was used in commercial shortwave antenna applications as a usual practice. It is not!

Nicopress is the magic trademark which you can find with a search. Their compression sleeves work so well the wire fails before the splice. Tons of force are put to the task of uniting wires and are applied with a hydraulic press.

Best regards, Richard Harrison, KB5WZI

2663. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 22:07:33 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202051407.6ac7d867@posting.google.com>
Source record: 149150

Roy,

What about the directivity, though? I think it would still have a useable pattern.

Jim
N8EE

Roy Lewallen <w7el@eznec.com> wrote in message
news:<3C601E43.B704EAFE@eznec.com>...
> A practical difficulty with using parasitic vertical elements is ground
> loss. You'll find that it doesn't take much ground loss resistance to
> pretty much lose any gain you'd get from a parasitic vertical that's a
> quarter wavelength high or less. It's less of a problem with longer
> elements, and none at all with elements that are close to a half
> wavelength long.
>
> Roy Lewallen, W7EL
>
> JLB wrote:
> >
> > Neat!!!
> >
> > I actually thought of this idea many years ago, but never got enough
> > 'roundtuits' to actually do it. My hat is off to you, Rick!
> >
> > I have a keen interest in phased arrays, since I did my MSEE thesis on
> > one. It had 6 elements in a circle and was for receive only. By
> > using DSP algorithms I could form a 'image' of the radio
> > environment---essentially creating many beams all simultaneously.
> >
> > In response to some statements on your web site FAQ....Yes, you can
> > use parasitic elements. There is no reason why they have to be in a
> > straight line. The easiest way would be to have them all be the same
> > length and put a reactive element at the bottom for tuning. In fact,
> > I have worked out a design in Elnec where you can feed guy wires as
> > parasitic reflectors. Again, I do not have enough roundtuits to
> > pursue it further, although I did install my present guys with this in
> > mind.
> >
> > Again, congrats on a great idea!
> >
> > Jim
> > N8EE

2664. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 22:27:15 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <0om06us0dafqspm480t3nf66u8k9jm08hm@4ax.com>
Source record: 149151

On Tue, 5 Feb 2002 15:38:35 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>I wrote:
>"On large antenna wire this is no problem."
>
>I would be remiss as Richard Clark reminds me that I frequently am if I
>left the impression that solder was used in commercial shortwave antenna
>applications as a usual practice. It is not!
>
>Nicopress is the magic trademark which you can find with a search. Their
>compression sleeves work so well the wire fails before the splice. Tons
>of force are put to the task of uniting wires and are applied with a
>hydraulic press.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

If I were to mention anything, it would be to add that the last
prototyping shop I worked in used acid core solders typically and
washed the boards faithfully. The reason was that for some reason the
EPA didn't have as much trouble with this method as with any OTHER
flux based system (apparently more ecological damage from them).

Simple dilution. No one worried about neutralizing because it didn't
matter. In any process there is a wash, we went straight to the wash.

But woe to those who went with solder in hand from production to R&D
or vice-versa.

73's
Richard Clark, KB7QHC

2665. Re: Newbie question: So why is my coax feed line radiating?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 22:31:51 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <QhZSxhVX1FY8EAIq@ifwtech.com>
Source record: 149152

Richard Harrison wrote:
>Ian, G3SEK wrote:
>"When we talk about "balanced feedline", that`s all it is - just talk."
>
>For practical purposes they are balanced. I worked for years in a
>commercial shortwave broadcast plant. We had miles of 600-ohm oper-wire
>lines. A dozen high-power transmitters fed a cross-bar switch arranged
>so that any transmitter could use any of dozens of balanced antennas.
>We never had five minutes trouble with imbalance.
>
There's the difference between the professional and the amateur. If
you had a single moment's trouble with imbalance, you should have
fired the design engineers, because they had near-ideal conditions in
which to install the antennas and feedlines.

Amateurs don't.

>Ian is too pessimistic.
>
Well, they do say that life is full of pleasant surprises for the
pessimist!

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

2666. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 22:42:15 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202051442.7c391c5f@posting.google.com>
Source record: 149153

Vito <vito@crosslink.net> wrote in message news:<3C60019C.2ADBDB25@crosslink.net>...
> Gary - KJ6Q wrote:
> >
> > "Vito" <vito@crosslink.net> wrote
> > > That's why I'm looking at running some wire just off the 8x32' rubber....
> >
> > I *have* tried it, and seen others who also have - and have YET to see such an
"invisible" antenna
> > supported mere inches above an RV roof - metal or otherwise - that would perform as
well as a
> > mediocre standard monoband mobile vertical!
>
> Thanks for the info Gary but in theory a resonant horizontal dipole at
> say 13' otta outperform a hamstick with its tip at the same height.
> Parking a nonmetallic MH under the dipole shouldn't make much
> difference. What do the antenna models say?

If the antenna is inches away from the metal you will have problems.
If the antenna is a few feet above the RV, then it should work fine
although there probably will be some coupling which will effect
tuning. If you tweak the legs to have a good match, it should work
fine. But the same antenna inches above an RV will likely be a dud,
and not much better than a conventional vertical mobile antenna. Maybe
worse. As Gary found, I've also found any wires near car metal will
kill an antenna dead in the water. If the wire is capacity loading for
a vertical on the car, and the coil is also near the car, I mean
REALLY dead. :(This can be modeled. "Metal Structures"
>
> > ....
> > When I am fortunate enough to be in a more wilderness or lightly populated CG, the SGC
and random
> > wire are great - but not too practical to be seen skulking thru CG underbrush with a
> > slingshot/spinning reel trying to shoot a line into a tree when it's crowded and
cramped... So,
> > then, the various compromises come into play...

Myself, I usually just sling a coax fed dipole over any nearby trees.
I don't worry about other campers. They will get over it. I only worry
about campsite owners complaining.:(I've never had to yank one down
yet. Most see the radio on the picnic table and get curious to what
the heck I'm doing. I've used many that were only 5-10 ft off the
ground that worked great, but they were not near metal. I also have a
drive on mast holder which can hold either rat shack TV mast , or
fence top rail. It will easily support a dipole at 20 ft, and still be
easy for one person to put up. If I don't have trees to tie the ends

off to, I just run leaders to the legs as insulators, and tie them off to ground stakes. I prefer to sling the ends over trees if possible though. If I can't do any of this, I just use my mobile antenna. MK

2667. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 22:48:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C606155.A0A88369@eznec.com>
Source record: 149154

I don't think I can be any more specific. It's easy to look at a
particular configuration and see what the effect of ground resistance
is. This can be done with even the demo version of EZNEC, by using a
MININEC-type ground and inserting a resistance at the base of each
element to represent the ground loss.

Roy Lewallen, W7EL

JLB wrote:
>
> Roy,
>
> What about the directivity, though? I think it would still have a useable pattern.
>
> Jim
> N8EE
>
> Roy Lewallen <w7el@eznec.com> wrote in message
> news:<3C601E43.B704EAFE@eznec.com>...
> > A practical difficulty with using parasitic vertical elements is ground
> > loss. You'll find that it doesn't take much ground loss resistance to
> > pretty much lose any gain you'd get from a parasitic vertical that's a
> > quarter wavelength high or less. It's less of a problem with longer
> > elements, and none at all with elements that are close to a half
> > wavelength long.
> >
> > Roy Lewallen, W7EL

2668. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 22:54:08 UTC
From: Bob Javits <rjavits@optonline.net>
Message-ID: <koZ78.87958$B94.20451390@news02.optonline.net>
Source record: 149155
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

jim: your problem may not be corrosion, but lack of heat instead.

that wire may be acting like a big heat sink, and if your heat source is not large enough, the heat is traveling up the wire, and the end will never got hot enough to melt the solder and let it attach to the wire.

hope this helps.....

bob wb2aiu

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.314 / Virus Database: 175 - Release Date: 01/11/2002

2669. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 23:28:07 UTC
From: "Alexander S. Wood" <alec_wood@nospamplease.ntlworld.com>
Message-ID: <d%Z78.13304$jV2.965080@news2-win.server.ntlworld.com>
Source record: 149157
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Personally, I just dip it into one cell of an old car battery, seems to work ok. I wouldn't recommend licking it afterwards though.....

73

Alec M1BNK

"J Titcomb" <kimoloka@hawaii.rr.com> wrote in message news:4HL78.13177$Ib.2741039@typhoon.hawaii.rr.com...
> Aloha, anyone got any suggestions for soldering weathered stranded wire? I'm
> trying to revive my G5RV which blew down during the last storm here. I've
> tried wire brushing it, sanding it, using flux...none of these work. Is
> there some homebrew secret for cleaning corrosion from copper wire, making
> it like new so it can be soldered? Some acid wash or something? Mahalo, I
> appreciate the help.
>
> Jim KH6IX
>
>

2670. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-05 23:38:49 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <h3r06ucrhlooj2o2nqdg6qn5lh4568ot31@4ax.com>
Source record: 149156

On Tue, 05 Feb 2002 17:56:05 GMT, "Gary - KJ6Q" <davison7@gte.net>
wrote:

>Funny how they manage to come up with 50 grand or so for an RV
>setup - yet can't seem to afford a place to stay that's
>designed, zoned and established for overnite stays.

Perhaps doing the latter makes them able to afford the former.

One thing I've observed is that self-made rich folks don't waste their
money. Inherited wealth, well that's a different story.

I ain't either one of 'em, BTW. :-)

73, Bill W7TI

2671. Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 00:09:07 UTC
From: Ace_On_Par3 <pwhelton@hal-pcNOSPAM.org>
Message-ID: <a3psaclcp1@news.hal-pc.org>
Source record: 149158

It sure would be nice if some folks learned how to reply to a message in a newsgroup. It is very frustrating to page and page and page through a lengthy message that has been replied to 43 times and some ding dong has added his one word one liner response ..... grrrrr!!!!

2672. Re: Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 00:14:57 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <JE_78.78242$E4.3128664@e3500-atl2.usenetserver.com>
Source record: 149159

LOL! OK, let's try www.qsl.net/k4kwh I didn't notice I had done that.

Tnx and 73

Jerry
K4KWH
Dick Hughes <rhughes33@cableone.net> wrote in message
news:uge06uk5glki87dbrlauoqg76g6vj2d437@4ax.com...
> You need to take that exclamation point off the URL. Won't work with
> it in there. I didn't notice it at first.
>
> Dick - W6CCD
>
> On Tue, 5 Feb 2002 10:48:31 -0500, "Jerry Oxendine"
> <joxendi@bellsouth.net> wrote:
>
> >I finally "went and done it"! For those looking to buy screwdriver
> >antennas, I would like to invite you to visit my website at
> >www.qsl.net/k4kwh! After a long reluctance, I was talked into
> >it by a most kind gentleman who helped me get the site up and running.
> >Please drop by and give the Carolina Cyclone products a look.
> >
> >Tnx and 73
> >
> >Jerry
> >K4KWH
> >
> >
>

2673. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 02:20:13 UTC
From: LRod-removethispart-@pobox.com
Message-ID: <3c60910f.338601835@netnews.worldnet.att.net>
Source record: 149160
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Tue, 05 Feb 2002 08:57:55 GMT, mike@corn2.freeserve.co.uk (Mike W)
wrote:

> Plumbers flux is acidic, some more than others (IIRC eutectic is the
> nastiest one) but all are neutralised by water.

Uh, eutectic is not a flux. Eutectic is the particular percentage of
an alloy (tin/lead solder in this case) which has the lowest melting
point and which (at least in the case of 63/37 Pb/Sn solder), when
cooling, transforms from liquid directly to solid without an
intervening crystalline state.

LRod

2674. Re: QST contra-wound inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 02:37:50 UTC
From: aunwin@fgi.net
Message-ID: <c4becf19.0202051837.3b015f4e@posting.google.com>
Source record: 149161

If my memory serves me correctly that antenna was
developed by a University out East, round about the same time
the cross field antenna was published (1992?) I may have made mention
of it on this forum at that time and did discuss it with Mr Hately
personally because on first glance it appeared connected.
From memory it was a toroid around 6 feet in diameter and not very
high (2 feet?
and was also focussed on the broadcast bands I.E. low antenna as is
the
cross field antenna. I seemed to remember that the designers went
private with it, possibly patented it and I heard of it no more but I
have been out of
the ham radio chat loop for some time.
I may come across more info with a picture as I am presently reviewing
my records of the early to middle nineties to refresh my memory on my
work with the multi frequency monoband antenna referred to in another
posting.
Regards
Art Unwin KB9MZ

"amdx" <amdx@att.net> wrote in message
news:<lMm28.109885$fe1.1867622@bgtnsc06-news.ops.worldnet.att.net>...
> In the Feb 2002 QST the article on matching short antennas
> refers to a contra-wound toroidal air core inductor as being
> a method to get very high Q. I've looked for more info, all
> I can find is the CTHA antenna.
> Is the CTHA the same winding method the author refers
> to (contra-wound)?
> Wouldn't a contra-wound inductor have zero inductance?

2675. Re: Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 02:40:10 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C60978A.47325E08@IEEE.org>
Source record: 149162

Jerry Oxendine wrote:
> LOL! OK, let's try www.qsl.net/k4kwh I didn't notice I had done that.

And if you add seven characters, people will be able to click on it directly
from their browsers. http://www.qsl.net/k4kwh
--
cheers, CAM http://www.qsl.net/w5dxp

2676. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 02:49:14 UTC
From: VE3TMT <ve3tmt@rac.ca>
Message-ID: <yN088.8654$5K1.2011872@news20.bellglobal.com>
Source record: 149163

"Ace_On_Par3" <pwhelton@hal-pcNOSPAM.org> wrote in message
news:a3psaclcp1@news.hal-pc.org...
> It sure would be nice if some folks learned how to reply to a message in a
> newsgroup. It is very frustrating to page and page and page through a
> lengthy message that has been replied to 43 times and some ding dong has
> added his one word one liner response ..... grrrrr!!!!

I have to agree...anyone else?

2677. Re: Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 02:54:56 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <jm616uomd6u33dh2o3ahsaevl84sl04bvb@4ax.com>
Source record: 149164

On Tue, 05 Feb 2002 20:40:10 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

>And if you add seven characters, people will be able to click on it directly
>from their browsers. http://www.qsl.net/k4kwh

You must have an old browser. The new ones don't need the http://

73, Bill W7TI

2678. Re: Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 03:00:40 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3q6rh$1a0je7$1@ID-124126.news.dfncis.de>
Source record: 149166

My browser (OE5+Win98) worked first time even on the exclamation mark.

Reg

2679. Re: Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 03:01:10 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C609C76.1593DC8@IEEE.org>
Source record: 149165

Bill Turner wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote:
> >And if you add seven characters, people will be able to click on it directly
> >from their browsers. http://www.qsl.net/k4kwh
>
> You must have an old browser. The new ones don't need the http://

I have both Netscape 4.6 and 6.0 installed on my computer. 6.0 has
so many bugs that I use 4.6 for the newsgroups.
--
cheers, CAM http://www.qsl.net/w5dxp

2680. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 03:04:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3q6ri$1a0je7$2@ID-124126.news.dfncis.de>
Source record: 149167

Yes.

2681. Re: mono multifreq antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 03:14:36 UTC
From: aunwin@fgi.net
Message-ID: <c4becf19.0202051914.25c54f44@posting.google.com>
Source record: 149168

Patrick,
As a follow up to my last post I checked my records
and found that when looking for best signal on the S.A.
it coincided with max gain(and sound) but an impedance
that was not totally resistive across the spectrum so I opted
for a tuner. The same antenna could be tuned
from the shack remotely to get unity swr(in the shack)across the
spectrum
from 2 meters down to around 8 or 9 meg hz)
However, by going with best swr (no extra matching)
the forward gain deteriated rapidly where as by tuning for maximum
sound, gains were BETTER than monoband (fixed length elements)
but with deteriation as you say, in the rearward direction.
I migtht add that when I posted this particular antenna on this forum
it
was not received too well by the experts so I moved on to
capacitive coupling of the same elements to each other,as well as 13
element antennas(fishing poles) with TWO REFLECYTORS, again to
receive a drubbing from the resident experts.
Even tho it appears to be a simplistic question it is because my self
confidence has taken a bashing in the past. (Hi Tom)
Best regards
Art Unwin KB9MZ

2682. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 03:43:34 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202051943.3aafbfee@posting.google.com>
Source record: 149019

Roy Lewallen <w7el@eznec.com> wrote in message news:<3C601E43.B704EAFE@eznec.com>...
> A practical difficulty with using parasitic vertical elements is ground
> loss. You'll find that it doesn't take much ground loss resistance to
> pretty much lose any gain you'd get from a parasitic vertical that's a
> quarter wavelength high or less. It's less of a problem with longer
> elements, and none at all with elements that are close to a half
> wavelength long.
>
> Roy Lewallen, W7EL

I remember a QST article where a guy tried different versions of 1/2
wave ground mount verticals on 15m?. He started out with parasitic
elements but had problems. The gain didn't really pan out as expected.
He had the best results with them all driven as I remember. I think
Richard Harrison once said he knew the guy that tried them. He may
remember more details. I'd have to dig out the QST to find the
month/year. MK

2683. IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 03:58:54 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C60A9FE.5C0828EF@IEEE.org>
Source record: 149020

I keep seeing IC-706 tuning devices advertised. They say they
key the XMTR at the 10w level. The IC-706 manual doesn't
yield much information about that socket. The signals are:
TKEY, TSTR, +12, and Gnd. Does anybody know how those
signals work? Info on the web? thanks
--
cheers, CAM http://www.qsl.net/w5dxp

2684. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 04:01:55 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <0c816uoo1tfja8oo51mde4ac90rqp9cjb1@4ax.com>
Source record: 149021
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"J Titcomb" <kimoloka@hawaii.rr.com> wrote:

>Aloha, anyone got any suggestions for soldering weathered stranded wire? I'm
>trying to revive my G5RV which blew down during the last storm here. I've
>tried wire brushing it, sanding it, using flux...none of these work. Is
>there some homebrew secret for cleaning corrosion from copper wire, making
>it like new so it can be soldered? Some acid wash or something? Mahalo, I
>appreciate the help.

Dipping in Muriatic acid works well. Just swish it around in clean
water afterwards to remove the acid left behind in the strands.
Muriatic/hydrocloric acid leaves no residue, even the HCL will
evaporate in a few minutes, but for the sake of your tools, etc., it
is best to remove it well before proceeding.

It is quite possible that the comment about insufficient heat is also
important here. It can be surprising how well a large wire can conduct
heat away.

-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

2685. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 05:01:45 UTC
From: mcalhoun@ksu.edu
Message-ID: <a3qdbp$jae@unix1.cc.ksu.edu>
Source record: 149022
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>>Aloha, anyone got any suggestions for soldering weathered stranded wire? I'm
>....[snip]....

>Dipping in Muriatic acid works well. Just swish it around in clean
>....[snip]....

You might try silver polish; I've even been able to
solder aluminum through a "puddle" of polish.

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (retired). "Barbershop" tenor. CDL(PTX). W0PBV. (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

2686. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 05:11:40 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C60BBC0.2567B9DE@home.com>
Source record: 149023

The expensive device they are trying to sell is a capacitor and resistor and a connector available at radio shack. It is a timing circuit that holds the transmitter keyed for about 15-30 seconds with about 10 Watts out.

Do a search on one of the radio mod sites and find the instructions.

This is basically what the auto tuners do, Hold the rig keyed at 10 watts until a low SWR is indicated.

Les, AA4F

CAM wrote:
>
> I keep seeing IC-706 tuning devices advertised. They say they
> key the XMTR at the 10w level. The IC-706 manual doesn't
> yield much information about that socket. The signals are:
> TKEY, TSTR, +12, and Gnd. Does anybody know how those
> signals work? Info on the web? thanks
> --
> cheers, CAM http://www.qsl.net/w5dxp

2687. Re: Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 05:20:16 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <e4f16uckq7ru11opcs1r3v9k6mh57ofvj5@4ax.com>
Source record: 149024

On Tue, 05 Feb 2002 21:01:10 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

>I have both Netscape 4.6 and 6.0 installed on my computer. 6.0 has
>so many bugs that I use 4.6 for the newsgroups.
>--
>cheers, CAM http://www.qsl.net/w5dxp

You might consider IE 6.0. Even people who hate M$ like it. Works for
me.

73, Bill W7TI

2688. Linear Trap Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 07:13:17 UTC
From: David C Dawson <beagle7@pacificcoast.net>
Message-ID: <3C60D7EF.ABEAA1C1@pacificcoast.net>
Source record: 149026

Hi. I would like to hear from someone who has built the linear trap dipole described in the July 1992 issue of 73 Magazine, or some varient of it.

I attempted to make an 80 meter version of this antenna, which meant two more traps, but was unsuccessful due to a poorly operating antenna analyser, the metal on the roof, and the fact that a full-sized 80 meter dipole has to be bent to fit on an 88 foot by 40 foot roof.

IF i try it again, I will either make the 40 meter version and keep the coil-shortened 80 meter antenna I have plus the 30 meter dipole I have. These are parts of a Dynamic electronics multiple dipole I have already.

I wonder if I actually could have made the 80 meter version work by bending it 15 feet or so either end?

Anybody have any experience to relate to me about the linear trap dipole?
Thanks
--
...David C Dawson
...beagle7@pacificcoast.net

2689. Re: DR. KING DAY: AFFIRMATIVE ACTION NEEDED IN HAM RADIO!!!!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 07:28:08 UTC
From: Zoran Brlecic <WA7AA@attbi.com>
Message-ID: <3C60DB06.7A3EBBED@attbi.com>
Source record: 149027

Vito wrote:

> AL Alexander wrote:
> >
> > Well, from my experience in amateur radio over the many years, I have
> > found that most negroids cannot learn anything that requires math....
>
> ... We barely beat Germany to the A-bomb thanks to a handful of
> individuals....

Not that SS Sturmbannfuehrer Alexander here would mind if we didn't....

2690. Cushcraft MA5V mini-review

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 08:52:20 UTC
From: Javier Henderson <javier@KJSL.COM>
Message-ID: <868za7q9ff.fsf@grumman.kjsl.com>
Source record: 149028

I wanted a relatively unobtrusive vertical antenna for my house, after a lot of scientific research (basically, I asked two people) I settled on the MA5V.

Assembly: piece-o-cake, about 45 minutes with the help of my 3 year old (15 minutes otherwise). The most time consuming assembly is the RF choke at the bottom, a length of RG58 wound on a PVC form.

Finished product: it's light, under 8 pounds I believe. Feels solid enough though. It's rated for winds up to 80 mph according to the spec sheet.

Operating: I don't have anything else with which to compare it side by side at this location. Suffice it to say I can copy a lot of stuff with an ancient Drake RX4C I am in the middle of restoring.

Value for the money: I always wonder why we pay so much for a few pieces of aluminum and stainless steel, but I guess it's all pre-cut, pre-drilled and, in some cases, pre-assembled. $199 at HRO in Sunnyvale, CA as I write this. I can't complain too much about the price I guess, it seems to get the job done. I would buy it again.

The instruction manual says something about a 6m resonator, but I don't see one listed for sale anywhere. Maybe it hasn't been released yet. Does anyone know if such an animal exist?

73,
-jav w6vms

2691. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 09:52:21 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <a3qub1rts1@slb2.atl.mindspring.net>
Source record: 149029

"Ace_On_Par3" <pwhelton@hal-pcNOSPAM.org> wrote in message
news:a3psaclcp1@news.hal-pc.org...
> It sure would be nice if some folks learned how to reply to a message in a
> newsgroup. It is very frustrating to page and page and page through a
> lengthy message that has been replied to 43 times and some ding dong has
> added his one word one liner response ..... grrrrr!!!!
>
>
>
>
>

TOO SHINY!!!!

--
It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net/

Paul Wesley Dunn <wpdunn@ipa.net> wrote in alt.thought.southern: "how about
It Came From C. L. Smith's Tiny Little Mind."

2692. The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 10:30:21 UTC
From: fachman <fachman@sprintnet.pl>
Message-ID: <a3r0hugmb1@news.tpi.pl>
Source record: 149030

Hi

I have heard that the size of the cable matters. I do know that if the shorter then its better, but i do also heard that its size must be the multipler of the lenght of the radio wave for the best results. So do you know what size of the cable i should use?

Greetings

2693. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 11:45:41 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3C611765.18940B5E@bloomer.net>
Source record: 149031

Are you referring to waveguide or hardline such as 7/8" ?

fachman wrote:
>
> Hi
>
> I have heard that the size of the cable matters. I do know that if the
> shorter then its better, but i do also heard that its size must be the
> multipler of the lenght of the radio wave for the best results. So do you
> know what size of the cable i should use?
>
> Greetings

--
Scott
http://corbenflyer.tripod.com/
Building RV-4
Gotta Fly or Gonna Die!

2694. Re: Antennas (as seen thru IE6}

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 11:49:23 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <bL888.36$5z.63976@newsfeed.slurp.net>
Source record: 149032

Whaddya do to make IE6 stop returning to the beginning of msgs too long to fit on one screen, or even closing the msg, every time it cks the server for for new msgs?

Whaddya do to make IE6 display a full screen, sans toolbars?

M$ won't answer.

--

73, Dave, K3BHJ

2695. Antenna Construction Materials

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 12:05:14 UTC
From: KC8PMX <kc8pmx@tm.net>
Message-ID: <_Z888.179$Bg4.277307@monger.newsread.com>
Source record: 149033

I was wondering if there was a web site with information as to the formulas, specifics etc. about using steel, copper, aluminum and other metals for construction of amateur antennas.

Questions I want to learn the answers to are:

Diameter and wall thickness of tubular material, how does it affect performance?

Specific Material performance, i.e. copper vs. steel and so on.

Can solid core work or must it be tubular?

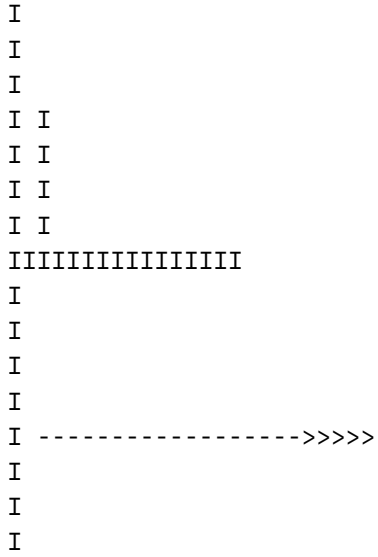
What methods of protecting the metal used do not affect performance? (paint? laquer? clear coat? etc)

Thanks in advance! I am going to be building some antennas soon, and would like to learn about those questions posed.

Ryan KC8PMX

2696. J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 12:05:16 UTC
From: KC8PMX <kc8pmx@tm.net>
Message-ID: <0_888.180$Bg4.277137@monger.newsread.com>
Source record: 149034



My question is the part of the J-pole antenna that is marked by the line and arrows, does this part of the antenna HAVE to be a metallic material or can other material be used?
Can't seem to find the answer to my question so I am posing it here.

Thanks in advance.

Ryan KC8PMX

2697. Re: Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 12:07:18 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c611a1a_4@corp.newsgroups.com>
Source record: 149035

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C609C76.1593DC8@IEEE.org...
> Bill Turner wrote:
> >
> > CAM <Cecil.A.Moore@IEEE.org> wrote:
> > >And if you add seven characters, people will be able to click on it
directly
> > >from their browsers. http://www.qsl.net/k4kwh
> >
> > You must have an old browser. The new ones don't need the http://
>
> I have both Netscape 4.6 and 6.0 installed on my computer. 6.0 has
> so many bugs that I use 4.6 for the newsgroups.
> --
> cheers, CAM http://www.qsl.net/w5dxp
Cam you should really try Opera, better than Net Scape or MS.. IMHO.
Grin 73 Dave

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.320 / Virus Database: 179 - Release Date: 1/30/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

2698. Re: Cushcraft MA5V mini-review

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 12:12:39 UTC
From: k1bqt@aol.com
Message-ID: <20020206071239.24676.00001663@mb-fe.aol.com>
Source record: 149036

I'm told the six-meter add-on resonator is in process--should be available in a few weeks.

Rick K1BQT

2699. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 12:54:47 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202060454.ec5930c@posting.google.com>
Source record: 149037

For those who may not be well versed in antenna theory....

Gain and directivity are directly related only if there are no losses
in the antennna.

If there are losses then the gain will be less but you will have the
same antenna pattern. However, with a parasitic array, the losses may
affect the mutually induced currents which will affect the pattern.
Everything would have to be carefully adjusted.

Using a circular array of driven elements is a simplifying 'trick'
because all the elements have the same mutual impedance and it can
then be essentially ignored.

Sound ok, Roy?

Jim
N8EE

Roy Lewallen <w7el@eznec.com> wrote in message news:<3C606155.A0A88369@eznec.com>...
> I don't think I can be any more specific. It's easy to look at a
> particular configuration and see what the effect of ground resistance
> is. This can be done with even the demo version of EZNEC, by using a
> MININEC-type ground and inserting a resistance at the base of each
> element to represent the ground loss.
>
> Roy Lewallen, W7EL
>
> JLB wrote:
> >
> > Roy,
> >
> > What about the directivity, though? I think it would still have a useable pattern.
> >
> > Jim
> > N8EE
> >
> > Roy Lewallen <w7el@eznec.com> wrote in message
> > news:<3C601E43.B704EAFE@eznec.com>...
> > > A practical difficulty with using parasitic vertical elements is ground
> > > loss. You'll find that it doesn't take much ground loss resistance to
> > > pretty much lose any gain you'd get from a parasitic vertical that's a
> > > quarter wavelength high or less. It's less of a problem with longer
> > > elements, and none at all with elements that are close to a half
> > > wavelength long.
> > >

> > > Roy Lewallen, W7EL

2700. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 13:25:42 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C612ED6.7C2AAE37@crosslink.net>
Source record: 149038

Dick Carroll wrote:
>
> The problem with that is that when you're caught and ID'ed as a
> "troublemaker" you're marked for the future. All the HOA Nazis
> will forever have you in their sights.

Faced with a similar situation in a Maryland "townhouse" development I told the worst gossips in the hood that I was going to move. "Yasee", "I explained, the county welfare people made me an offer. My place already has 3 br's and 2 1/2 baths. They can add 2 more BR and rent it to an indigent family with up to eight kids; collecting whatever the family can afford but paying me market value: enough to cover my mortgage, allow me to keep the house as an investment, but live where I can have my radio antennas." The prospect of having an 8-kid welfare family in their oh so nice hood so appalled them that I got put on the list of people to be nice to!

73 KA3DWW

2701. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 13:34:02 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C6130C9.255E1FE5@tampabay.rr.com>
Source record: 149039

that section is used to mount the antenna so it needs to be stiff and strong
after reading your last two posts i think you are over thinking this stuff its
just antenna construction not rocket science
you need to buy the ARRL antenna book and the ARRL handbook both will tell you
most of what you need/wamt to learn

KC8PMX wrote:

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> My question is the part of the J-pole antenna that is marked by the line and
> arrows, does this part of the antenna HAVE to be a metallic material or can
> other material be used?
> Can't seem to find the answer to my question so I am posing it here.
>
> Thanks in advance.
>
> Ryan KC8PMX

2702. Re: QST contra-wound inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 13:54:30 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <1013003692.923532@nnrp1.phx1.gblx.net>
Source record: 149040

The type of inductor winding that you're talking about is also
known as "regressive". It achieves higher Q by way of reducing the amount
of leakage inductance. If you look at my technical bibliography on
inductors on my web page at:

www.primenet.com/~ctrask

you'll find at least one article on regressive windings. If not, let me
know and I'll see if I can dig it up. I know it's around here somewhere.

Chris

amdx <amdx@att.net> wrote:
: In the Feb 2002 QST the article on matching short antennas
: refers to a contra-wound toroidal air core inductor as being
: a method to get very high Q. I've looked for more info, all
: I can find is the CTHA antenna.
: Is the CTHA the same winding method the author refers
: to (contra-wound)?
: Wouldn't a contra-wound inductor have zero inductance?

--
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: ctrask@primenet.com
| | | | \ '. http://www.primenet.com/~ctrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

2703. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 14:11:32 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C613994.6C1D40B5@crosslink.net>
Source record: 149042

Mark Keith wrote:
>
> If the antenna is inches away from the metal you will have problems....

Thanks Mark, but AFAIK there is little/no metal comprising my particular RV. The walls and roof are a strong self-supporting composite of foam inside hard f'glass sides, about 2" thick. There are a couple wires in the roof feeding lighting and an AC unit. Seems to me that a dipole strung above it low enough to clear overpasses, etc, would act much like a dipole up 12 -13' over metal rails representing the MH frame, motor, etc but, not having tried it yet I dunno.
> >
>
> Myself, I usually just sling a coax fed dipole over any nearby trees.
> ... I've never had to yank one down yet. .....

That's been my experience too. A friend bought a collapsable f'glass flagpole with a drive-on base from Camping World - uses it to support a dipole or runs a wire up the side as a vertical to be less obtrusive. Even the latter gives him a full 1/4 wave on 20m, which otta perform better than a shorter coil-loaded antenna.

The screwdrivers I've seen are compromises designed to fit cars. That's fine but I'd like to use the size of my MH to minimize those compromises. One step might be a screwdriver or bugcatcher with a 16+' inverted L in place of the more typical 9' whip. Beyond that ... ???
73 KA3DWW

2704. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 14:13:17 UTC
From: jcplpsm@aol.communicate
Message-ID: <20020206091317.04192.00001367@mb-df.aol.com>
Source record: 149041

>fter reading your last two posts i think you are over thinking this stuff its
>just antenna construction not rocket science
>you need to buy the ARRL antenna book and the ARRL handbook both will tell
>you
>most of what you need/wamt to learn

And you might consider buying a book on tact, as well as punctuation.

2705. Re: Antenna Construction Materials

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 15:13:50 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C61481B.F3B97D6B@icok.net>
Source record: 149043

Ryan,
Do a search for antennas and vary the type of antenna
as a search parameter, ought to find more than you'll ever
want to know.
The conductivity of different metals has little to do
with the average antenna, one works about as well as another.
The diameter, wall thickness etc, has more to do with strength
than anything. Pick materials for strength and lowest weight.
Protecting the tubing from the weather depends a lot on the
type of tubing used. With aluminum, I wouldn't worry about it
too much. If you use some other metal, it won't be the weather
that causes a problem, but weight sure will. The solid vs.
tubular thing has more to do with weight also, either will
work fine for most antennas.
'Doc

2706. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 15:17:23 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C6148F3.788AE32D@icok.net>
Source record: 149044

fachman,
The important thing is the loss in the feedline, not
it's size. For UHF/SHF the size will probably be larger
than for HF, but that has to do with loss of the cable.
If you're speaking about using a wave guide for a feed
line the 'size' does make a difference, but I really
doubt if that's going to be a problem for you...
'Doc

2707. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 15:26:52 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c615194_4@news1.prserv.net>
Source record: 149046

The real problem are those who try to reply to the original poster by clicking "reply to all" while looking at the last response instead of the originator. And many of these aren't newbies.

--
Crazy George
Remove NO and SPAM from return address

2708. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 15:35:11 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C614D23.3B285943@shaw.ca>
Source record: 149045

KC8PMX wrote:
>
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>
> My question is the part of the J-pole antenna that is marked by the line and
> arrows, does this part of the antenna HAVE to be a metallic material or can
> other material be used?
> Can't seem to find the answer to my question so I am posing it here.
>
> Thanks in advance.
>
> Ryan KC8PMX

It is electrically neutral and can be grounded.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2709. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 15:45:59 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <asj26uslian62m5pptois780rg3pfovare@4ax.com>
Source record: 149047

On Wed, 06 Feb 2002 08:25:42 -0500, Vito <vito@crosslink.net> wrote:

>The prospect of having an 8-kid welfare family in
>their oh so nice hood so appalled them that I got put on the list of
>people to be nice to!

There's more than one way to skin a CC&R.

73, Bill W7TI

2710. Re: J-Pole Question - OT

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 15:47:10 UTC
From: jcplpsm@aol.communicate
Message-ID: <20020206104710.11499.00001675@mb-mc.aol.com>
Source record: 149048

>Diagnosed Type II Diabetes March 5 2001
>Beating it with diet and exercise!
>297/215/210 (to be revised lower)
>58"/43"(!)/44" (already lower too!)

Congratulations Irv and keep up the good work! You are proof that lifestyle changes are a great approach to curing natures errors.

2711. Re: Antennas (as seen thru IE6}

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 15:47:23 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <vuj26usuvfjh6rks5b2uc5pb94j1bhog86@4ax.com>
Source record: 149049

On Wed, 6 Feb 2002 06:49:23 -0500, "David J. Windisch"
<davidw@copper.net> wrote:

>Whaddya do to make IE6 display a full screen, sans toolbars?

Hit F-11.

Don't know the answer to the other question.

73, Bill W7TI

2712. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 16:04:29 UTC
From: Dwight Weisman <NOdweisman5SPAM@home.dot.com>
Message-ID: <evc88.16802$l5.571642@read2.cgocable.net>
Source record: 149050
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

If you are going to invest money in a tower and an antenna and the spend the time to put it up, talk to a lawyer first. No judge is going to care very much about basketball hoops, satellite dishes, and cars parked on the street, if you have to go into court and say that you knowingly violated your CC&R, just because you saw everybody else was and nobody was doing anything about it. Especially once you are in court because someone complains about you.

Talk to a lawyer, this is not a situation like the misquoted remark about jumping off bridges, the is more like the old oil filter advertisement : you can pay a lawyer a few bucks now, or you can pay your lawyer, their lawyer and the court fees later, plus whatever penalties are applicable after you take down the antenna.

On the home front, after you talk to a lawyer, talk to your neighbours before you do anything. The laws here in Canada are a little different (thank God) but the Radio Amateurs of Canada (RAC) still advises that we follow a set procedure that includes notifying any neighbour who will be "visually impacted" by the "antenna support structure" (read tower). There is no legal requirement that we have to get their approval, we just have to notify them in a timely fashion (i.e. more than an hour before we put up a 300 foot tower with a 10 element 80 meter Yagi).

Talk to the lawyer, it will cost you a few dollars now, but so does auto insurance, it just means you might not have to pay as much later or end up investing in equipment that you can't use. If you want to visit a few web sites and get some info, go for it, print out what you see, with the URL and find out what state it refers to and take it with you to the lawyer, but talking to a lawyer beforehand is always gonna be cheaper than afterwards.

--
items may be closer than they appear
"R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
news:CGo78.19507$PC.113748@rwcrnsc52.ops.asp.att.net...
> Thanks guys. It seems to me that the CC&R's have been "abandoned" in my
area
> (at least that is what my argument will be), based on the fact that they
are
> not enforcing the ban on satellite dishes, cars parked in the streets,
> basketball hoops left in the street, odd window decorations, etc. They
can't
> be selective about only enforcing my violation.
>
> James

>
> "Cliff Holloway" <cholloway14@attbi.com> wrote in message
> news:3vn78.15460$ym3.54043@rwcrnsc51.ops.asp.att.net...
> > HI James,
> > I have had in this situation for about 10 years.. check out my site for
> > some ideas... http://www.geocities.com/n0hc/
> > 73 & Good Luck
> > Cliff N0HC
> > "R.U. Amused?" <n6ttd@spamsuxarrl.net> wrote in message
> > news:1pj78.13909$S06.50196@rwcrnsc53...
> > > Hello All;
> > >
> > > I live an a development in California that has CC&R's, restrictive to
> all
> > > types of external antennas, including satellite dishes. I need to
erect
> an
> > > antenna to use with my amateur radio, and I was wondering if anyone
else
> > > went up against CC&R's with an antenna, and what was the ending
result.
> > > CC&R's are part of every new development out here; you can't buy a new
> > house
> > > without them, effectively eliminating amateurs from operating. My
CC&R's
> > are
> > > not even linked to a homeowners association, so I am wondering how
> > > enforceable they are.
> > >
> > > Any comments or suggestions are appreciated.
> > >
> > > James
> > > n6ttd@arrl.net
> > >
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> >
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>
>

2713. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 16:28:39 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <68m26u4hu6v6l7bqqivfur1tlgjfojna4a@4ax.com>
Source record: 149051

On Wed, 06 Feb 2002 08:25:42 -0500, Vito <vito@crosslink.net> wrote:

>Faced with a similar situation in a Maryland "townhouse" development I
>told the worst gossips in the hood that I was going to move. "Yasee", "I
>explained, the county welfare people made me an offer. My place already
>has 3 br's and 2 1/2 baths. They can add 2 more BR and rent it to an
>indigent family with up to eight kids; collecting whatever the family
>can afford but paying me market value: enough to cover my mortgage,
>allow me to keep the house as an investment, but live where I can have
>my radio antennas." The prospect of having an 8-kid welfare family in
>their oh so nice hood so appalled them that I got put on the list of
>people to be nice to!

ROTFLMAO! You, sir, are a genius in the field of "tactical social
engineering." Heaven forbid that the "wrong kind of people" move in
to this enclave of beautiful homes. Oh, man, my sides hurt from so
much laughter.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2714. Re: Ground Rod?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 16:37:24 UTC
From: richardharrison@webtv.net
Message-ID: <20641-3C615BC4-48@storefull-112.iap.bryant.webtv.net>
Source record: 149052

Sylvan Butler wrote:
"I suppose that before I bond to the existing rod I can check for
galvanic potential between new electrodes and old ground system."

PIcon, a Canadian cathodic protection (CP) company says buried piplines
are protected by:
-850mV vs Cu/CuSO4 in conjunction with polymeric coatings. The voltage
is measured between a pipeline and a copper sulfate electrode to earth
such as those made by the M.C. Miller Company. Test leads are attached
to pipelines at appropriate locations.

A typical impressed current system puts the negative rectifier output on
the protected structure (pipe) and the positive rectifier output on an
inert anode (graphite ground bed).

The impressed current flowing through the soil into the pipe overcomes
corrosion current normally flowing away from a (steel) structure.
Choose your own current convention to make this work out.

Best regards, Richard Harrison, KB5WZI

2715. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 16:56:36 UTC
From: Jack <kc8pkn@arrl.net>
Message-ID: <a3rn3a$ba6$1@nntp9.atl.mindspring.net>
Source record: 149053

And usually at the very end of al the other posts

"Ace_On_Par3" <pwhelton@hal-pcNOSPAM.org> wrote in message
news:a3psaclcp1@news.hal-pc.org...
> It sure would be nice if some folks learned how to reply to a message in a
> newsgroup. It is very frustrating to page and page and page through a
> lengthy message that has been replied to 43 times and some ding dong has
> added his one word one liner response ..... grrrrr!!!!
>
>
>
>
>

2716. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 17:19:36 UTC
From: k7mem@myrealbox.com
Message-ID: <270a577d.0202060919.6a5ab181@posting.google.com>
Source record: 149054

"Reg Edwards" wrote:
>
> VE3TMT wrote:
> >
> > "Ace_On_Par3" wrote"
> > > It sure would be nice if some folks learned how to reply to a message in a
> > > newsgroup. It is very frustrating to page and page and page through a
> > > lengthy message that has been replied to 43 times and some ding dong has
> > > added his one word one liner response ..... grrrrr!!!!
> >
> > I have to agree...anyone else?
>
> Yes.

Agreed.

2717. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 17:31:01 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u62q24bkf8mo92@corp.supernews.com>
Source record: 149055
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Thanks, Roy. I was afraid that I was missing some "aha" factor when I saw the equations. I figured that the COULDN'T be as messy as they were, but you confirmed that they are just as messy as I thought.

The real answer seems to be take some curves you believe and fit an equation to them. That's the sense of what I'm hearing.

Jim

"Roy Lewallen" <w7el@eznec.com> wrote in message news:3C603D88.689C0C99@eznec.com...
> I'm afraid that an emperical formula based on curve fitting is about as
> good as you can do. The real formula is Hallen's integral equation,
> which can only be calculated numerically. The only (almost) closed form
> approximation I know of is Shelkunoff's approximation for straight wire
> dipoles, based on a transmission line analog. It's not extremely
> accurate, but is plenty good enough for most purposes. The equations
> have quite a large number of terms which include sine and cosine
> integrals. I said "(almost) closed form" because the sine and cosine
> integrals have to be evaluated numerically, or by summing terms of an
> infinite series until the result is close enough.

2718. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 17:37:24 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <rbq26u0ktd2i6pl6unptlqn2tra03cmmce@4ax.com>
Source record: 149056

If you go with the dipole over the roof, be sure and keep it at 13.5'
or less total height for the freeway requirements.

73, Dick - W6CCD

On Wed, 06 Feb 2002 09:11:32 -0500, Vito <vito@crosslink.net> wrote:

>Mark Keith wrote:
>>
>> If the antenna is inches away from the metal you will have problems....
>
>Thanks Mark, but AFAIK there is little/no metal comprising my particular
>RV. The walls and roof are a strong self-supporting composite of foam
>inside hard f'glass sides, about 2" thick. There are a couple wires in
>the roof feeding lighting and an AC unit. Seems to me that a dipole
>strung above it low enough to clear overpasses, etc, would act much like
>a dipole up 12 -13' over metal rails representing the MH frame, motor,
>etc but, not having tried it yet I dunno.

>73 KA3DWW

2719. Re: Antennas (as seen thru IE6}

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 17:53:02 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <rtp26uc5jt5mfs5pg3ttb20oocqtfhik9m@4ax.com>
Source record: 149057

On Wed, 6 Feb 2002 06:49:23 -0500, "David J. Windisch"
<davidw@copper.net> wrote:

>Whaddya do to make IE6 stop returning to the beginning of msgs too long to
>fit on one screen, or even closing the msg, every time it cks the server for
>for new msgs?
>
>Whaddya do to make IE6 display a full screen, sans toolbars?
>
>M$ won't answer.

Hi Dave,

You are worried about the wrong thing. Today's headlines (literally)
about microsoft reveal how their instant messenger service and outlook
express will expose your list of buddies and their e-mail addresses.
And this on the heels of news about their "Passport" exposure
problems. New headlines come out about once a week.

Just one more of those special features they design before they decide
if you need it, much less can trust it. Their solution, by the way,
cripples IE6 - but then with their commitment to security that is
probably a blessing in disquise.

Correlation may not be causation, but it is startling with the
coincidence in the rising popularity (?) of IE and the explosion in
identity theft. Given the already proven causation, it seems a
strange argument that downloading your credit history to hackers is a
suitable cost for a faster loading browser (an often inaccurate
claim).

There is nothing on the net that has changed the news nor e-mail
protocols in a verrrrry long time. Agent, the commercial form of
FreeAgent, has been my software client for these services for 5 years.
At no time has it ever been nicked by viruses - much less crippled or
responsible for passing on the infections like MS products.

73's
Richard Clark, KB7QHC

2720. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 18:19:24 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c618603_2@news1.prserv.net>
Source record: 149061

Here is some general information on coaxial cable at 2.4 GHz. The first column in the table is loss in dB per 100 feet. Then, since I suspect that won't mean much, a second column which is feet for 3 dB loss. 3dB is half of your power, and a usual rule of thumb for maximum transmission line loss. Note that only one RG number is given, but at this frequency, the loss is directly related to the diameter, and any cable with the same diameter will have very nearly the same loss.

Cable dB/100' feet/3dB
RG174 64 5'
RG214orRG8 19 16'
RG17 9 33'
3/8" LDF Heliax 6.6 48'
1/2" LDF 4.4 68'
7/8" LDF 2.5 118'
Teflon
RG188 58 5'
RG142 26 12'
RG87 14 21'

So, if you intend to place the antenna very far from the equipment, be prepared to use some big coax, or loose any advantage of an external antenna.

--
Crazy George
Remove NO and SPAM from return address

2721. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 19:07:13 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <B9f88.660$9_3.334086@paloalto-snr1.gtei.net>
Source record: 149058

Don't overlook the fact that you aren't locked into using ONLY a mobile whip with the screwdriver
base - you MIGHT see a substantial benefit from attaching the base to a substantially longer run of
wire, and then use the screwdriver base to "tune" that random wire. I have used that method a number
of times - and it works great, especially on he lower frequency bands - 40 meters and lower...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"Vito" <vito@crosslink.net> wrote in message news:3C613994.6C1D40B5@crosslink.net...
> Mark Keith wrote:
> >
> > If the antenna is inches away from the metal you will have problems....
>
> Thanks Mark, but AFAIK there is little/no metal comprising my particular
> RV. The walls and roof are a strong self-supporting composite of foam
> inside hard f'glass sides, about 2" thick. There are a couple wires in
> the roof feeding lighting and an AC unit. Seems to me that a dipole
> strung above it low enough to clear overpasses, etc, would act much like
> a dipole up 12 -13' over metal rails representing the MH frame, motor,
> etc but, not having tried it yet I dunno.
> > >
> >
> > Myself, I usually just sling a coax fed dipole over any nearby trees.
> > ... I've never had to yank one down yet. .....
>
> That's been my experience too. A friend bought a collapsable f'glass
> flagpole with a drive-on base from Camping World - uses it to support a
> dipole or runs a wire up the side as a vertical to be less obtrusive.
> Even the latter gives him a full 1/4 wave on 20m, which otta perform
> better than a shorter coil-loaded antenna.
>
> The screwdrivers I've seen are compromises designed to fit cars. That's
> fine but I'd like to use the size of my MH to minimize those
> compromises. One step might be a screwdriver or bugcatcher with a 16+'
> inverted L in place of the more typical 9' whip. Beyond that ... ???
> 73 KA3DWW

2722. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 19:11:42 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <u6300qhk9hn8ed@corp.supernews.com>
Source record: 149059

I recall a guy pulling a trailer with a dipole strung across it.
Worked quite well as I recall. 20 meters it was.
H.
WA5IGW

"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:rbq26u0ktd2i6pl6unptlqn2tra03cmmce@4ax.com...
> If you go with the dipole over the roof, be sure and keep it at 13.5'
> or less total height for the freeway requirements.
>
> 73, Dick - W6CCD
>
> On Wed, 06 Feb 2002 09:11:32 -0500, Vito <vito@crosslink.net> wrote:
>
> >Mark Keith wrote:
> >>
> >> If the antenna is inches away from the metal you will have problems....
> >>
> >Thanks Mark, but AFAIK there is little/no metal comprising my particular
> >RV. The walls and roof are a strong self-supporting composite of foam
> >inside hard f'glass sides, about 2" thick. There are a couple wires in
> >the roof feeding lighting and an AC unit. Seems to me that a dipole
> >strung above it low enough to clear overpasses, etc, would act much like
> >a dipole up 12 -13' over metal rails representing the MH frame, motor,
> >etc but, not having tried it yet I dunno.
>
> >73 KA3DWW
>

2723. Azimuthal Maps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 19:15:47 UTC
From: Al <ABurzynski@nojunk.satx.rr.com>
Message-ID: <Dhf88.1747$Re7.51844@typhoon.austin.rr.com>
Source record: 149060

Is there a site which generates azimuthal maps similar to

http://www.wm7d.net

but the map is a more recognizable projection of a specific area? In other words if I generate an azimuthal map centered on Texas, the US and South America look pretty good, Africa is barely recognizable, and Europe and Asia do not resemble Europe and Asia at all. I would like to see a map of Europe or Asia (only) showing the projection lines coming from Texas. I realize that the lines would no longer be straight, they would probably be portions of a sine wave, but I would be able to identify countries within Europe.

All information will be greatly appreciated. Thank you.

Al
KA5JGV

2724. Ford Ranger antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 19:40:49 UTC
From: Bill Grimwood <bill@grimwood.net>
Message-ID: <uxf88.108657$h31.7305858@e420r-atl1.usenetserver.com>
Source record: 149062

I am going to mount my Kenwood TMG 707 in my truck. How do you recommend I do it. I will use a magnetic antenna on the roof. Is there an access hole to run the wire in or do I have to drill one. Have any of you had engine or fuel pump problems with the Ford Ranger. Mine is a 99 model.

2725. Hy-Gain DX-77

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 19:56:09 UTC
From: vswrref@hotmail.com
Message-ID: <3c618917.11414464@national-news.stargate.net>
Source record: 149063

Hi all!

I was helping a buddy of mine get his DX-77 antenna together, plus hole dug and mast cemented into the ground when we came upon the description of how the tilt-over section is suppose to be assembled. Since the picture is in 2 dimension, it is very hard to get an exact idea of how this is suppose to be mounted. If anybody has assembled this antenna and have photos of how the tilt-over section was assembled, please send them to me via my e-mail address.

Jeff Y.

2726. Re: Ford Ranger antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 20:14:23 UTC
From: John Buck <kh7t@arrl.net>
Message-ID: <3C618ED6.4050703@arrl.net>
Source record: 149064

Hi Bill,

I have a 99 Ford Ranger 4x4. It is an excellent truck but a miserable RFI source on HF. I have the fuel pump added filter in the tank. I need to put some straps between the bed and cab.

Having said that, I have never had any noise problem on VHF. My 2 meter radio works well in the fringe areas of the repeaters.

There are rubber plugged holes in the bottom of the cab below the seats, that are relatively easy to get to. I put an antenna hole for the VHF 5/8 in the top near the dome light. It is sealed with the standard O ring sealed through hole mount. The Coax is snaked behind the liner to to floor. I live in a very humid and wet environment and have had no leaks. when I sell the truck, I will either install a plug in the roof or a small business band whip.

I like the 5/8 much better than a 1/4 for 2 meter use. Coverage is much better. I also have a Larsen dual bander that is a little shorter than the standard 5/8 that works very well.

I have had good luck with mag mounts but use caution to avoid scratches and dirt around the edges. Lift it off, do not tilt it off. Extra coats of heavy duty wax on the truck may help. I have used a thin layer of teflon tape on the bottom of the mount with success to help prevent scratches to the paint. I usually run the coax over to the passenger door and route it under the door seal to the floor level. Use some sort of drip loop at the top to prevent water running along the coax to the inside of the truck. I have used Duct tape to secure the coax inside the door opening. The silver stuff deteriorates in a year or so and makes a mess. If you can get the real stuff (Green, Mil. grade) use it.

For the record, my large HF whip is installed on a custom SS bracket that bolts onto the rear of the truck under the rear fold down gate latch at the top of the bed. It is basically an SS plate with enough of a Z bend in it to move the bolt heads away from the the door as it opens. The plate protrudes out between the Gate and the bed within the clearance for the door to close. The latch bolts are used and no extra holes are required.

I like my truck but I think the next one will be a Dodge Diesel because of the Ford HF noise problems.

Aloha,

John KH7T

You wrote: >I am going to mount my Kenwood TMG 707 in my truck. How do you recommend I do it. I will use a magnetic antenna on the roof. Is there an access hole to run the wire in or do I have to drill one. Have any of you had engine or fuel pump problems with the Ford Ranger. Mine is a 99 model.<

2727. Re: Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 20:50:37 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C61971D.705B37D5@IEEE.org>
Source record: 149065

Bill Turner wrote:
>
> On Tue, 05 Feb 2002 21:01:10 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:
> >I have both Netscape 4.6 and 6.0 installed on my computer. 6.0 has
> >so many bugs that I use 4.6 for the newsgroups.

> You might consider IE 6.0. Even people who hate M$ like it. Works for
> me.

I'm happy using Netscape 4.6 for email and netnews and Netscape 6.2 for
surfing the web.
--
cheers, CAM http://www.qsl.net/w5dxp

2728. Re: Azimuthal Maps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 20:59:06 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C61991A.5A610AB8@IEEE.org>
Source record: 149066

Al wrote:
>
> Is there a site which generates azimuthal maps similar to
>
> http://www.wm7d.net
>
> but the map is a more recognizable projection of a specific area? In other
> words if I generate an azimuthal map centered on Texas, the US and South
> America look pretty good, Africa is barely recognizable, and Europe and Asia
> do not resemble Europe and Asia at all. I would like to see a map of Europe
> or Asia (only) showing the projection lines coming from Texas. I realize
> that the lines would no longer be straight, they would probably be portions
> of a sine wave, but I would be able to identify countries within Europe.
>
> All information will be greatly appreciated. Thank you.

Have you tried giving the software the long/lat halfway between
the transmitter and the receiver?
--
cheers, CAM http://www.qsl.net/w5dxp

2729. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 21:30:16 UTC
From: Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna6383b.qpc.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 149067

On Wed, 6 Feb 2002 12:19:24 -0600, Crazy George <munschNO@attglobal.net.SPAM> wrote:
> Note that only one RG number is given, but at this frequency, the loss is
> directly related to the diameter, and any cable with the same diameter will
> have very nearly the same loss.

Not really. Compare LMR-400 with the RG8. Times Microwave rates
it at 2.5ghz:

LMR-400 6.8 44'

> Cable dB/100' feet/3dB
> RG214orRG8 19 16'
> RG17 9 33'
> 3/8" LDF Heliax 6.6 48'

Obviously it performs more similarly to 3/8 heliax but is size-wise
a drop-in for RG8. Also available in an "ultra-flex" (stranded
center, etc) at 15% worse attenuation. Also available as
direct-bury, plenum, etc.

> So, if you intend to place the antenna very far from the equipment, be
> prepared to use some big coax, or loose any advantage of an external
> antenna.

That's for sure.

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

2730. Re: Impressions of the MFJ 1025/1026 Noise Canceller?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 21:44:01 UTC
From: Joe O <jenjoeo@zianet.com>
Message-ID: <3c61a48b.0@oracle.zianet.com>
Source record: 149068

I reduced AC power line buzz that was being radiating from a defective Pole Transformer by using the MFJ-1026. The trick is to be able to place a SENSE antenna where it picks up mostly only the noise. Phasing out the buzz resulted in a reduction from S9+10 to about S4. After about a year the Pole Transformer finally went up in flames. I now use the 1026 sense antenna input to couple in a 350 ft low Beverage RX antenna.

73s
Joe O KI5FJ

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message news:3C5DDC2A.787FB397@bellatlantic.net...
> Anyone try either of these? Assuming a good noise antenna, does it
> work?
>
> '73 KI4Z
>

2731. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 21:49:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3s9fl$1ak68i$1@ID-124126.news.dfncis.de>
Source record: 149070
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Jim says -

> The real answer seems to be take some curves you believe and fit an
equation to them. That's the sense of what I'm hearing.
==========
Jim, ;o) get yourself a hearing aid, you are are hearing wrong !

I have never read the tomes nor have I even heard of most of the many
authors of the books and papers mentioned in this waffling overcomplicated
thread. I don't doubt that most of their conclusions are published in the
form of 'curves'. But curves, inevitably, can apply only to restricted
ranges of parameters and are poor sources of information on which to base a
practical understanding of what's really going on.

Terman (who I *have* heard of and have 1937 and 1943 wartime editions of his
books) relies on curves. But I have never found any of his curves to be of
any practical use. (But then, I have never used a Smith Chart either).
People who quote, recommend, even worship him have no doubt familarised
themselves with his writings but have seldom tried to make much *practical*
use of them otherwise they would not have set him up on a pedestal.

To fend off assault I hasten to add that many years ago I discovered
Terman's indeed comprehensive writings (and some of his curves) were of
considerable educational value and a valuable set of reminders. A
check-list. A safeguard against omitting essentials. But for getting down
to basics, Everitt and his ilk were a superior little bunch.

If you are more than just another author yourself, when trying to solve a
particular engineering problem you must have been many times disappointed to
find most sets of recommended curves fizzle out at the edges of the regions
you are really interested in. To try to base a practical computer program or
another practical book on sets of curves preconceived by other gurus is a
waste of time. The important thing is to recognise and appreciate a waste of
time before getting bogged down in it.

It may be of interest that NONE of my programs (as imagined by Roy) are
based on number-crunching curve fitting. So far as I can recall numerical
integration (Simpson's) is used only to predict radiation resistance. The
great majority of calculations are done using explicit algebraic expressions
deduced by fundamental engineering reasoning which any competent electrical
engineer should be able to do for himself.

When I first discovered the internet and websites, and began giving programs
away just a few years back, I was very surprised to discover they, or
similar, hadn't already been produced 10 or more years before. Nothing was

copied. There was nothing to copy from. I undertook the work as a hobby to find something satisfying to do in retirement.

And, as I have said before, the principal reason for witholding program source code is to allay unfounded, ill-educated criticism by sincere do-gooders, nit-picking trolls and cantankerous 'old wives'. Unfortunately, mud sticks and confidence can be undermined.

Here comes the flack ! (A ww2 understatement.)

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

2732. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 21:57:29 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c61aa0f_1@news1.prserv.net>
Source record: 149069

I knew I forgot something, especially since the RG info came out of Times' catalog.

--
Crazy George
Remove NO and SPAM from return address
Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid> wrote in message
news:slrna6383b.qpc.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid...
> On Wed, 6 Feb 2002 12:19:24 -0600, Crazy George
<munschNO@attglobal.net.SPAM> wrote:
> > Note that only one RG number is given, but at this frequency, the loss is
> > directly related to the diameter, and any cable with the same diameter will
> > have very nearly the same loss.
>
> Not really. Compare LMR-400 with the RG8. Times Microwave rates
> it at 2.5ghz:
>
> LMR-400 6.8 44'
>
> > Cable dB/100' feet/3dB
> > RG214orRG8 19 16'

2733. Re: Azimuthal Maps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 22:09:50 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c61ad7d_4@news1.prserv.net>
Source record: 149071

Al:
The answer is sort of. Some guy at Datapoint had such software, and we had
a copy of a large map printed from it where countries could be recognized,
but it was given away.

--
Crazy George
Remove NO and SPAM from return address
Al <ABurzynski@nojunk.satx.rr.com> wrote in message
news:Dhf88.1747$Re7.51844@typhoon.austin.rr.com...
> Is there a site which generates azimuthal maps similar to
>
> http://www.wm7d.net
>
> but the map is a more recognizable projection of a specific area? In other
> words if I generate an azimuthal map centered on Texas, the US and South
> America look pretty good, Africa is barely recognizable, and Europe and
Asia
> do not resemble Europe and Asia at all. I would like to see a map of
Europe
> or Asia (only) showing the projection lines coming from Texas. I realize
> that the lines would no longer be straight, they would probably be
portions
> of a sine wave, but I would be able to identify countries within Europe.
>
> All information will be greatly appreciated. Thank you.
>
> Al
> KA5JGV
>
>
>

2734. Force 12 /SIGMA-5

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 22:46:29 UTC
From: Ted Sloan <tedsloan@ntlworld.com>
Message-ID: <MPG.16cbc2a1d334217d989680@news.ntlworld.com>
Source record: 149072

I would like to hear from anyone who uses the SIGMA-5 vertical antenna as
to it's efficiency.

73 Ted

2735. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 22:57:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C61B4D5.4A5680AE@eznec.com>
Source record: 149073
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Yes, that's what you need to do. Just don't forget what range of antenna lengths and diameters the fit is valid for!

Roy Lewallen, W7EL

Jim Weir wrote:
>
> Thanks, Roy. I was afraid that I was missing some "aha" factor when I saw
> the equations. I figured that the COULDN'T be as messy as they were, but
> you confirmed that they are just as messy as I thought.
>
> The real answer seems to be take some curves you believe and fit an equation
> to them. That's the sense of what I'm hearing.
>
> Jim

2736. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 23:10:10 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C61B7D2.2425FAD5@dialpoint.net>
Source record: 149074

Thought I could fine more. Try here for a circuit that will activate
the tx at the 10 watt level for a short time. The device does have to
be plugged in when the Icom is turned on as that is when the icom reads
a device.

http://www.qsl.net/g4fzn/706cct.gif

CAM wrote:
>
> I keep seeing IC-706 tuning devices advertised. They say they
> key the XMTR at the 10w level. The IC-706 manual doesn't
> yield much information about that socket. The signals are:
> TKEY, TSTR, +12, and Gnd. Does anybody know how those
> signals work? Info on the web? thanks
> --
> cheers, CAM http://www.qsl.net/w5dxp

2737. Re: Azimuthal Maps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-06 23:31:52 UTC
From: Otis Cribblecoblis <alaininvc@netscape.net>
Message-ID: <3C61BCE8.35D6750@netscape.net>
Source record: 149075

try: http://edcwww.cr.usgs.gov

Al wrote:

> Is there a site which generates azimuthal maps similar to
>
> http://www.wm7d.net
>
> but the map is a more recognizable projection of a specific area? In other
> words if I generate an azimuthal map centered on Texas, the US and South
> America look pretty good, Africa is barely recognizable, and Europe and Asia
> do not resemble Europe and Asia at all. I would like to see a map of Europe
> or Asia (only) showing the projection lines coming from Texas. I realize
> that the lines would no longer be straight, they would probably be portions
> of a sine wave, but I would be able to identify countries within Europe.
>
> All information will be greatly appreciated. Thank you.
>
> Al
> KA5JGV

2738. TRADE BOAT FOR HAM GEAR

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 00:16:59 UTC
From: nedrog@aol.comNOSPAM
Message-ID: <20020206191659.01038.00000346@mb-cr.aol.com>
Source record: 149076

TRADE: 1974 Invader 16 foot fiberglass bass boat, 65hp Merc outboard, side console, lights, live well, 2 anchor-mates, rod locker, & Trailer.

Wanted: HF TRI-BANDER ANTENNA, HF AMP, etc.

SELL: 60 ft Rohn 25G tower, on ground.

Prefer Washington, DC area

73's Howard W3CQH

tele: 301-294-3824

2739. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 00:47:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C61CEB6.C58F5470@eznec.com>
Source record: 149077

Unfortunately it's not quite that simple. Those who have EZNEC (even the demo) can follow along with a simple illustration. Open NBSYagi.EZ and delete wire 3, the director, to make a simple two element Yagi with driven element (wire 2) and reflector (wire 1). Run a far field plot and note the gain and front/back ratio. Add a 100 ohm resistive load at the center of wire 2, the driven element. (EZNEC will put it in series with the source.) Note that the gain has decreased, but the pattern and front/back ratio are the same as before. Increase the resistance to 1000 ohms. The gain is down more yet, but the pattern and front/back ratio are still unchanged.

Now put a 100 ohm resistor at the center of the parasitic element, wire 1. What happens to the pattern and front/back ratio? (For those who aren't trying the experiment, the answer is that the pattern looks like a slightly lopsided dipole, and the front/back ratio has decreased.) The more resistance you put at the center of the reflector, the more the pattern looks like a plain dipole. And there's no amount of resistance you can add to the driven element to restore the original pattern.

On the other hand, you can insert resistances of any values at the any or all the bases of cardiod model Cardioid.EZ or four square model 4Square.EZ without changing the pattern shape, regardless of the amount of resistance you add and which elements you add them to. The reason is that the model antennas are driven by current sources, so adding a serie resistances at the bases doesn't change the relative amount of current going into the elements, or the current distribution on the elements.

So loss can be added without changing the pattern only if it's added in such a way as to reduce the current in every part of the antenna in the same proportion. But it's possible to add loss in ways that don't satisfy this requirement.

As far as ignoring losses goes, the effect of loss has a lot more to do with coupled impedance than mutual impedance. The mutual impedance depends only on element length and orientation. It's the same for two parallel elements which are both driven as for two parallel elements of which one is parasitic and the other driven -- or for two elements just sitting there. Yet as you've seen, the effect of loss is much greater on the parasitic element. The coupled impedance depends not only on the mutual impedance, but also on the relative magnitudes and phases of current in the elements. In the case of a parasitic element, the coupled impedance equals the negative of the self impedance, resulting in a zero feedpoint impedance. Any loss in series with this has quite a profound effect.

Roy Lewallen, W7EL

JLB wrote:
>
> For those who may not be well versed in antenna theory....
>
> Gain and directivity are directly related only if there are no losses
> in the antennna.
>
> If there are losses then the gain will be less but you will have the
> same antenna pattern. However, with a parasitic array, the losses may
> affect the mutually induced currents which will affect the pattern.
> Everything would have to be carefully adjusted.
>
> Using a circular array of driven elements is a simplifying 'trick'
> because all the elements have the same mutual impedance and it can
> then be essentially ignored.
>
> Sound ok, Roy?
>
> Jim
> N8EE
>
> Roy Lewallen <w7el@eznec.com> wrote in message news:<3C606155.A0A88369@eznec.com>...
> > I don't think I can be any more specific. It's easy to look at a
> > particular configuration and see what the effect of ground resistance
> > is. This can be done with even the demo version of EZNEC, by using a
> > MININEC-type ground and inserting a resistance at the base of each
> > element to represent the ground loss.
> >
> > Roy Lewallen, W7EL
> >
> > JLB wrote:
> > >
> > > Roy,
> > >
> > > What about the directivity, though? I think it would still have a useable pattern.
> > >
> > > Jim
> > > N8EE
> > >
> > > Roy Lewallen <w7el@eznec.com> wrote in message
> > > news:<3C601E43.B704EAFE@eznec.com>...
> > > > A practical difficulty with using parasitic vertical elements is ground
> > > > loss. You'll find that it doesn't take much ground loss resistance to
> > > > pretty much lose any gain you'd get from a parasitic vertical that's a
> > > > quarter wavelength high or less. It's less of a problem with longer
> > > > elements, and none at all with elements that are close to a half
> > > > wavelength long.
> > > >
> > > > Roy Lewallen, W7EL

2740. Re: QST contra-wound inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 02:38:41 UTC
From: Anthony Duffy <a.duffy@sympatico.ca>
Message-ID: <3C61E8B1.2090406@sympatico.ca>
Source record: 149078

was it 6' in diameter?... I remember something about an antenna wound on
a hula hoop in QST (I think) while I was researching on loop antennas.

73, Tony
VA3ATD
London, Ontario

Art Unwin KB9MZ wrote:

> If my memory serves me correctly that antenna was
> developed by a University out East, round about the same time
> the cross field antenna was published (1992?) I may have made mention
> of it on this forum at that time and did discuss it with Mr Hately
> personally because on first glance it appeared connected.
> From memory it was a toroid around 6 feet in diameter and not very
> high (2 feet?
> and was also focussed on the broadcast bands I.E. low antenna as is
> the
> cross field antenna. I seemed to remember that the designers went
> private with it, possibly patented it and I heard of it no more but I
> have been out of
> the ham radio chat loop for some time.
> I may come across more info with a picture as I am presently reviewing
> my records of the early to middle nineties to refresh my memory on my
> work with the multi frequency monoband antenna referred to in another
> posting.
> Regards
> Art Unwin KB9MZ
>
>
>
>
>
>
> "amdx" <amdx@att.net> wrote in message
news:<lMm28.109885$fe1.1867622@bgtnsc06-news.ops.worldnet.att.net>...
>
>>In the Feb 2002 QST the article on matching short antennas
>>refers to a contra-wound toroidal air core inductor as being
>>a method to get very high Q. I've looked for more info, all
>>I can find is the CTHA antenna.
>> Is the CTHA the same winding method the author refers
>>to (contra-wound)?
>> Wouldn't a contra-wound inductor have zero inductance?
>>

2741. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 02:42:42 UTC
From: richardharrison@webtv.net
Message-ID: <19042-3C61E9A2-78@storefull-117.iap.bryant.webtv.net>
Source record: 149080

Richard Clark wrote:
"The reason was that for some reason the EPA didn`t have as much trouble with this method (acid flux in production soldering) as with any other flux based system (apparently more ecological damage from them)."

EPA probably has a point. The composition of acid flux is probably a very short list of well understood chemicals. Good clean acid should be no problem if diluted very well and it`s been around forever. Who knows what might be used in other fluxes?

EPA is a force to be reckoned with everywhere, and with some cause. Cathodic protection used to be just good business. It was an operating and maintenance expense, but the best bargain available. Now EPA mandates cathodic protection of buried tanks and pressure piping which contain regulated substances. Too many gasoline station tanks leaked into the environment.

Likewise, oil, gas, and chemical pipelines were just about all protected cathodically before regulation mandated the practice. The DOT mandate for high pressure testing is more controversial. The practice seems to trigger subsequent failures. Sooner, if significant yielding results from testing. Later, if slight yielding produces tiny stress cracks in the steel which operational pressurization cycles enlarge into something serious. Examinations of blow outs have seemed to link them to the high pressure tests. The lines normally operate below the test pressure, so the test is really an overstress.

Never mind, EPA is here to stay, even if it hair-lips every cow in Texas.

Best regards, Richard Harrison, KB5WZI

2742. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 03:07:24 UTC
From: Jim Adney <jadney@vwtype3.org>
Message-ID: <2kq36ugm7hu2h6ruiho1oa23guda4lcvch@4ax.com>
Source record: 149079
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

LRod-removethispart-@pobox.com (LRod) wrote:

>On Tue, 05 Feb 2002 08:57:55 GMT, mike@corn2.freeserve.co.uk (Mike W)
>wrote:

>> Plumbers flux is acidic, some more than others (IIRC eutectic is the
>> nastiest one) but all are neutralised by water.
>
>Uh, eutectic is not a flux. Eutectic is the particular percentage of
>an alloy (tin/lead solder in this case) which has the lowest melting
>point and which (at least in the case of 63/37 Pb/Sn solder), when
>cooling, transforms from liquid directly to solid without an
>intervening crystalline state.

You're exactly right, but there is also a company named Eutectic which
makes soldering and brazing alloys. This may be what he was referring
to.

-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

2743. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 04:18:21 UTC
From: Rick Karlquist <richard@karlquist.removethis.com>
Message-ID: <gen88.4033$Pz4.61254@rwcrnsc53>
Source record: 149081

"JLB" <jim.bolinger@lintek.aeroflex.com> wrote in message
news:8d5ec8a2.0202060454.ec5930c@posting.google.com...
> Using a circular array of driven elements is a simplifying 'trick'
> because all the elements have the same mutual impedance and it can
> then be essentially ignored.
>
> Sound ok, Roy?
>
> Jim
> N8EE

That is only the case if you have just the six outer elements (no center
element)
and you drive them with the same current (a fairly useless configuration).

In the case of my 7-hex array, since the currents are different, the mutual
impedance is a big player. My phasing network forces the currents in
spite of the coupling. You can model the coupling and the drive impedances
of the elements on EZNEC if you want, but they don't really matter because
of the forcing arrangement.

Rick N6RK
www.n6rk.com

2744. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 04:23:57 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C620219.6004FD81@home.com>
Source record: 149082

That is way too complicated. It only takes a resistor and capacitor and
I know it works. I use one mobile with a screwdriver antenna.

I will find the plans and post them here.
Les, AA4F

CAM wrote:
>
> I keep seeing IC-706 tuning devices advertised. They say they
> key the XMTR at the 10w level. The IC-706 manual doesn't
> yield much information about that socket. The signals are:
> TKEY, TSTR, +12, and Gnd. Does anybody know how those
> signals work? Info on the web? thanks
> --
> cheers, CAM http://www.qsl.net/w5dxp

2745. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 04:50:19 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u641sp90odn6c8@corp.supernews.com>
Source record: 149083
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

Wrong buffalo breath! I'm the 2nd term Pres of an HOA and we do select which rules to enforce and when. It's written into the charter and Design Standards that since every situation is different, lack of enforcement of a rule in one situation doesn't mean we can't enforce it in other situations.

You signed a contract. If you didn't read the CC&Rs before you bought the property, that's your bad. Be a man and live up to the obligations you signed up to. Other people probably moved into the neighborhood specifically because there were CC&Rs - don't violate their rights because you're some sorta "I'm gonna fight it..." macho man.

If you go to court, guess where the HOA's legal costs are paid from? Your dues!!! You lose either way dufus!

--

"Bill Nelson" <billn@spock.peak.org> wrote in message news:a3lot0ggq12@quark.scn.rain.com...
> In rec.radio.amateur.antenna R.U. Amused? <n6ttd@spamsuxarrl.net> wrote:
> > Thanks guys. It seems to me that the CC&R's have been "abandoned" in my area
> > (at least that is what my argument will be), based on the fact that they are
> > not enforcing the ban on satellite dishes, cars parked in the streets,
> > basketball hoops left in the street, odd window decorations, etc. They can't
> > be selective about only enforcing my violation.
>
> That is exactly true. Either they all have to be enforced - or none can
> be enforced. Of course, you might have to spend a bunch of money in court
> to get relief.
>
> --
> Bill Nelson (billn@peak.org)
>

2746. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 04:57:41 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <s8246u8cmhini65eilpmj8lof988c4ordk@4ax.com>
Source record: 149084
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

On Wed, 6 Feb 2002 23:50:19 -0500, "AstroMan"
<AstroMan@dont.bug.me.with.spam.nyet> wrote:

>Wrong buffalo breath!
<snip>
>If you go to court, guess where the HOA's legal costs are paid from? Your
>dues!!! You lose either way dufus!

Well, if crudely, said. <g>

73, Bill W7TI

2747. 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 04:58:03 UTC
From: RellikJm@yahoo.com
Message-ID: <937a202b.0202062058.9ec402f@posting.google.com>
Source record: 149085

I just purchased a 4:1 balun from LDG and was wondering how do I properly connect it to different antennas? Like a Dipole and Long wires? LDG is very confusing with the antenna symbol and a ground symbol.

Thanks,

Lost QRP'er

2748. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 05:01:11 UTC
From: Leland Cox <lcox107@home.com>
Message-ID: <3C620AD4.864884BB@home.com>
Source record: 149086

Modifications for the Icom IC-706

Picture(s) of Icom - IC-706
Here is the TUNE PLUG MOD

IC-706 10 watt tune modification/An Icom IC706 Tune Trigger

Author: Larry Lefczik, WA2EHZ - WA2EHZ@juno.com.MODIFICATION.NET

(Some assembly required)

The ICOM IC-706 has a nifty feature built in to help the operator tune the HF antenna SWR. By pushing the TUNE button on the front panel, the radio switches to CW mode and transmits a 10 Watt carrier. This state last for approximately 10 seconds or the operator can terminate sooner by pushing the button again. This was designed to work with the Icom automatic antenna tuners. There have been a few circuits developed to fool the 706 into thinking there is a Icom tuner attached and produce the same tuning signal which can be used with a manual antenna tuner or many automatic tuners, some get quite complex.

Well, being the cheap guy I am, and being one to tinker, I felt there had to be a simple way to do this. I began reading the various postings on
the Internet. I went back to an e-mail exchange I had with Ed, W1AAZ in early April 1999 on Vartel's ICOM 706 Discussion Group. Ed explained the functions of the TKEY and TSTR pins on the "AH-3" connector on the 706.

The outcome was a simple RC circuit which I have built right on a Molex connector which plugs into the AH-3 jack on the back of the IC706.

CONSTRUCTION:
The (+) side of C is connected to the 13.8VDC pin. The (-) side connected to TSTR and TKEY which are connected together. Resistor R is in parallel with C. Below is a diagram of the AH4 connector on the back of the IC706 where the < indicates the pointy end of the connector (Pin 1 = TKEY). You can buy the Molex connector at Radio Shack (#274-0224).

```
< TKEY TSTR 13.8V GND ]
|_____| |
| R |
+--///--+
| + |
+----)(----+
```

C

The values I use are C=1000uF 16WV R=92K Ohms 1/8 Watt which result in 15 seconds of tune time. As you can see, these are tied in parallel. If you want to use a physically smaller capacitor such as 440 uF, you can adjust the time by raising R. The extreme values I found are:

2K

OPERATION:
Be sure to read the manual about the various Initial Settings that can affect the operation with a tuner connected, otherwise you may go
into the TUNE mode every time you change frequency or push the PTT.

Turn off the radio and plug in the unit. Make sure you have some sort of load on the HF antenna connector. Turn on the IC706, the radio sees TSTR is high during boot up and thinks there is a tuner connected. Be sure the meter is in the SWR mode. Push the TUNE button. The TUNE light should flash counting the seconds and stay lit when finished, as stated in the manual. You may interrupt the cycle by pressing TUNE again.

If you terminate the TUNE mode early by pressing the button again, you must wait for the remainder of the time-out period to re-start.
If you don't then the cycle is started over again when you press TUNE and you still must wait, but longer. This is why I have opted for 15 seconds instead of a possible 30 seconds. One way to reset the timer is by powering the IC706 off then on.

I have noticed false triggering when the supply voltage AT THE IC706 POWER CONNECTOR drops during transmit and C has not yet totally discharged. This is caused by the TKEY voltage dropping through the trigger point because the supply voltage drops while
C is discharging. This lead me to upgrade my power supply cable so there is less voltage drop when I transmit.

ALTERNATE DESIGN:
You can eliminate the capacitor and the TKEY to TSTR connection if you want to manually trigger the IC706 into TUNE. You do need the pull-up resistor between TSTR and 13VDC to make the radio think there is a tuner present during power up. Then ground TKEY to trigger the TUNE mode as long as TKEY remains grounded.

Thanks to Ed, W1AAZ for the explanation of the connector.
Enjoy!
73 de Larry Lefczik, WA2EHZ@netzero.net.MODIFICATION.NET

This modification is read 2907 times.

top of page

add a comment

Have you any tips, trick or modifications you can't find here,
please send a mail to me.
Can't you find a modification, then don't don't e-mail me please.
All mododification that i have, is listed on this site.!
Have you problem with www.mods.dk then you can visit the support
page.

Start page

CAM wrote:
>
> I keep seeing IC-706 tuning devices advertised. They say they
> key the XMTR at the 10w level. The IC-706 manual doesn't
> yield much information about that socket. The signals are:
> TKEY, TSTR, +12, and Gnd. Does anybody know how those
> signals work? Info on the web? thanks
> --
> cheers, CAM http://www.qsl.net/w5dxp

2749. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 06:08:35 UTC
From: JB <ac6tk@nospamcybertime.net>
Message-ID: <a44ofs$2rpr$1@madmax.keyway.net>
Source record: 148813
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Forget about using a torch. It will burn off your flux leaving a mess. Use an large iron. Scrape or use fine 300-400 grit to clean to bright copper. You may have trouble with some steel if you go too deep into Copperweld though.

Jim, ac6tk

"J Titcomb" <kimoloka@hawaii.rr.com> wrote in message news:4HL78.13177$Ib.2741039@typhoon.hawaii.rr.com...
: Aloha, anyone got any suggestions for soldering weathered stranded wire? I'm
: trying to revive my G5RV which blew down during the last storm here. I've
: tried wire brushing it, sanding it, using flux...none of these work. Is
: there some homebrew secret for cleaning corrosion from copper wire, making
: it like new so it can be soldered? Some acid wash or something? Mahalo, I
: appreciate the help.
:
: Jim KH6IX
:
:

2750. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 06:49:49 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C62238D.F852A369@IEEE.org>
Source record: 149087

Leland Cox wrote:
> Modifications for the Icom IC-706

Thanks very much, Leland.
--
cheers, CAM http://www.qsl.net/w5dxp

2751. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 07:11:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a3t9md$1b7ql7$1@ID-124126.news.dfncis.de>
Source record: 149088
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

With 'curves' include 'tables'.

Curves can be fitted to. Tables can be interpolated within.

But algebraic expressions take precedence.
C and T follow later if needed.

It is cheating to work backwards in order to write books.
--
Reg.

2752. WTB:QUANTUM LOOP

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 07:28:07 UTC
From: Daniel Simpson <dzan@qwest.net>
Message-ID: <070220020128079016%dzan@qwest.net>
Source record: 149089
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

WTB:QUANTUM LOOP

please email me at:

dzan@qwest.net

2753. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 07:57:52 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <KxdHqIAAOjY8Ew6v@jmwa.demon.co.uk>
Source record: 149096
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

I read in sci.electronics.design that Reg Edwards
<g4fgq.regp@btinternet.com> wrote (in <a3t9md$1b7ql7$1@ID-
124126.news.dfncis.de>) about 'R & X for simple antennas', on Thu, 7 Feb
2002:
>With 'curves' include 'tables'.
>
>Curves can be fitted to. Tables can be interpolated within.
>
>But algebraic expressions take precedence.
>C and T follow later if needed.
>
>It is cheating to work backwards in order to write books.

Well, publishing curves and tables but not the equations from which they
were derived might be said to be the analogue equivalent of not
publishing the source code. This is not to say that your reasons for
withholding source code are not justified.

--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
After swimming across the Hellespont, I felt like a Hero.
PLEASE do NOT copy news posts to me by E-MAIL!

2754. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 08:05:09 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a3tcfl$c58$1@quark.scn.rain.com>
Source record: 149090
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

In rec.radio.amateur.antenna AstroMan <AstroMan@dont.bug.me.with.spam.nyet> wrote:
> Wrong buffalo breath! I'm the 2nd term Pres of an HOA and we do select
> which rules to enforce and when. It's written into the charter and Design
> Standards that since every situation is different, lack of enforcement of a
> rule in one situation doesn't mean we can't enforce it in other situations.

I expect that it depends on the particular HOA agreement, and even the
state in which you live. The few agreements I have read do not have the
wiggle clauses that you mention - although I can see some slimey association
putting them in so that they can do as they wish.

> You signed a contract. If you didn't read the CC&Rs before you bought the
> property, that's your bad. Be a man and live up to the obligations you
> signed up to. Other people probably moved into the neighborhood
> specifically because there were CC&Rs - don't violate their rights because
> you're some sorta "I'm gonna fight it..." macho man.

I wouldn't live in one of your god-forsaken nazi neighborhoods. There are
plenty of places to live where I can do pretty much as I please with my
property, as long as I do not make it unsafe for other people.

--
Bill Nelson (billn@peak.org)

2755. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 08:33:02 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u64euan6o7ppa4@corp.supernews.com>
Source record: 149091
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

You're more than welcome to stay in your white trash neighborhood where cars sit up on blocks in the front yard, old furniture sits in the yard, weeds have taken over the entire lawn, gutters falling down, house needs painting, kids need spanking, etc., etc., etc.

--

"Bill Nelson" <billn@spock.peak.org> wrote in message news:a3tcfl$c58$1@quark.scn.rain.com...
> In rec.radio.amateur.antenna AstroMan <AstroMan@dont.bug.me.with.spam.nyet> wrote:
> > Wrong buffalo breath! I'm the 2nd term Pres of an HOA and we do select
> > which rules to enforce and when. It's written into the charter and Design
> > Standards that since every situation is different, lack of enforcement of a
> > rule in one situation doesn't mean we can't enforce it in other situations.
>
> I expect that it depends on the particular HOA agreement, and even the
> state in which you live. The few agreements I have read do not have the
> wiggle clauses that you mention - although I can see some slimey association
> putting them in so that they can do as they wish.
>
> > You signed a contract. If you didn't read the CC&Rs before you bought the
> > property, that's your bad. Be a man and live up to the obligations you
> > signed up to. Other people probably moved into the neighborhood
> > specifically because there were CC&Rs - don't violate their rights because
> > you're some sorta "I'm gonna fight it..." macho man.
>
> I wouldn't live in one of your god-forsaken nazi neighborhoods. There are
> plenty of places to live where I can do pretty much as I please with my
> property, as long as I do not make it unsafe for other people.
>
> --
> Bill Nelson (billn@peak.org)
>

2756. Re: Antenna Construction Materials

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 08:41:31 UTC
From: ok1sip@atlas.cz
Message-ID: <8f3e93b5.0202070041.19a1f71d@posting.google.com>
Source record: 149092

Hi Ryan,
IMHO:
> Diameter and wall thickness of tubular material, how does it affect
> performance?
Keep in mind, that RF currents flow in a very thin layer near the
surface (tens of microns). Only this layer affects electrical
parameters of the antenna. The greater the outer diamater, the bigger
the surface is and the lower is the loss resistance. Simultaneously,
the bandwidth of the antenna increases. The wall thickness must be
considered for mechanical purposes only and has no influence on
electrical parameters.

> Specific Material performance, i.e. copper vs. steel and so on.
Copper is quite strong, conductive and can be soldered easily. It is
almost perfect for wire and small experimental antennas. It is a bit
costly and heavy for beams, Yagis etc.
Brass works nearly as well as copper, is cheaper and even more strong,
but oftend breaks when frost.
"Hard aluminum" (Al alloy) is fairly conductive, strong, lightweight
and cheap. The main disadvantage is it cannot be soldered in a
standard way. It is the favourite material for antennas made from
tubing an/or bars. Pure aluminum is too soft, otherwise it has the
same properties.
Steel is good for towers, but I would not use it for active elements.
It is quite lossy and ferromagnetic. Good corrosion protection is a
must.
On the contrary, copper plated steel (if available, e.g. from military
surplus) is very good. The copper surface is very conductive, can be
soldered and protects the steel core from corrosion. The steel core is
strong and does not affect electical parameters (see higher).
Another, more exotic materials ? Ask !

> Can solid core work or must it be tubular?
See higher: only the thin surface layer works. So electrically a pipe
and a bar of the same outer diameter, length and material are
identical. Consider mechanical properties.

> What methods of protecting the metal used do not affect performance? (paint?
> laquer? clear coat? etc)
Most paints do not absorb RF too much up to some GHz, but it must be
tried. Copper and aluminum alloys usually do not need any protective
coating.

BR from Ivan OK1SIP

2757. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 08:46:30 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3tf4r$4h5$1@slb4.atl.mindspring.net>
Source record: 149093
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Reg:

Heh, heh...

Since we cannot see inside your wonderful programs, how then do you expect
us to believe that they are not merely "look up tables" or interpolations of
some old Terman data?

Just wondering?

--Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a3t9md$1b7ql7$1@ID-124126.news.dfncis.de...
> With 'curves' include 'tables'.
>
> Curves can be fitted to. Tables can be interpolated within.
>
> But algebraic expressions take precedence.
> C and T follow later if needed.
>
> It is cheating to work backwards in order to write books.
> --
> Reg.
>
>
>

2758. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 10:42:20 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202070242.79ebc1ca@posting.google.com>
Source record: 149094

"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<B9f88.660$9_3.334086@paloalto-snr1.gtei.net>...
> Don't overlook the fact that you aren't locked into using ONLY a mobile whip with the screwdriver
> base - you MIGHT see a substantial benefit from attaching the base to a substantially longer run of
> wire, and then use the screwdriver base to "tune" that random wire. I have used that method a number
> of times - and it works great, especially on he lower frequency bands - 40 meters and lower...

Sure, that works great and increases the efficiency quite a bit. The only thing is to run the wire off away from the car or rv to a tree or small mast. I once talked to a friend of mine who was down on the coast towards Corpus. He had only a 40m hustler antenna, but it was getting dark, and 80m was the better band for us. He was about ready to hang it up, but I just told him to clip a wire onto the top of his stinger and run it off to a tree, which he did. Worked fine. I'm sure better than most normal 80m mobile antennas being so long. As mentioned, it's also a handy way to change bands with high band hamsticks, hustlers, or whatever. You can take a 10m hamstick on the car, and some wire and clips and work all bands as long as you are sitting still next to a tree. And the efficiency will be fairly high on all bands. You might need a pretty long wire on 80m though... Once you trim a wire for a band, keep it for future use so you don't have to keep trimming them. I do the same thing with stinger whips in order to be drivable. My normal 20m antenna is 5 ft of stick, with 2 ft of stinger. It works much better on 20m than the 20m hamstick I have which is pretty lousy with it very short stinger. I use the 20m hamstick and a 5 ft stinger for 40m. But I once tried this same thing, only running the wire across the roof and sloping downwards and tied off to the front of the hood. Was terrible. I could hardly get out at all although it would seem to be working ok at first glance. I took the wire off, and gave a quick call and I was back to normal. The coupling to the roof and hood just killed it dead. MK

2759. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 10:46:15 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c625898$1_4@corp.newsgroups.com>
Source record: 149095

"Jay" <RellikJm@yahoo.com> wrote in message
news:937a202b.0202062058.9ec402f@posting.google.com...
> I just purchased a 4:1 balun from LDG and was wondering how do I
> properly connect it to different antennas? Like a Dipole and Long
> wires? LDG is very confusing with the antenna symbol and a ground
> symbol.
>
> Thanks,
>
> Lost QRP'er
Hi,

I've done the following in the Past,
Use it to feed a dipole cut for the lowest frequency of interest , fed with
open wire or Ladder line. contenting one side to ground and the other to
end fed wire will work if the wire is approximatel 1/2 wave or odd multiple,
if wire is 1/4 wave or odd multiple by pass the balun. End fed 1/2 wave fed
with 1/4 wave open wire connect balun to open wire line.
Hope this will be of some help.
73 Dave kc1di // always qrp

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.320 / Virus Database: 179 - Release Date: 1/30/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

2760. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 11:07:26 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202070307.2735f362@posting.google.com>
Source record: 149097

Leland Cox <lcox107@home.com> wrote in message news:<3C620AD4.864884BB@home.com>...
> Modifications for the Icom IC-706
>
> Here is the TUNE PLUG MOD

Thanks. I might have to make me one of those. I knew they existed, but I had never bothered finding a circuit. It get's kind of old having to switch to AM or RTTY and then reduce power in the menu to check SWR. I wish they would have used a tad more power than ten watts though. The SWR metering doesn't seem to be too accurate until you are doing 20-30 watts. "Comparing my 706 swr meter to my outboard meter". But I guess it's still plenty for finding the dip when tuning mobile. MK

2761. Re: Antennas (as seen thru IE6}

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 11:58:38 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <TZt88.40$kL1.68989@newsfeed.slurp.net>
Source record: 149098

Hi, Richard:

I'm tangentially aware of the M$ shortcomings you mention, and others, and I run thru a multi-level firewall in the perhaps fond hope of avoiding being exploited by such terrorists as are out there ... the 'net has done much to expose at least several more layers of the unwary to these hyenas and jackals.

However .. all I really want is a few bug-fixes, or at least some explanation of these 'undocumented features' ;o)))

73, Dave, K3BHJ

2762. Re: Antennas (as seen thru IE6}

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 12:02:00 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <11u88.41$kL1.69249@newsfeed.slurp.net>
Source record: 149099

F11 DNW on mail/newsreader here; only on browser .. drat. Or, am I doing something wrong?

73, Dave, K3BHJ

2763. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 13:27:30 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202070527.3e632d71@posting.google.com>
Source record: 149100

"Rick Karlquist" <richard@karlquist.removethis.com> wrote in message
news:<gen88.4033$Pz4.61254@rwcrnsc53>...

> That is only the case if you have just the six outer elements (no center
> element)
> and you drive them with the same current (a fairly useless configuration).
>

Yes, I forgot to mention 'no center element'.

The current magnitude would be the same for a symmetrical, but the
phases can be different. Since all the feedpoint impedances would be
the same it makes it easier adjusting the phases.

However, in the most general case you want to be able to adjust both
the phase and amplitude of the current. There are ways to decrease
the sidelobes, at the expense of a slightly larger main lobe, by
carefully tapering the element currents. All of this is explained in
Antennas (Kraus) for linear arrays but can be expanded for 2-D (and
even 3-D) arrays.

It is when you have a non symmetric array, where each element will
have a different feedpoint impedance, that things get fun. I went
through the calculations (brute force, not using Eznec) many years ago
for my MSEE thesis.

Jim
N8EE

2764. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 13:28:14 UTC
From: KC8PMX <kc8pmx@nospamtm.net>
Message-ID: <Ohv88.393$TS.46572@newshog.newsread.com>
Source record: 149101

No, I am not overthinking it, and was asking a simple question. Every diagram and material I have seen shows it using copper for the elements part of the antenna and the bottom support.

As far as the ARRL materials, there is nowhere to buy them around here, with the closest place being over 2 hours away. I would love to purchase amateur radio texts, but there is nowhere to go and purchase these items.

Thanks anyways...

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message news:3C6130C9.255E1FE5@tampabay.rr.com...
> that section is used to mount the antenna so it needs to be stiff and strong
> after reading your last two posts i think you are over thinking this stuff its
> just antenna construction not rocket science
> you need to buy the ARRL antenna book and the ARRL handbook both will tell you
> most of what you need/wamt to learn
>
> KC8PMX wrote:
>
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> >
> > My question is the part of the J-pole antenna that is marked by the line and
> > arrows, does this part of the antenna HAVE to be a metallic material or can
> > other material be used?

> > Can't seem to find the answer to my question so I am posing it here.
> >
> > Thanks in advance.
> >
> > Ryan KC8PMX
>

2765. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 13:49:35 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C6285EF.5E0CE6C7@crosslink.net>
Source record: 149102
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

AstroMan wrote:
>
> Wrong buffalo breath! I'm the 2nd term Pres of an HOA and we do select
> which rules to enforce and when. ...

Well then, buffalo breath's solution is obvious: eliminate HOA prexys
til he gets one who likes antennas.
Cheers
KA3DWW

2766. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 13:51:37 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3u130$a1t$1@slb3.atl.mindspring.net>
Source record: 148980

What?

2767. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 13:52:27 UTC
From: azacdoc1 <azacdoc1@home.com>
Message-ID: <vEv88.36735$vc.6012896@news1.rdc1.az.home.com>
Source record: 149103
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

Well, its obvious theres a couple of assholes in this group!

"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
news:u64euan6o7ppa4@corp.supernews.com...
> You're more than welcome to stay in your white trash neighborhood where
cars
> sit up on blocks in the front yard, old furniture sits in the yard, weeds
> have taken over the entire lawn, gutters falling down, house needs
painting,
> kids need spanking, etc., etc., etc.
>
> --
>
> "Bill Nelson" <billn@spock.peak.org> wrote in message
> news:a3tcfl$c58$1@quark.scn.rain.com...
> > In rec.radio.amateur.antenna AstroMan
> <AstroMan@dont.bug.me.with.spam.nyet> wrote:
> > > Wrong buffalo breath! I'm the 2nd term Pres of an HOA and we do
select
> > > which rules to enforce and when. It's written into the charter and
> Design
> > > Standards that since every situation is different, lack of enforcement
> of a
> > > rule in one situation doesn't mean we can't enforce it in other
> situations.
> >
> > I expect that it depends on the particular HOA agreement, and even the
> > state in which you live. The few agreements I have read do not have the
> > wiggle clauses that you mention - although I can see some slimey
> association
> > putting them in so that they can do as they wish.
> >
> > > You signed a contract. If you didn't read the CC&Rs before you bought
> the
> > > property, that's your bad. Be a man and live up to the obligations
you
> > > signed up to. Other people probably moved into the neighborhood
> > > specifically because there were CC&Rs - don't violate their rights
> because
> > > you're some sorta "I'm gonna fight it..." macho man.
> >
> > I wouldn't live in one of your god-forsaken nazi neighborhoods. There
are

> > plenty of places to live where I can do pretty much as I please with my
> > property, as long as I do not make it unsafe for other people.
> >
> > --
> > Bill Nelson (billn@peak.org)
> >
>
>

2768. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 13:59:26 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C62883D.DAE5DD5C@crosslink.net>
Source record: 149104
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

AstroMan wrote:
>
> If you go to court, guess where the HOA's legal costs are paid from?
> Your dues!!! You lose either way dufus!

BTW, that isn't *necessarily true*. I know of at least one case where the court ruled that other homeowners would have to demo that their property values were hurt before a CC&R could be enforced based on previous decisions on racial CC&Rs. They couldn't so the CBr got to keep his antenna. End of story? Nope! As a HOA member he then sued the HOA prez who'd taken him to court in the first place and that *individual* had to repay the HOAs legal expenses for bringing a frivilous lawsuit. He had to sell his house to do so. Naturally YMMV.
Enjoy
KA3DWW

2769. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 14:20:16 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C628D20.1AA126E4@crosslink.net>
Source record: 149105

KC8PMX wrote:
>
> No, I am not overthinking it, and was asking a simple question. Every
> diagram and material I have seen shows it using copper for the elements
> part of the antenna and the bottom support.
>
> As far as the ARRL materials, there is nowhere to buy them around here,
> with the closest place being over 2 hours away.

AFAIK the "antenna" is just the "J" ... it doesnt matter what the support is made of so long as it is strong enough to support the rest of your creation. I have seen J-Poles mounted on the rear deck of automobiles.

A quick <www.dogpile.com> search for "copper cactus" turned up this among many others: <http://www.n7qvc.com/copper.html> . It's made from household copper pipe E fittings available anywhere homes are built. Alternately, Arrow antenna <http://hometown.aol.com/Arrow146/index.html> makes good looking aluminum J-poles and Yagis out of arrow shafts as the name implies.
73 KA3DWW

2770. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 14:35:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C6290B7.EC848DA8@IEEE.org>
Source record: 149106

Mark Keith wrote:
>
> Leland Cox <lcox107@home.com> wrote in message news:<3C620AD4.864884BB@home.com>...
> > Modifications for the Icom IC-706
> >
> > Here is the TUNE PLUG MOD
>
> Thanks. I might have to make me one of those. I knew they existed, but
> I had never bothered finding a circuit. It get's kind of old having to
> switch to AM or RTTY and then reduce power in the menu to check SWR. I
> wish they would have used a tad more power than ten watts though. The
> SWR metering doesn't seem to be too accurate until you are doing 20-30
> watts. "Comparing my 706 swr meter to my outboard meter". But I guess
> it's still plenty for finding the dip when tuning mobile. MK

The protection circuitry in the IC-706 works to reduce output power
to keep the reflected power limited to a certain amount. For years,
I have found a clear frequency and tuned my screwdriver without
manually lowering my output power setting.
--
cheers, CAM http://www.qsl.net/w5dxp

2771. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 14:47:22 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <k5356uskja8hlp4lv8loh2pjjvr3nsak5i@4ax.com>
Source record: 149107
Cross-posted to: rec.radio.amateur.antenna,rec.ham-radio,alt.ham-radio

On Thu, 7 Feb 2002 03:33:02 -0500, "AstroMan"
<AstroMan@dont.bug.me.with.spam.nyet> wrote:

>You're more than welcome to stay in your white trash neighborhood where cars
>sit up on blocks in the front yard, old furniture sits in the yard, weeds
>have taken over the entire lawn, gutters falling down, house needs painting,
>kids need spanking, etc., etc., etc.

Your portrayal of what non-CC&R living is like is utterly brainless,
bigoted bullshit.

No, what I object to is some nitwit telling me I can't install a split
rail fence around some portion of my yard. I object to the inspectors
telling me after the fact that the color I painted my front door or
the knocker I installed on it are not allowed. I object to a
committee member saying my neighbor can't install a floodlight the
drive way when the only provision in the HOA rules against this is
committee discretion and we both agreed to it.

I don't have a car on blocks in my yard. My kids are well behaved. I
keep my gutters in good repair, and we spend many a day during the
spring, summer and early fall mowing, weeding, planting, painting and
so on.

And guess what? I don't have a CC&R. All I have that might offend
your sensibilities are the occasional company work truck (large
pick-up truck) and a few very discreet wire antennas. Gee. Imagine
that.

You have been living in isolation for too long. Go out in the real
world and get a reality check. Rural living in a 100 year old farm
house ain't what you think it is. You may be living in the veneer of
a bucolic suburban enclave, but if you scratch the surface, I think
you'll find that your attitudes are probably more bigoted and nasty
than any you'll find out here.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2772. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 14:47:53 UTC
From: SAM <xxscottm@xxnetcommander.comxx>
Message-ID: <tsw88.14009$Mo3.834761@bin3.nnrp.aus1.giganews.com>
Source record: 149108

"KC8PMX" <kc8pmx@nospamtm.net> wrote in message

> As far as the ARRL materials, there is nowhere to buy them around here,
with
> the closest place being over 2 hours away. I would love to purchase
amateur
> radio texts, but there is nowhere to go and purchase these items.

Just in case you were not aware, you can order ARRL reference material on
line at www.arrl.org or mail order any item they offer.

2773. Re: J-Pole Question - OT

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 14:52:08 UTC
From: AB2HR <ab2hr@arrl.net>
Message-ID: <pa256ug2rttd7f3uuhkbcbjkg8u0eng475@4ax.com>
Source record: 149109

On 06 Feb 2002 15:47:10 GMT, jcplpsm@aol.communicate (SAM) wrote:

>>Diagnosed Type II Diabetes March 5 2001
>>Beating it with diet and exercise!
>>297/215/210 (to be revised lower)
>>58"/43"(!)/44" (already lower too!)
>
>Congratulations Irv and keep up the good work! You are proof that lifestyle
>changes are a great approach to curing natures errors.

Well, your weight and measurement reductions are commendable (having
myself gone from 360+ lbs to my current 270lbs and from a 54" waist to
a 48"), when considering your situation a more important factor are
your serum glucose levels... Are THEY as well controlled as your
weight?

Raymond Sirois AB2HR
SysOp: The Lost Chord BBS
607-733-5745
telnet:\\thelostchord.dns2go.com:6000

2774. Re: Azimuthal Maps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 15:07:57 UTC
From: Larry Gauthier <larryg5099@chartermi.net>
Message-ID: <u6562me1ve2u7d@corp.supernews.com>
Source record: 149110
Body handling: HTML body converted to readable text

Cam,

Take a look at the DX4WIN logging program (even the demo will do this much...). If you enter a call sign (or just the prefix) the program calculates the distance to center of country/state and the correct azimuth from your QTH. If you enter in IOTA number or the grid locator square, the system calculates the distance/direction to that location rather than the center of the country.

When you display the globe (in the QSO details window, select indow, orld map) it draws short and long path lines on a globe depicting the countries of the world. You can zoom in/out by pressing or , and you can set the program to display the gray line boundaries based on time of day. You can spin the globe around by selecting a portion of the world, pressing and holding-down the left mouse button, and moving the mouse. Oh, and you can print it if you want.

Very slick...

-larry
K8UT

"CAM" wrote in message
news:3C61991A.5A610AB8@IEEE.org...
> Al wrote:
> >
> > Is there a site which generates azimuthal maps similar to
> >
> > http://www.wm7d.net
> >
> > but the map is a more recognizable projection of a specific area? In
other
> > words if I generate an azimuthal map centered on Texas, the US and South
> > America look pretty good, Africa is barely recognizable, and Europe and
Asia
> > do not resemble Europe and Asia at all. I would like to see a map of
Europe
> > or Asia (only) showing the projection lines coming from Texas. I realize
> > that the lines would no longer be straight, they would probably be
portions
> > of a sine wave, but I would be able to identify countries within Europe.
> >
> > All information will be greatly appreciated. Thank you.
>
> Have you tried giving the software the long/lat halfway between

> the transmitter and the receiver?
> --
> cheers, CAM http://www.qsl.net/w5dxp

2775. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 15:10:26 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u6567f6k6fc7bb@corp.supernews.com>
Source record: 149111
Cross-posted to: rec.radio.amateur.antenna,rec.ham-radio,alt.ham-radio

I lived in a non-CC&R neighborhood for many years and was subjected to all the crap I mentioned in my previous post. Believe me, it's better where I am now.

This knife cuts both ways. I got pissed when the HOA guys told me I couldn't have a hose reel mounted to the side of my house. Well, I didn't just get mad - I got even - I'm now the (second term) President of the HOA. So, quit bitching and do something!!!

--

"Jake Brodsky" <frussle@erols.com> wrote in message news:k5356uskja8hlp4lv8loh2pjjvr3nsak5i@4ax.com...
> On Thu, 7 Feb 2002 03:33:02 -0500, "AstroMan"
> <AstroMan@dont.bug.me.with.spam.nyet> wrote:
>
> >You're more than welcome to stay in your white trash neighborhood where cars
> >sit up on blocks in the front yard, old furniture sits in the yard, weeds
> >have taken over the entire lawn, gutters falling down, house needs painting,
> >kids need spanking, etc., etc., etc.
>
> Your portrayal of what non-CC&R living is like is utterly brainless,
> bigoted bullshit.
>
> No, what I object to is some nitwit telling me I can't install a split
> rail fence around some portion of my yard. I object to the inspectors
> telling me after the fact that the color I painted my front door or
> the knocker I installed on it are not allowed. I object to a
> committee member saying my neighbor can't install a floodlight the
> drive way when the only provision in the HOA rules against this is
> committee discretion and we both agreed to it.
>
> I don't have a car on blocks in my yard. My kids are well behaved. I
> keep my gutters in good repair, and we spend many a day during the
> spring, summer and early fall mowing, weeding, planting, painting and
> so on.
>
> And guess what? I don't have a CC&R. All I have that might offend
> your sensibilities are the occasional company work truck (large
> pick-up truck) and a few very discreet wire antennas. Gee. Imagine
> that.
>

> You have been living in isolation for too long. Go out in the real
> world and get a reality check. Rural living in a 100 year old farm
> house ain't what you think it is. You may be living in the veneer of
> a bucolic suburban enclave, but if you scratch the surface, I think
> you'll find that your attitudes are probably more bigoted and nasty
> than any you'll find out here.
>
>
> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"

2776. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 15:12:42 UTC
From: AstroMan <AstroMan@dont.bug.me.with.spam.nyet>
Message-ID: <u656bme98temef@corp.supernews.com>
Source record: 149112
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

Actually, that is a good solution - just wait till a board with more
favorable views takes office. Or...

RUN FOR OFFICE YOURSELF!

--

"Vito" <vito@crosslink.net> wrote in message
news:3C6285EF.5E0CE6C7@crosslink.net...
> AstroMan wrote:
> >
> > Wrong buffalo breath! I'm the 2nd term Pres of an HOA and we do select
> > which rules to enforce and when. ...
>
> Well then, buffalo breath's solution is obvious: eliminate HOA prexys
> til he gets one who likes antennas.
> Cheers
> KA3DWW

2777. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 15:40:16 UTC
From: richardharrison@webtv.net
Message-ID: <17011-3C629FE0-13@storefull-116.iap.bryant.webtv.net>
Source record: 149115

Mark Keith wrote:
"I think Richard Harrison once said he knew a guy that tried them."

That was my father-in-law, Phil Rand, W1DBM. He erected an in-line array of (8) 1/4-wave ground mounted verticals spaced 1/4-wave apart over a good number of radials. As a parasitic array it was a disappointment, so he drove all the elements and it became a great performer. He wrote an article about the experience in one of the ham magazines.

Best regards, Richard Harrison, KB5WZI

2778. Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 15:46:58 UTC
From: Andrew Munro <andrewmunro@austarnet.com.au>
Message-ID: <a3u7b5$7rb$1@austar-news.austarnet.com.au>
Source record: 149113

In the near future I plan on putting a base antenna on a 10 foot mast and then mounting the whole thing atop of a corrugated iron roof of a house. The whole roof is made from corrugated iron, and the roof is well earthed to the ground on one side about 20 feet from where the antenna will be mounted, by 8 square iron 2" X 2" support posts wich hold up the verandah edge.

I am concerened because I do not know the effects of a potential lightning strike to the antenna, with reguards house damage.
Is there someone who can estimate the likelyhood of damage to the house for me, and what would be the best way to minimise potential damage?

I presume, if lightning hit the antenna, it would be destroyed, and my radio would be destroyed, is there a way to avoid this.

PS, I do live in an area where there are heaps of electrical storms during the summer months

Any help would be apreiciated.

Andy

2779. Re: Antennas (as seen thru IE6}

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 16:11:34 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <s3756ukg349j9ltco4th6938eeblmg1pb6@4ax.com>
Source record: 149114

On Thu, 7 Feb 2002 07:02:00 -0500, "David J. Windisch"
<davidw@copper.net> wrote:

>F11 DNW on mail/newsreader here; only on browser .. drat. Or, am I doing
>something wrong?
>
>73, Dave, K3BHJ

I only use the browser for the web, not for mail/news, so can't help
with that. Sorry.

73, Bill W7TI

2780. Re: Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 16:18:55 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C62A8C9.2FD152DA@tampabay.rr.com>
Source record: 149116

hey andy
about the best way to avoid the lightening from hitting your rig is to unhook the coax and short it to ground
but there is very little to keep the stuff from hitting your antenna if its a fiberglass one it will rain down all over your yard.....grin
good luck

Andrew Munro wrote:

> In the near future I plan on putting a base antenna on a 10 foot mast and
> then mounting the whole thing atop of a corrugated iron roof of a house. The
> whole roof is made from corrugated iron, and the roof is well earthed to the
> ground on one side about 20 feet from where the antenna will be mounted, by
> 8 square iron 2" X 2" support posts wich hold up the verandah edge.
>
> I am concerened because I do not know the effects of a potential lightning
> strike to the antenna, with reguards house damage.
> Is there someone who can estimate the likelyhood of damage to the house for
> me, and what would be the best way to minimise potential damage?
>
> I presume, if lightning hit the antenna, it would be destroyed, and my radio
> would be destroyed, is there a way to avoid this.
>
> PS, I do live in an area where there are heaps of electrical storms during
> the summer months
>
> Any help would be apreiciated.
>
> Andy

2781. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 16:23:44 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <9ea56u8ot2v2o94uuv7afpuuknij2fsro1@4ax.com>
Source record: 148971

On Thu, 07 Feb 2002 13:28:14 GMT, "KC8PMX" <kc8pmx@nospamtm.net>
wrote:
>
>As far as the ARRL materials, there is nowhere to buy them around here, with
>the closest place being over 2 hours away. I would love to purchase amateur
>radio texts, but there is nowhere to go and purchase these items.
>
You can purchase those items here: http://www.arrl.org/catalog/

73
Danny

2782. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 16:29:20 UTC
From: richardharrison@webtv.net
Message-ID: <6153-3C62AB60-148@storefull-118.iap.bryant.webtv.net>
Source record: 148969

Jim Bolinger wrote:
"If there are losses then the gain would be less but you will have the same antenna pattern."

Maybe not in both planes. See Fig 3 on page 3-5 of the 19th edition of the ARRL Antenna Book where: "The solid line is the pattern for perfect earth. The shaded pattern shows how the response is modified over average earth---." (Both amplitude and pattern shape are changed by the loss.)

Jim also wrote: "Gain and directivity are directly related only if there are no losses in the antenna."

Sort of, maybe. See above. But, directivity comes from concentration of a given energy into a smaller directional area, and this is identical with gain for a given loss.

Best regards, Richard Harrison, KB5WZI

2783. identify antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 16:33:01 UTC
From: gws@redbird.net
Message-ID: <ef4073c.0202070833.51c6f9d5@posting.google.com>
Source record: 149117

A number of years ago I picked up a triband antenna. It was a made by a 2 call area ham and sold a a semi commerical short production run antenna.

Its a tri-band (10,15,20). The booms and elements are all fiberglass with imbeded copper wire inbetween the fiberglass to make up the antenna. Its reasonably light want and I wanted to start using it as a portable antenna.

I dont have any assembly or tuning info.

Anyknow have or know more about this antenna. I can provide digital pics if you need additional help

Gary N8EMR

2784. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 16:44:52 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <hga56u0c3n83u1qver0g254qp8hgho1q6p@4ax.com>
Source record: 149118
Cross-posted to: rec.radio.amateur.antenna,rec.ham-radio,alt.ham-radio

On Thu, 7 Feb 2002 10:10:26 -0500, "AstroMan"
<AstroMan@dont.bug.me.with.spam.nyet> wrote:

>I lived in a non-CC&R neighborhood for many years and was subjected to all
>the crap I mentioned in my previous post. Believe me, it's better where I
>am now.

I did exactly the opposite. I started at a place where the HOA ruled
with an iron fist. The last straw was when some clipboard toting
woman with an attitude asked my wife if the color on our door was
approved. My wife replied "Well, it's the best I could do to match a
faded color at the hardware store under fluorescent lights." After
that we wanted out.

Oh and if you think an HOA keeps the value up, get this: I SOLD AT A
SUBSTANTIAL LOSS. That's how bad I wanted out. My only consolation
for losing money on that deal is that it pissed off the HOA almost as
much as it did me.

>This knife cuts both ways. I got pissed when the HOA guys told me I
>couldn't have a hose reel mounted to the side of my house. Well, I didn't
>just get mad - I got even - I'm now the (second term) President of the HOA.
>So, quit bitching and do something!!!

I did it. Now I don't have to do anything about this sort of
foolishness ever again. --That is until the HOA nazis get tired of
their own little enclaves and try to take over the whole county. That
nearly happened a couple years ago.

Enforcing rules of aesthetics on your neighbor seems like an exercise
in mind control to me. I despise it. I don't want to have to run for
office to get my neighbor off my case. If that's what makes your day
complete, more power to you. I'd rather spend my spare time flying my
airplane, tinkering in my radio shack, flying kites in our hay field
with my kids, or dreaming up new tree-house designs. That's my life.
Where's yours? --Oh I forgot: You need to check up on your neighbors,
don't you? Well, I hope you like it.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2785. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 16:49:09 UTC
From: fachman <fachman@sprintnet.pl>
Message-ID: <a3ub45mmj1@news.tpi.pl>
Source record: 148970

> The important thing is the loss in the feedline, not
> it's size. For UHF/SHF the size will probably be larger
> than for HF, but that has to do with loss of the cable.
> If you're speaking about using a wave guide for a feed
> line the 'size' does make a difference, but I really
> doubt if that's going to be a problem for you...

But what about the lenght of such cable, does it matters? Shouldn`t be also some multipler?

Greetings

2786. Re: Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 18:38:00 UTC
From: mike.luther@ziplog.com
Message-ID: <u65ic8bhm7f58c@corp.supernews.com>
Source record: 148972

In <a3u7b5$7rb$1@austar-news.austarnet.com.au>, "Andrew Munro"
<andrewmunro@austarnet.com.au> writes:

Andy, you are probably in luck ..

>In the near future I plan on putting a base antenna on a 10 foot mast and
>then mounting the whole thing atop of a corrugated iron roof of a house. The
>whole roof is made from corrugated iron, and the roof is well earthed to the
>ground on one side about 20 feet from where the antenna will be mounted, by
>8 square iron 2" X 2" support posts wich hold up the verandah edge.
>
>I am concerened because I do not know the effects of a potential lightning
>strike to the antenna, with reguards house damage.
>Is there someone who can estimate the likelyhood of damage to the house for
>me, and what would be the best way to minimise potential damage?
>
>I presume, if lightning hit the antenna, it would be destroyed, and my radio
>would be destroyed, is there a way to avoid this.
>
>PS, I do live in an area where there are heaps of electrical storms during
>the summer months
>
>Any help would be apreiciated.
>
>Andy

There are no guarantees, but in similar fashion, airliners fly around
this stuff all the time and even take direct hits, mostly without major
problems. The reason is that lightning is an RF issue! It travels over
the SURFACE of the conductor. Yes, they take special precautions to
keep the stuff out of fuel tanks and helping it leave the airframe! And
yes, there are horror stories. but our Beech Baron was hit a number of
times with me flying it. I'm still here. People on the INSIDE of a
metal cage are generally relatively safe!

If your antenna is a grounded antenna and bonded directly to the metal
roof, and the feed line goes through the roof such that a metal skin
path is created between it and the roof, things should start looking up
for you! At that point, the idea is to make sure that whatever
lightning strike RF voltage that is on the INSIDE of the feed line
conductor doesn't go inside, but is shifted to the outside skin of the
whole system as well.

To that effect, one would presume that you are going to use a coaxial
form of feed line for this antenna. If you then put a proper Polyphaser
or other gas discharge lightning suppressor unit there where the feed

line goes through the roof or, at the point where it exits the roof to go down under it and inside, you may have done enough to stop your worries.

The idea is that you want the inductance along the skin and outer conductor path to be far less in impedance to what will be seen going into the shack. From there the gas discharge operation shunts the surge to that low impedance path for the surge to ground. Inside, your equipment will be relatively safe.

A pretty fair showing of faith toward that statement would be that you have likely never had any damage problems with the roof there that way for anything inside the building, right?

As you investigate this idea, also keep in mind that your real intent is to keep the impedance of the path to ground as low as possible. With that in mind, even though the whole structure is metal, as you say, it is worth investigation to help this out a bit. Where you do the mitigation work to implement this, adding a copper sheet conductor for the ground path down to the ground on the pole leg and shortest path from the gas discharge device, will give you some added protection, per the professional books on all this.

Polyphaser has or had a web site devoted to the science of protection things which must remain working. It's not cheap stuff, and there are other competitive devices. But with the full metal jacket around you to start with, you are starting off much better than most folks to handle the visits!

--> Sleep well; OS/2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

2787. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 18:52:44 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <l5h56ug68frqts9p966avh2n0gvkd6v3jg@4ax.com>
Source record: 148973
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On Thu, 7 Feb 2002 03:46:30 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Since we cannot see inside your wonderful programs, how then do you expect
>us to believe that they are not merely "look up tables" or interpolations of
>some old Terman data?
>

Our Punchinello a plagiarist?

I love the way this board mimics the headlines of the local paper. We
have a die-hard petitioner (one Tim Eyman) who has claimed for years
he doesn't make a nickel off the initiatives he heads. Not even that
quarter million bucks... for car expenses and stamps. We certainly
live in the age of denial.

But in all honesty, I have never seen Terman reference the measurement
of mud in the kitchen sink, so I think that "Intellectual Property"
may be original to our Old Wife. Is there an uh-zipped MUDPRECISION
program? Woops! The Old Wife sweeps her recipes under her apron as
we approach. ;-)

That last is so funny given Punchinello lays claims to its simplicity
(which he has yet to describe) and to its results (which seem to be
elusive) and to its intellectual inheritance (which seem to lack
references). The method is so intuitive (like a CFA) that it defies
description beyond the rudimentary first step of filling a bucket with
mud (and muttered claims of using alligator clips - which evolved more
into the discussion of the comparison/contrast to crocodiles). I can
only suppose you infer the characteristics from the number of steps
you can traverse before you give up hauling it toward the kitchen. 10
Ohms per step and toss in 10 Ohms reactance for each stumble? I don't
need to see the source code for that, thank you (and I already know
the difference between crocs and gators).

Such glaring contrast to Terman's clear and open style.

73's
Richard Clark, KB7QHC

2788. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 19:00:06 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <W8A88.257$sk6.567980@paloalto-snr2.gtei.net>
Source record: 148974

"Mark Keith" <nm5k@wt.net> wrote on the subject of trying to run a wire antenna relativey close to
a vehicle body...

But I once tried this same thing,
> only running the wire across the roof and sloping downwards and tied
> off to the front of the hood. Was terrible. I could hardly get out at
> all although it would seem to be working ok at first glance. I took
> the wire off, and gave a quick call and I was back to normal. The
> coupling to the roof and hood just killed it dead. MK

Which was MY point on inefficiency often present when attempting to operate antennas too close to
adjacent structures - frequently, even apparent non-conductive surfaces will GREATLY inhibit
radiation ability of such antenns - sure, you probably WILL make some contacts, just at a rather
POOR level of efficiency!

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

2789. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 19:03:06 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <KbA88.273$sk6.573661@paloalto-snr2.gtei.net>
Source record: 148975

I'm puzzled as to why ANY such device is "needed" - I operate my 706 into a screwdriver, and also an
SGC 230 autotuner... I merely place the function switch in the AM position, key the rig while
monitering SWR, and awaaaay we go! WHY the "need" for some "special" device?

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"CAM" <Cecil.A.Moore@IEEE.org> wrote in message news:3C62238D.F852A369@IEEE.org...
> Leland Cox wrote:
> > Modifications for the Icom IC-706
>
> Thanks very much, Leland.
> --
> cheers, CAM http://www.qsl.net/w5dxp

2790. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 19:22:51 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C62D40B.8861BDBF@crosslink.net>
Source record: 148976

Gary - KJ6Q wrote:
>
> I'm puzzled as to why ANY such device is "needed" - I operate my 706 into a screwdriver, and also an SGC 230 autotuner... ...

Yaaa, well (big wink) you might know there'd be *somebody* trying to get
off cheap by not paying for an unnecessary product. Prolly camps at
Walmart.
73 KA3DWW

2791. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 19:39:28 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C62D7F0.43C3018@crosslink.net>
Source record: 148977

Gary - KJ6Q wrote:
>
> "Mark Keith" <nm5k@wt.net> wrote on the subject of trying to run a wire antenna relativey close to
> a vehicle body...
>
> But I once tried this same thing,
> > only running the wire across the roof and sloping downwards and tied
> > off to the front of the hood. Was terrible. I could hardly get out at
> > all although it would seem to be working ok at first glance. I took
> > the wire off, and gave a quick call and I was back to normal. The
> > coupling to the roof and hood just killed it dead. MK
>
> Which was MY point on inefficiency often present when attempting to operate antennas too close to
> adjacent structures - frequently, even apparent non-conductive surfaces will GREATLY inhibit
> radiation ability of such antenns - sure, you probably WILL make some contacts, just at a rather
> POOR level of efficiency!
>
Nobody disagrees. Question is, would a short, loaded vertical
(screwdriver) close to an adjacent structure (a MH) be as efficient as a
full-size horizontal dipole or inverted L, close to the same structure?
KA3DWW

2792. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 19:41:42 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C62D876.E996D160@IEEE.org>
Source record: 148978

Gary - KJ6Q wrote:
> I'm puzzled as to why ANY such device is "needed" - I operate my 706 into a screwdriver, and also an
> SGC 230 autotuner... I merely place the function switch in the AM position, key the rig while
> monitering SWR, and awaaaay we go! WHY the "need" for some "special" device?

Well, 10 watts does cause less interference than 40 watts.
--
cheers, CAM http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
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2793. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 20:05:56 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <E6B88.437$sk6.654527@paloalto-snr2.gtei.net>
Source record: 148982

TOO many variables - what vehicle/structure, how close the antenna, what band, which way is the wind
blowing, etc., etc. :-)

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"Vito" <vito@crosslink.net> wrote in message news:3C62D7F0.43C3018@crosslink.net...
> Gary - KJ6Q wrote:
> >
> > "Mark Keith" <nm5k@wt.net> wrote on the subject of trying to run a wire antenna relativey close
to
> > a vehicle body...
> >
> > But I once tried this same thing,
> > > only running the wire across the roof and sloping downwards and tied
> > > off to the front of the hood. Was terrible. I could hardly get out at
> > > all although it would seem to be working ok at first glance. I took
> > > the wire off, and gave a quick call and I was back to normal. The
> > > coupling to the roof and hood just killed it dead. MK
> >
> > Which was MY point on inefficiency often present when attempting to operate antennas too close
to
> > adjacent structures - frequently, even apparent non-conductive surfaces will GREATLY inhibit
> > radiation ability of such antenns - sure, you probably WILL make some contacts, just at a rather
> > POOR level of efficiency!
> >
> Nobody disagrees. Question is, would a short, loaded vertical
> (screwdriver) close to an adjacent structure (a MH) be as efficient as a
> full-size horizontal dipole or inverted L, close to the same structure?
> KA3DWW

2794. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 20:24:34 UTC
From: Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna65ok7.8hb.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 148979

On Thu, 07 Feb 2002 08:23:44 -0800, Dan Richardson <k6mhe@arrl.net> wrote:
> On Thu, 07 Feb 2002 13:28:14 GMT, "KC8PMX" <kc8pmx@nospamtm.net>
> wrote:
>>As far as the ARRL materials, there is nowhere to buy them around here, with
>>the closest place being over 2 hours away. I would love to purchase amateur
>>radio texts, but there is nowhere to go and purchase these items.
>>
> You can purchase those items here: http://www.arrl.org/catalog/

Check at amazon.com and barnesandnoble.com first. Many times the
books are available and you can use a coupon to get a discount.

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

2795. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 20:27:58 UTC
From: Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna65oqj.8hb.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 148981
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

On Thu, 7 Feb 2002 03:33:02 -0500, AstroMan <AstroMan@dont.bug.me.with.spam.nyet> wrote:
> "Bill Nelson" <billn@spock.peak.org> wrote in message
> news:a3tcfl$c58$1@quark.scn.rain.com...
>> I wouldn't live in one of your god-forsaken nazi neighborhoods. There are
>> plenty of places to live where I can do pretty much as I please with my
>> property, as long as I do not make it unsafe for other people.

Agreed 100%

> You're more than welcome to stay in your white trash neighborhood where cars

Yeah, that's what it's like, uh huh!

Now, why don't you just close the gates on your
subdivision and stay there.

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

2796. Re: Ford Ranger antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 20:46:25 UTC
From: Caveat Emptor <caveat@emptor.com>
Message-ID: <8sm56u4s56e6a4s4a8t3727notbup8oh89@4ax.com>
Source record: 148983

On Wed, 6 Feb 2002 13:40:49 -0600, "Bill Grimwood" <bill@grimwood.net>
wrote:

>I am going to mount my Kenwood TMG 707 in my truck. How do you recommend I
>do it. I will use a magnetic antenna on the roof. Is there an access hole
>to run the wire in or do I have to drill one. Have any of you had engine or
>fuel pump problems with the Ford Ranger. Mine is a 99 model.
>
>
Hi Bill,

You likely will have no problems or noise with your VHF/UHF radio in
your truck. It's always advisable to run 12v lines directly from the
battery through the existing holes in the floor in front of the seats.
The antenna coax can also feed through these holes and brought up
behind the rear window to the antenna.

Although some hams report HF radio noise problems in the Fords, I've
had little in my 2000 4.0 4X4 Ranger with two HF radios (FT-757 and
TS-130SE) . The antenna is mounted on the right rear, which might help
(plus those receivers are not overly sensitive, I guess).

Noise blankers also help, although HF mobile installations probably
always involve some noise (if nothing else, from other vehicles). If
the QSO is all that important, one can always pull over; it's safer
that way, too <g>.

Caveat Emptor

2797. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 20:59:55 UTC
From: Dennis <DennisF@ABC.NET>
Message-ID: <a3uppb$1algc2$1@ID-59690.news.dfncis.de>
Source record: 148984
Cross-posted to: rec.radio.amateur.antenna,rec.ham-radio,alt.ham-radio

What kind of kites do you fly? I love my Jam, Stranger, Maestrale and Psycho which all keeps me smiling. I love to take out my QuadTrac when I wanna go flying myself!

As well as I love flying them in 'my horses pastures'. Its funny to see the horses, all three, folowing them like people watching a tennis game, left-right,up,down and so forth!

It's hiliarious.

PS: My take on the HOA's out there. Those neighborhoods are the same as the 'projects' with each home which looks the same as the other. Instead of a $20,000 home they are $200,000 homes. The thing is, at least the $20,000 home can paint it if they wish and whos to complain!

"Jake Brodsky" <frussle@erols.com> wrote in message
news:hga56u0c3n83u1qver0g254qp8hgho1q6p@4ax.com...
> On Thu, 7 Feb 2002 10:10:26 -0500, "AstroMan"
> <AstroMan@dont.bug.me.with.spam.nyet> wrote:
>
> >I lived in a non-CC&R neighborhood for many years and was subjected to
all
> >the crap I mentioned in my previous post. Believe me, it's better where
I
> >am now.
>
> I did exactly the opposite. I started at a place where the HOA ruled
> with an iron fist. The last straw was when some clipboard toting
> woman with an attitude asked my wife if the color on our door was
> approved. My wife replied "Well, it's the best I could do to match a
> faded color at the hardware store under fluorescent lights." After
> that we wanted out.
>
> Oh and if you think an HOA keeps the value up, get this: I SOLD AT A
> SUBSTANTIAL LOSS. That's how bad I wanted out. My only consolation
> for losing money on that deal is that it pissed off the HOA almost as
> much as it did me.
>
> >This knife cuts both ways. I got pissed when the HOA guys told me I
> >couldn't have a hose reel mounted to the side of my house. Well, I
didn't
> >just get mad - I got even - I'm now the (second term) President of the
HOA.
> >So, quit bitching and do something!!!

>
> I did it. Now I don't have to do anything about this sort of
> foolishness ever again. --That is until the HOA nazis get tired of
> their own little enclaves and try to take over the whole county. That
> nearly happened a couple years ago.
>
> Enforcing rules of aesthetics on your neighbor seems like an exercise
> in mind control to me. I despise it. I don't want to have to run for
> office to get my neighbor off my case. If that's what makes your day
> complete, more power to you. I'd rather spend my spare time flying my
> airplane, tinkering in my radio shack, flying kites in our hay field
> with my kids, or dreaming up new tree-house designs. That's my life.
> Where's yours? --Oh I forgot: You need to check up on your neighbors,
> don't you? Well, I hope you like it.
>
> 73,
>
>
> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"

2798. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 21:22:21 UTC
From: richardharrison@webtv.net
Message-ID: <2626-3C62F00D-53@storefull-111.iap.bryant.webtv.net>
Source record: 148988

Fachman wrote:
"Shouldn`t be also some multiplier?" (Length as well as "size")

Yes. For a particular frequency and for a particular coaxial cable, the attenuation is most often specified as a particular number of db per 100 feet.

Loss in coax comes from resistance which is a function of frequency due to skin effect. Larger cable has less resistance. Longer cable has more resistance. Conductivity is usually about the same for most cables. Most use the same conductive material, copper. Slight differences result from platings used (or if a different material is used) and from if the conductors are solid or stranded (braided).

Loss in coax also comes from dielectric material. This loss is a function of frequency also. The more times per second the signal nudges the molecules of the dielectric to move about, the more loss is developed. Some dielectrics are lossier than others and some coax uses more of this lossy dielectric than others do. For example, solid dielectric tends to be lossier than foam. Air occupies a lot of the space in foam. Foam dielectric tends to be lossier than Heliax, in which the dielectric is solid but only occupies a narrow spiral space around the center conductor. Heliax tends to be lossier than rigid air-dielectric coax because less dielectric is needed to keep the center conductor centered in rigid coax.

Common sense should indicate which coax will be more efficient.

Best regards, Richard Harrison, KB5WZI

2799. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 21:32:00 UTC
From: Kent K9EZ <kwinrich@wi.rr.com>
Message-ID: <BvC88.10557$aE3.5485553@twister.kc.rr.com>
Source record: 148986

"fachman" <fachman@sprintnet.pl> wrote in message
news:a3r0hugmb1@news.tpi.pl...
> Hi
>
> I have heard that the size of the cable matters. I do know that if the
> shorter then its better, but i do also heard that its size must be the
> multipler of the lenght of the radio wave for the best results. So do you
> know what size of the cable i should use?
>
> Greetings
>
>

It isn't the size of the cable, it's how you use it. Sorry... it was
there... had to take it.

2800. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 21:33:21 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <r4s56ug7gq5pfjdv3bs0j0173k2q11bls8@4ax.com>
Source record: 148985

A way to get the screwdriver further away from the motorhome structure
is as recommended to me by Don Johnson, W6AAQ. I mounted the base of
the antenna on the driver's side at about the point where the body
started sloping back for the windshield. This kept the antenna well
away from the structure. My ground was the steel frame of the
Winnebago in the engine compartment, right behind the mount. Used a
6-1/2' whip while underway, and a 9' while parked. Got out like
gang-busters with that setup. Of course this won't work if the
motorhome is built like a box front and rear.

Dick - W6CCD

On Thu, 07 Feb 2002 14:39:28 -0500, Vito <vito@crosslink.net> wrote:

>Gary - KJ6Q wrote:
>>
>> "Mark Keith" <nm5k@wt.net> wrote on the subject of trying to run a wire antenna
relativey close to
>> a vehicle body...
>>
>> But I once tried this same thing,
>> > only running the wire across the roof and sloping downwards and tied
>> > off to the front of the hood. Was terrible. I could hardly get out at
>> > all although it would seem to be working ok at first glance. I took
>> > the wire off, and gave a quick call and I was back to normal. The
>> > coupling to the roof and hood just killed it dead. MK
>>
>> Which was MY point on inefficiency often present when attempting to operate antennas too
close to
>> adjacent structures - frequently, even apparent non-conductive surfaces will GREATLY
inhibit
>> radiation ability of such antenns - sure, you probably WILL make some contacts, just at
a rather
>> POOR level of efficiency!
>>
>Nobody disagrees. Question is, would a short, loaded vertical
>(screwdriver) close to an adjacent structure (a MH) be as efficient as a
>full-size horizontal dipole or inverted L, close to the same structure?
>KA3DWW

2801. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 21:43:40 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <3os56ukq9kj1t231okd8r2scr2e8q56mei@4ax.com>
Source record: 148987

It is much more convenient. You just push the tune button and adjust the screwdriver up or down. With your method you have to set the mode to AM, key the rig, adjust the antenna, then set it back to SSB (assuming that's what you are using.) A lot more distractions for the driver. And the 10 watts causes a lot less QRM than the 40-watts you are using. Of course you can always turn the power down first, but then you have six operations to perform.

Dick - W6CCD

On Thu, 07 Feb 2002 19:03:06 GMT, "Gary - KJ6Q" <davison7@gte.net> wrote:

>I'm puzzled as to why ANY such device is "needed" - I operate my 706 into a screwdriver, and also an
>SGC 230 autotuner... I merely place the function switch in the AM position, key the rig while
>monitering SWR, and awaaaay we go! WHY the "need" for some "special" device?

2802. Re: WTB:QUANTUM LOOP

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 21:55:08 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a3ut3l02pha@enews3.newsguy.com>
Source record: 148991
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Is that related to an infinitesimal dipole? If so I have a whole box of
them I can sell you cheap!

"Daniel Simpson" <dzan@qwest.net> wrote in message
news:07022002012807901 6%dzan@qwest.net...
> WTB:QUANTUM LOOP
>
> please email me at:
>
> dzan@qwest.net

2803. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 21:55:11 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <ast56ucimmtqjo7767rd71l5duqgu6bq7j@4ax.com>
Source record: 148989

Oh no! You mentioned Wal-Mart. Don't you know what that does to
Gary? :-)

Dick - W6CCD

On Tue, 05 Feb 2002 12:28:33 -0500, Vito <vito@crosslink.net> wrote:

>Gary - KJ6Q wrote:
>>
>> "Joe Bramblett, KD5NRH" wrote
>> > Mark Tetrault <tetrault@mv.mv.com> wrote:
>> >
>> > >I need something I can set up in 2 minutes,.....
>> >
>> > That's not a campground, it's a parking lot.
>> >
>> >
>> AHHhhhh - another "I don't RV very much" response -
>
>In other words "If you don't call the Walmart lot a campground then you
>must not RV much.", right?

2804. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 21:58:10 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <4bt56uceq9r6ckq8mpicsg85a639uqa9a4@4ax.com>
Source record: 148990
Cross-posted to: rec.radio.amateur.antenna,rec.ham-radio,alt.ham-radio

On Thu, 7 Feb 2002 14:59:55 -0600, "Dennis" <DennisF@ABC.NET> wrote:

>What kind of kites do you fly? I love my Jam, Stranger, Maestrale and Psycho
>which all keeps me smiling. I love to take out my QuadTrac when I wanna go
>flying myself!

I like flying single line kites. I have a Prism dual line kite, but I
gotta watch my kids too. I can stake a single line kite and send
parachutes up the line...

I have a Stratoscoop 3, a 9' delta (no-name), and a Hot Snowflake,
among some of my favorites. My daughter also likes the biplane kite
we have...

>As well as I love flying them in 'my horses pastures'. Its funny to see the
>horses, all three, folowing them like people watching a tennis game,
>left-right,up,down and so forth!

I know the day will come when my daughter will ask me for a pony. But
for now, my field grows hay, when the thistle doesn't invade. No
horses to annoy for now.

>PS: My take on the HOA's out there. Those neighborhoods are the same as the
>'projects' with each home which looks the same as the other. Instead of a
>$20,000 home they are $200,000 homes. The thing is, at least the $20,000
>home can paint it if they wish and whos to complain!

Amen. They're slapping these $600k "cottages" on single acre lots.
It looks like a bunch of overgrown suburban houses scaled up so that
they're still too close to one another. Don't get me wrong, these
houses are quite nice inside. But I like having enough land around my
house so I can hoot, holler, shoot spuds in the air and keep animals
without annoying my neighbors...

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2805. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 22:41:17 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <3E3AB5334EBB50F8.724003D3CFBEF78C.7CB01CA655C6F705@lp.airnews.net>
Source record: 148992
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

On Wed, 6 Feb 2002 23:50:19 -0500, "AstroMan"
<AstroMan@dont.bug.me.with.spam.nyet> wrote:

>Wrong buffalo breath! I'm the 2nd term Pres of an HOA and we do select
>which rules to enforce and when.

Trailer parks with HOAs? Don't you think that's going a bit too far?

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

2806. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-07 23:41:44 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u6645831hj8q71@corp.supernews.com>
Source record: 148993
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Gentlemen...

I have great respect for BOTH of your professional capabilities, yet we seem to be at loggerheads with our answers. Would you all mind straightening me out as to why you are on opposite sides of the fence?

Jim

"Roy Lewallen" <w7el@eznec.com> wrote in message news:3C61B4D5.4A5680AE@eznec.com...

>> Yes, that's what you need to do. Just don't forget what range of antenna
>> lengths and diameters the fit is valid for!

Yet Reg Edwards wrote in answer to the same message:

>>Jim, ;o) get yourself a hearing aid, you are are hearing wrong !

> Jim Weir wrote:
> >
> > The real answer seems to be take some curves you believe and fit an equation
> > to them. That's the sense of what I'm hearing.
> >
> > Jim

2807. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 00:38:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C631DF1.55512C3D@eznec.com>
Source record: 148994
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

I spent a couple of years of spare time studying the issue of the self impedance of antennas. I have a pretty large pile of professional papers on the subject, and have in my library five major antenna texts, plus a number of minor ones. None of these make any mention of "explicit algebraic expressions deduced by fundamental engineering reasoning which any competent electrical engineer should be able to do for himself." It appears that Reg, once again, has singlehandedly developed a simple method never before discovered by generations of engineers. As one of the incompetent engineers, at least I'm in good company along with Kraus, Johnson, Jasik, King, Harrison, Jordan, Balmain, Schelkunoff, and many other "waffling old wives".

The ultimate test of any calculation is its ability to produce results consistent with reality. The set of measurements most often considered as a standard for evaluating theoretical methods is the one in Brown and Woodward, "Experimentally Determined Impedance Characteristics of Cylindrical Antennas", Proc. of the I.R.E., April 1945. All theories purporting to predict the self impedance of an antenna have had to run the gauntlet of comparison with these measurements. Certainly, many approximations have been and can be made, all with varying accuracy. It's always important to determine what the degree of error is and the range over which the approximation is valid.

Using "fundamental engineering reasoning" is fine as long as the reasoning is sound and it's based on valid assumptions. The test is whether it produces verifiably accurate results. If Reg has indeed come upon a nice, neat closed form soultion for this problem, he's accomplished something that no one else has been able to do in nearly 100 years of searching. A professional paper would certainly be in order, showing calculated results and their comparison with Brown and Woodward's measurements (or other measurements if of demonstrably comparable quality). I look forward to reading and learning from it.

Roy Lewallen, W7EL

Jim Weir wrote:
>
> Gentlemen...
>
> I have great respect for BOTH of your professional capabilities, yet we seem
> to be at loggerheads with our answers. Would you all mind straightening me
> out as to why you are on opposite sides of the fence?
>
> Jim

>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:3C61B4D5.4A5680AE@eznec.com...
>
> >> Yes, that's what you need to do. Just don't forget what range of antenna
> >> lengths and diameters the fit is valid for!
>
> Yet Reg Edwards wrote in answer to the same message:
>
> >>Jim, ;o) get yourself a hearing aid, you are are hearing wrong !
>
> > Jim Weir wrote:
> > >
> > > The real answer seems to be take some curves you believe and fit an
> equation
> > > to them. That's the sense of what I'm hearing.
> > >
> > > Jim

2808. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 00:52:35 UTC
From: Mont <k0ycn@arrl.net>
Message-ID: <njF88.38866$pw1.1478322248@newssvr30.news.prodigy.com>
Source record: 148995

As Vito says, the mounting pole material is unimportant because this is a neutral point. However, remember that the J-Pole is a balanced antenna so you need to form a choke balun with a few turns of coax at the feedpoint.
Mont - K0YCN

"KC8PMX" <kc8pmx@nospamtm.net> wrote in message
news:Ohv88.393$TS.46572@newshog.newsread.com...
> No, I am not overthinking it, and was asking a simple question. Every
> diagram and material I have seen shows it using copper for the elements
part
> of the antenna and the bottom support.
>
> As far as the ARRL materials, there is nowhere to buy them around here,
with
> the closest place being over 2 hours away. I would love to purchase
amateur
> radio texts, but there is nowhere to go and purchase these items.
>
> Thanks anyways...
>
>
> "Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
> news:3C6130C9.255E1FE5@tampabay.rr.com...
> > that section is used to mount the antenna so it needs to be stiff and
> strong
> > after reading your last two posts i think you are over thinking this
stuff
> its
> > just antenna construction not rocket science
> > you need to buy the ARRL antenna book and the ARRL handbook both will
tell
> you
> > most of what you need/wamt to learn
> >
> > KC8PMX wrote:
> >
> > > I
> > > I
> > > I
> > > I I
> > > I I
> > > I I
> > > I I
> > > IIIIIIIIIIIIIII

> > > I
> > > I
> > > I
> > > I
> > > I ------------------>>>>>
> > > I
> > > I
> > > I
> > >
> > > My question is the part of the J-pole antenna that is marked by the
line
> and
> > > arrows, does this part of the antenna HAVE to be a metallic material
or
> can
> > > other material be used?
> > > Can't seem to find the answer to my question so I am posing it here.
> > >
> > > Thanks in advance.
> > >
> > > Ryan KC8PMX
> >
>
>

2809. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 01:12:54 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <qCF88.9776$bh3.91328@rwcrnsc52.ops.asp.att.net>
Source record: 148996
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

You don't get out much, do you?
"AstroMan" <AstroMan@dont.bug.me.with.spam.nyet> wrote in message
news:u64euan6o7ppa4@corp.supernews.com...
> You're more than welcome to stay in your white trash neighborhood where
cars
> sit up on blocks in the front yard, old furniture sits in the yard, weeds
> have taken over the entire lawn, gutters falling down, house needs
painting,
> kids need spanking, etc., etc., etc.
>

2810. J pole information-help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 01:42:07 UTC
From: Victor Andr&#65533; Moinhos <raves@clix.pt>
Message-ID: <1013132286.934579@news.iol.pt>
Source record: 148997

Hello,
I am biulding a Jpole antenna but I have a few questions:
My Jpole is according to next shematic, but I don&#65533;t know if it is correct, any one can help me.
In the web shematics the 3/4 wave section is conected to 1/4 wave section with conductive material, is that correct?
And the continuation of the 3/4 wave what is the function, in the shematics is about 20inchs, is that section only the support or is it part of tha antenna?
Can anyone give mee sites that explains all details in construction of this antenna
Best regards

```
3/4wave section (center coax)
I (1/2" cooper pipe)
I
I
I
I 1/4 wave section
I I (1/2" cooper pipe)
I I
I -- coax -- I
I cable I
IIIIIIIIIIIIIII -non conductive material
I
I
I -non conductive material
I
I
```

2811. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 02:00:19 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202071800.15666fb0@posting.google.com>
Source record: 148998

"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<KbA88.273$sk6.573661@paloalto-snr2.gtei.net>...
> I'm puzzled as to why ANY such device is "needed" - I operate my 706 into a screwdriver, and also an
> SGC 230 autotuner... I merely place the function switch in the AM position, key the rig while
> monitering SWR, and awaaaay we go! WHY the "need" for some "special" device?
>
> --
> Gary - KJ6Q

I mainly want it for home use. I don't change freq enough when mobile to worry about it. For me , it would come in handy when I'm tuning my tuner, say when on 160m. Sure, I can put it on AM and test with the full 40 watts no problems, but many times I'm on the CW portion of the band, and hate to have audio or noise on my carrier. I've usually got TV's etc going in the background. So I end up usually using RTTY and going into the menu and cutting it back. And yes, I know as Cecil says, that you can test with full power and let the protection circuit cut back, but I'm paranoid. That makes me nervous at 100w out. Fairly new radio too... I like to baby my finals. They get enough abuse with my normal operation. :/ MK

2812. Re: Screwdrivers vs Dipoles - Modelers! Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 02:23:03 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202071823.7f3c8d33@posting.google.com>
Source record: 148999

Vito <vito@crosslink.net> wrote in message
> Nobody disagrees. Question is, would a short, loaded vertical
> (screwdriver) close to an adjacent structure (a MH) be as efficient as a
> full-size horizontal dipole or inverted L, close to the same structure?
> KA3DWW

Depends what band, time of day, distance, etc. Also how far the dipole was from the metal body. Like Gary said, lots of variables. It's quite possible that with a decently working setup that wasn't overly killed by the coupling to the car, you could outdo the screwdriver on a NVIS type path. Say 40m in the day or 80m at night possibly. But then you have to think about having a 65 ft dipole strung on a car. Maybe loaded if needed. I'm not sure if you mean moving or not at this point in the thread. On longer paths , higher bands, or late at night on most any band, I'd put my money on the screwdriver for anything over about 800 miles away. The reason I say this, is my mobile antenna on 40m, outdoes my home dipole at 35 ft or so. But it only does it at night on fairly long paths. From Houston to Fla. on 40m, appx 2 AM, the mobile antenna won every time we tested it against the 35 ft high dipole. And no, I wasn't expecting that to be the case...But it happened about 5 times in as row. In a case like yours, there is only one way to really find out. Try it. Probably the easiest way to test at home to compare would be with a FS meter. You can't really go by on the air reports unless you can A/B them with a switch real quick. MK

2813. Re: Screwdrivers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 03:00:56 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <xbH88.119962$E4.4352356@e3500-atl2.usenetserver.com>
Source record: 149000

If you go with another screwdriver, don't forget to look at
www.qsl.net/k4kwh

73

Jerry
K4KWH
Mark Tetrault <tetrault@mv.mv.com> wrote in message
news:6rhl5ucv3j1t0m5msfoo33jku936ee4j4g@4ax.com...
> OK, So I have a presently broken TJ (BB3) screwdriver and would like
> to replace it with another screwdriver.
>
> Is there a consensus in the newsgroup due to experience which is the
> best made, best performing screwdriver antenna. My needs are 6m to
> 80m, and rugged long lasting, minimum maintenance construction and
> good screwdriver performance.
> It will be used with an FT847 in an RV.
>
> While I have an ATAS100 in my car for my FT100 and it works quite
> well, I really want the 80m in the RV.
>
> All comments and experiences are more than welcome.
>
> Mark

2814. Just Curious

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 03:14:19 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <1oH88.120124$E4.4358403@e3500-atl2.usenetserver.com>
Source record: 149001

Anybody know what happened to Master Mobile antennas? I know they went out
of business
over 30 years ago, but I don't know if they just folded, merged, or were
just bought out. Any
body out West know the story?

73

Jerry
K4KWH

2815. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 03:31:47 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <u66hjve988f976@corp.supernews.com>
Source record: 149002

Yes!
There has been a change over the past (almost) 50 years. When I was an undergrad, the only women to graduate in engineering were better than the men - intellectually and emotionally. When I started to teach electrical engineering, the women were near, or at, the top of the class.
I am delighted to report that women now graduating extend from the bottom of the class to the top of the class.

Think about the significance of my observation.

73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net
Office: JCM@McLMcL.Com
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a3cegu$16m58r$1@ID-124126.news.dfncis.de...
> Do women make as good engineers as men ?
>
>

2816. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 03:47:49 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a3vhhvirg1@bob.news.rcn.net>
Source record: 149003

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote:

> Do women make as good engineers as men ?

No, women make very poor men.
Just trust me on this, okay? :-)

2817. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 05:06:36 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202072106.585b8390@posting.google.com>
Source record: 149004

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<17011-3C629FE0-13@storefull-116.iap.bryant.webtv.net>...
> Mark Keith wrote:
> "I think Richard Harrison once said he knew a guy that tried them."
>
> That was my father-in-law, Phil Rand, W1DBM. He erected an in-line array
> of (8) 1/4-wave ground mounted verticals spaced 1/4-wave apart over a
> good number of radials. As a parasitic array it was a disappointment, so
> he drove all the elements and it became a great performer. He wrote an
> article about the experience in one of the ham magazines.
>
> Best regards, Richard Harrison, KB5WZI

Hummm, it seems he was a 1 land station, but seems to me he was using
1/2 waves on 15m. I'll have to double check that if I run across the
article again. Might be a different person, or I've got it wrong as
far as the antennas..It was in a QST or CQ, whatever, mag.. MK

2818. Re: CC&R's and antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 05:12:44 UTC
From: K4JDP@webtv.net
Message-ID: <2492-3C635E4C-7@storefull-132.iap.bryant.webtv.net>
Source record: 149005

The last neighborhood we lived in had CC&R's. They kept changing them at each HOA meeting.

First, only vinyl-covered chain link fences
no higher than 4 ft.
Then, shadow-box fences, no higher than 6ft. Wood molds here in FL very quick just like the roofs.

First, no boats allowed in the neighborhood.
Then, when shadow-box fences went up our next door neighborhood buys a boat and backs it into his backyard behind his moldy fence.

First, no more than 2 pets per family.
Then, no limit on pets. Our rear neighbor
gets 4 yapping chihuahuas. Yapped all night long and kept us awake for 3 years.
First, no outside antennas. Had to put a dipole in the attic.
Then, dish antennas allowed outside for TV reception. Then they went nuts. Wrote a new covenant prohibiting any ham radio or CB radio transmitter from being brought into the neighborhood by homeowners.

This didn't affect my operating since I already lived there. We moved out because of all the changes to the changes and the continual increase of HOA dues and continual harassment by the "property manager" hired by the HOA. "No wet bathing suits in the clubhouse, no flip-flops in the clubhouse, sign-in before using the pools, sign-out before using shuffleboard equipment, no kids allowed in the clubhouse without parents. ad nauseum."

I mailed a copy of the CC&R's to the ARRL to show them and the FCC just how far one HOA has tried to go in an area they have no authority over (namely prohibiting ham radio transmitters in the neighborhood.)

There are NO new homes being built in developments without CC&R's anywhere in this county. We have looked at building our own place on a lot and we don't like what we see in those areas, namely huge messes by messy people.

We have now found a development which does allow outside antennas no higher than 10 ft. above the highest point of the roof line. Our home will be a 2-story.

jdp

2819. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 05:36:46 UTC
From: richardharrison@webtv.net
Message-ID: <26107-3C6363EE-5@storefull-116.iap.bryant.webtv.net>
Source record: 149006

Fachman wrote:
"--heard that its size must be a multiple of the length of the radio wave for best results."

The intention of Fachman`s source is a mystery. Don`t know of any transmission line where "size" must be a multiple of a wavelength except as a phasing or matching tool, a circuit element, or as a tuned circuit.

The cross section of a waveguide has minimum dimensions with respect to wavelength. The longer dimension must be greater than 1/2-wavelength to allow propagation of a wave in the waveguide. This is a low-frequency cut-off. Waves just above the cut-off frequency have too much attenuation and waves too much above the cut-off frequency can propagate in too many modes and this is problematic. So, waveguides are sized for a particular frequency range.

There is no low-frequency cut-off for coax. In coax, length is not critical if a matched load is served unless one of the other uses such as a circuit element is being served.

Another use of coax is as a transmission line which will not alter any impedance presented to it. This requires a phase change of 180 degrees (1/2-wavelength) in the coax, or some multiple of 180 degrees. That may be Fachman`s "size".

Another possibility requiring some particular length of coax as a fraction or multiple of wavelength would be for impedance matching or producing a particular phase relationship, as already mentioned above. Without more information we can`t know what was intended.

Best regards, Richard Harrison, KB5WZI

2820. Part number needed for discontinued Hustler antenna mount

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 06:00:44 UTC
From: John_Breland@Yahoo.Com
Message-ID: <d2e1c59f.0202072200.34ca559@posting.google.com>
Source record: 149007

Hi all.

A few years back I had a mobile antenna mount that was made by Hustler. It used a hole in the fender like a factory AM/FM antenna would use. The mount had a uhf connector on the feeline side and a 3/8" female hole on the antenna side. This was just an antenna mount, no electronics involved.

I totaled the van, and did not take the time to remove the antenna mount. I thought I could find another one easily, but it's been 5 years years now and I haven't seen one since! Can any of you recall (or look up in an old catalog) the part number of that device? Then I would at least know exctly what I was looking for. It would be greatly appreciated.

Thanks,
John Breland
KD4EXS
Birmingham, Alabama

2821. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 06:14:31 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a3vqm1$345$1@slb3.atl.mindspring.net>
Source record: 149008
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Roy, Reg, et al:

I know I sort of "trashed" Reg up the thread a ways for not sharing his "fundamentals" with us.

However Reg's neat little computer programs give pretty good results in comparison to actual
measurements, etc... So what is he really doing?

To be fair to Reg... he did share with us a somewhat veiled peek at his methods of calculating
R and X, for these antennas which, if I can read between the lines of Reg's allusions, are apparently
based upon TEM transmission line models rather than upon antenna field models.

The antenna guru's and the textbooks and papers to which Roy refers simply do not consider
this as an "antenna" problem, or more likely they don't consider it as a valid approach to solving an
antenna problem cuz it uses Kirchoff's laws with voltages and currents rather than some integration of
Maxwell's field equations.

Heh, heh... antenna jocks can outsmart themselves by insisting that there are no voltages only "line integrals", etc...

Reg apparently models these antennas from a circuit parameter [Volts and Amps] perspective as
TEM transmission lines utilizing distributed RLCG models from first principles. i.e. from calculations
of static capacitance, static resistance with perhaps some skin effect formulae factored in plus
inductance per unit length, as opposed to using a field equation perspective.

The only thing that would be missing from such a first principles analysis of an antenna as a transmission
line would be the radiation resistance of the antenna.

At least, I can't see any way to derive the radiation resistance from the TEM transmission line equations!
Apparently Reg has some way of separately calculating the radiation resistance [Is this where he introduces
some empirical curve fitting? I don't know!] and then apparently he just adds this radiation resistance to

the TEM transmision line model in a uniform distribution of the radiation
resistance along side the
distributed thermionic resistance R.

Such formulas should be pretty straightforward...

Reg, is this what you do in your programs?

Heh, heh... I'll bet he won't tell.

--Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C631DF1.55512C3D@eznec.com...
> I spent a couple of years of spare time studying the issue of the self
> impedance of antennas. I have a pretty large pile of professional papers
> on the subject, and have in my library five major antenna texts, plus a
> number of minor ones. None of these make any mention of "explicit
> algebraic expressions deduced by fundamental engineering reasoning which
> any competent electrical engineer should be able to do for himself." It
> appears that Reg, once again, has singlehandedly developed a simple
> method never before discovered by generations of engineers. As one of
> the incompetent engineers, at least I'm in good company along with
> Kraus, Johnson, Jasik, King, Harrison, Jordan, Balmain, Schelkunoff, and
> many other "waffling old wives".
>
> The ultimate test of any calculation is its ability to produce results
> consistent with reality. The set of measurements most often considered
> as a standard for evaluating theoretical methods is the one in Brown and
> Woodward, "Experimentally Determined Impedance Characteristics of
> Cylindrical Antennas", Proc. of the I.R.E., April 1945. All theories
> purporting to predict the self impedance of an antenna have had to run
> the gauntlet of comparison with these measurements. Certainly, many
> approximations have been and can be made, all with varying accuracy.
> It's always important to determine what the degree of error is and the
> range over which the approximation is valid.
>
> Using "fundamental engineering reasoning" is fine as long as the
> reasoning is sound and it's based on valid assumptions. The test is
> whether it produces verifiably accurate results. If Reg has indeed come
> upon a nice, neat closed form soultion for this problem, he's
> accomplished something that no one else has been able to do in nearly
> 100 years of searching. A professional paper would certainly be in
> order, showing calculated results and their comparison with Brown and
> Woodward's measurements (or other measurements if of demonstrably
> comparable quality). I look forward to reading and learning from it.
>
> Roy Lewallen, W7EL
>
> Jim Weir wrote:
> >
> > Gentlemen...

> >
> > I have great respect for BOTH of your professional capabilities, yet we
seem
> > to be at loggerheads with our answers. Would you all mind straightening
me
> > out as to why you are on opposite sides of the fence?
> >
> > Jim
> >
> > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > news:3C61B4D5.4A5680AE@eznec.com...
> >
> > >> Yes, that's what you need to do. Just don't forget what range of
antenna
> > >> lengths and diameters the fit is valid for!
> >
> > Yet Reg Edwards wrote in answer to the same message:
> >
> > >>Jim, ;o) get yourself a hearing aid, you are are hearing wrong !
> >
> > > Jim Weir wrote:
> > > >
> > > > The real answer seems to be take some curves you believe and fit an
> > equation
> > > > to them. That's the sense of what I'm hearing.
> > > >
> > > > Jim

2822. Re: 7 element electrically steerable vertical phased array

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 06:14:31 UTC
From: richardharrison@webtv.net
Message-ID: <26107-3C636CC7-10@storefull-116.iap.bryant.webtv.net>
Source record: 149010

Mark Keith wrote:
"I think Richard Harrison once said he knew a guy that tried them."

Phil, W1DBM had less than dazzling performance from his ground mounted parasitic array. He then tried driving all the elements and it worked exceptionally well. Hello Australia? and they came back every morning in abundance.

Roy Lewallen suggested that the driven element which has too much resistance in a parasitic array may cause pattern shrinkage, and the parasitic element which has too much resistance in a parasitic array may cause wash out of the directionality. Phil probably thought he suffered from both problems until he drove all of the elements. His problems then were history.

Best regards, Richard Harrison, KB5WZI

2823. Re: Stealth antenna feedline?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 06:27:18 UTC
From: mensch90249@yahoo.com
Message-ID: <1kr66usser4cv4a0rpc9ml94jrqft549lm@4ax.com>
Source record: 149009

On Mon, 04 Feb 2002 19:17:00 GMT, "Marty" <nfn04028@naples.net> wrote:

>I now live in a place where outside antennas can't be used. The usual
>flagpole, birdbath, attic, and all those exotic alternatives are not
>feasible. And inside antennas are practically useless because the building
>is constructed with concrete, rebar and steel studs.
>
>The only place that might be used is inside of a porch, adjacent to a
>screen (non-metallic). The screen frame (aluminum) measures 21ft across and
>10ft high. I would like to put up something usable on 20M and am
>considering a drooping dipole, the ends hanging down about 7ft. I've used
>this configuration before at a different location but with ladder line and a
>balun which made it easy to match.
>
>Now I'd like to use a feedline that is much less visible. I'd appreciate
>any suggestions and general comments on the whole idea.
>
>Marty K1FHR
>
Marty,
How about some 300 ohm twinlead, the 20 gage stuff is usually in a
translucent jacket which might be easy to conceal. The guru's could
speak better than I as to power handling in a wire of that gage; you
could have to keep your power lower than in the past but at least
you'd have something.

Good Luck & 73,
Howard KE6MAK

2824. CUSTOM BUILT CENTER FED HALF WAVE DIPOLES

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 07:24:17 UTC
From: NI4L <ni4l@charter.net>
Message-ID: <3C637D21.E0BD2945@charter.net>
Source record: 149011
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

NI4L CUSTOM RESONANT DIPOLE BUILT TO MILTARY SPECS

http://www.angelfire.com/nb/ni4l/

2825. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 07:39:00 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0202072339.5b52c7ac@posting.google.com>
Source record: 149012

Hi,
if the RF cable is matched on both ends, it carries a travelling wawe only. Both the attenuation and the dispersion increase with length, the dispersion is usually negligible. Thicker conductors have less unit attenuation; gas dielectric (air) has less unit attenuation than a solid one.
If the cable is not matched, a standing wawe appears together with all its effects. The parameters of the cable seem to change periodically after half of the wawelength (with shortening coefficient). This is not the matter of the cable, but of the poor matching.
Coaxes have one more limitation: only the TEM wawe should exist inside. The limit frequency of the next mode (perhaps TE11) is considered as the upper limit for the coax. The thinner the coax is, the higher this limit.

BR from Ivan

2826. Re: Do they ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 07:52:01 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0202072352.1c5ea652@posting.google.com>
Source record: 149013

> > Do women make as good engineers as men ?
>
> No, women make very poor men.
> Just trust me on this, okay? :-)

And engineer women make even more poor men.
(10 years' personal experience)

Ivan

2827. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 08:08:29 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202080008.56202bc3@posting.google.com>
Source record: 149014

RellikJm@yahoo.com (Jay) wrote in message
news:<937a202b.0202062058.9ec402f@posting.google.com>...
> I just purchased a 4:1 balun from LDG and was wondering how do I
> properly connect it to different antennas? Like a Dipole and Long
> wires? LDG is very confusing with the antenna symbol and a ground
> symbol.
>
> Thanks,
>
> Lost QRP'er

Dunno, sounds like you bought the wagon before the horse. You normally wouldn't use a 4:1 balun with either one of those antennas. Or at least I wouldn't. But if you want to try, for a dipole just hook one side to hot, and the other leg to ground. Normally, a long wire would be hooked to hot, and the ground side grounded to earth. You don't mention the feedline used, so hard to tell what you have in mind. Are you using a tuner and ladder line? Does the tuner already have a 4:1 balun in it? IE: provisions for a balanced output? If you are using coax, you would want a 1:1 balun for a dipole. I normally wouldn't use a balun at all on a long wire, unless it happens to be a 4:1 already in a tuner. But than again , normally I wouldn't even use a long wire/random wire. I'm not that crazy about them. All you need to match a long wire is a simple L network tuner. A MFJ 39.99 special will do the job. You don't need a balun at all on a coax fed dipole. But it's good practice to use one to reduce currents on the shield of the coax. You don't want it acting like part of the antenna. MK

2828. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 09:58:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C63A133.ED5CE2C7@eznec.com>
Source record: 149015
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Schelkunoff uses entirely transmission line principles for his analysis. He first shows how a conical antenna can be analyzed as a constant impedance transmission line, then derives factors to account for the equivalent change of impedance with distance from the source that a cylindrical (e.g., wire) dipole represents. The process is nicely summarized in a series of articles in Ham Radio magazine beginning in April 1977 by Joseph Boyer titled "The Antenna-Transmission Line Analog".

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> . . .

> The antenna guru's and the textbooks and papers to which Roy refers simply
> do not consider
> this as an "antenna" problem, or more likely they don't consider it as a
> valid approach to solving an
> antenna problem cuz it uses Kirchoff's laws with voltages and currents
> rather than some integration of
> Maxwell's field equations.
>
> Heh, heh... antenna jocks can outsmart themselves by insisting that there
> are no voltages only "line integrals", etc...
> . . .

2829. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 11:12:58 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a40brqaro6@quark.scn.rain.com>
Source record: 149016
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

In rec.radio.amateur.antenna AstroMan <AstroMan@dont.bug.me.with.spam.nyet> wrote:
> You're more than welcome to stay in your white trash neighborhood where cars
> sit up on blocks in the front yard, old furniture sits in the yard, weeds
> have taken over the entire lawn, gutters falling down, house needs painting,
> kids need spanking, etc., etc., etc.

Heh, heh. Boy would you be surprised. The people around here take pride
in their houses and property. They just don't need a group of control freaks
dictating to them how to do so.

The kids may need spanking, but that is pretty much true anywhere in the
US these days. If you punish the kids - you get accused of child abuse.

--
Bill Nelson (billn@peak.org)

2830. Re: CC&R's and antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 11:28:01 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a40co1aro7@quark.scn.rain.com>
Source record: 149017

JDP <K4JDP@webtv.net> wrote:

> I mailed a copy of the CC&R's to the ARRL to show them and the FCC just
> how far one HOA has tried to go in an area they have no authority over
> (namely prohibiting ham radio transmitters in the neighborhood.)

Unfortunately, HOAs DO have authority over outside antennas, if they wish.
These are not local or state governmental regulations which the FCC has
partially preempted. They are civil contracts that you sign when you buy
a home in the area - and sometimes even if you refinance your house.

The HOA can sue you in civil court to force you into compliance.

The last I heard, the FCC has refused to override the CC&Rs, even though
there have been a number of requests that they do so.

> There are NO new homes being built in developments without CC&R's
> anywhere in this county. We have looked at building our own place on a
> lot and we don't like what we see in those areas, namely huge messes by
> messy people.

I wouldn't want to live in a crowded development anyway. I would rather
purchase a much larger piece of property elsewhere - and end up paying
the same or less for a comparable home.

> We have now found a development which does allow outside antennas no
> higher than 10 ft. above the highest point of the roof line. Our home
> will be a 2-story.

You are lucky they allow a two story building.

--
Bill Nelson (billn@peak.org)

2831. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 11:31:06 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a40ctqaro8@quark.scn.rain.com>
Source record: 149018
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

In rec.radio.amateur.antenna Joe Bramblett, KD5NRH <kd5nrh-r.r.a.a@kd5nrh.net> wrote:
> On Wed, 6 Feb 2002 23:50:19 -0500, "AstroMan"
> <AstroMan@dont.bug.me.with.spam.nyet> wrote:

>>Wrong buffalo breath! I'm the 2nd term Pres of an HOA and we do select
>>which rules to enforce and when.

> Trailer parks with HOAs? Don't you think that's going a bit too far?

Nah. He would want a HOA for a bunch of bums living under a bridge.
Trailer parks would be upscale neighborhoods.

--
Bill Nelson (billn@peak.org)

2832. Re: Part number needed for discontinued Hustler antenna mount

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 11:39:36 UTC
From: VE3TMT <ve3tmt@rac.ca>
Message-ID: <JKO88.27411$Xw.3290397@news20.bellglobal.com>
Source record: 148819

"John" <John_Breland@Yahoo.Com> wrote in message
news:d2e1c59f.0202072200.34ca559@posting.google.com...
> Hi all.
>
> A few years back I had a mobile antenna mount that was made by
> Hustler. It used a hole in the fender like a factory AM/FM antenna
> would use. The mount had a uhf connector on the feeline side and a
> 3/8" female hole on the antenna side. This was just an antenna mount,
> no electronics involved.

John,

If by UHF you mean "accepts PL259", check your local Radio Shack. They are
still available up here anyway.

Max

2833. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 12:18:30 UTC
From: me@privacy.net
Message-ID: <3C63C216.6E2651E8@privacy.net>
Source record: 148820
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

How about taking this bullshit to another group.

Bill Nelson wrote:
>
> In rec.radio.amateur.antenna AstroMan <AstroMan@dont.bug.me.with.spam.nyet> wrote:
> > You're more than welcome to stay in your white trash neighborhood where cars
> > sit up on blocks in the front yard, old furniture sits in the yard, weeds
> > have taken over the entire lawn, gutters falling down, house needs painting,
> > kids need spanking, etc., etc., etc.
>
> Heh, heh. Boy would you be surprised. The people around here take pride
> in their houses and property. They just don't need a group of control freaks
> dictating to them how to do so.
>
> The kids may need spanking, but that is pretty much true anywhere in the
> US these days. If you punish the kids - you get accused of child abuse.
>
> --
> Bill Nelson (billn@peak.org)

2834. Re: Part number needed for discontinued Hustler antenna mount

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 12:47:49 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C63C8F4.1AD435D@tampabay.rr.com>
Source record: 148825

down here too i just bought one they are called acorn mounts i think and sell
for around $8

VE3TMT wrote:

> "John" <John_Breland@Yahoo.Com> wrote in message
> news:d2e1c59f.0202072200.34ca559@posting.google.com...
> > Hi all.
> >
> > A few years back I had a mobile antenna mount that was made by
> > Hustler. It used a hole in the fender like a factory AM/FM antenna
> > would use. The mount had a uhf connector on the feeline side and a
> > 3/8" female hole on the antenna side. This was just an antenna mount,
> > no electronics involved.
>
> John,
>
> If by UHF you mean "accepts PL259", check your local Radio Shack. They are
> still available up here anyway.
>
> Max

2835. Re: Antenna Construction Materials

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 12:48:09 UTC
From: KC8PMX <kc8pmx@nospamtm.net>
Message-ID: <dOP88.489$TS.60467@newshog.newsread.com>
Source record: 148823

Alrighty.... so then what I am picking up from this message is that electrically or RF speaking, as long as it is a radiating type of material, that is all that matters?

The concerns I had with choosing a material to experiment with was in relation to:

Cost
Strength/Durability
Weight
Availability
Ease of use/tools necessary to manipulate

I believe copper is probably the best candidate, based on the above factors. But was curious about others. Never hurts to learn more eh?

Ryan

"'Doc" <w5lz@icok.net> wrote in message news:3C61481B.F3B97D6B@icok.net...
> Ryan,
> Do a search for antennas and vary the type of antenna
> as a search parameter, ought to find more than you'll ever
> want to know.
> The conductivity of different metals has little to do
> with the average antenna, one works about as well as another.
> The diameter, wall thickness etc, has more to do with strength
> than anything. Pick materials for strength and lowest weight.
> Protecting the tubing from the weather depends a lot on the
> type of tubing used. With aluminum, I wouldn't worry about it
> too much. If you use some other metal, it won't be the weather
> that causes a problem, but weight sure will. The solid vs.
> tubular thing has more to do with weight also, either will
> work fine for most antennas.
> 'Doc

2836. Re: Antenna Construction Materials

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 12:48:10 UTC
From: KC8PMX <kc8pmx@nospamtm.net>
Message-ID: <eOP88.490$TS.60467@newshog.newsread.com>
Source record: 148822

Wow... thanks for the abundance of information. I have played around with the various forms of "wire" antennas and want to experiment with beam and vertical/horizontal antennas and such.

Ryan
KC8PMX

"Ivan" <ok1sip@atlas.cz> wrote in message
news:8f3e93b5.0202070041.19a1f71d@posting.google.com...
> Hi Ryan,
> IMHO:
> > Diameter and wall thickness of tubular material, how does it affect
> > performance?
> Keep in mind, that RF currents flow in a very thin layer near the
> surface (tens of microns). Only this layer affects electrical
> parameters of the antenna. The greater the outer diamater, the bigger
> the surface is and the lower is the loss resistance. Simultaneously,
> the bandwidth of the antenna increases. The wall thickness must be
> considered for mechanical purposes only and has no influence on
> electrical parameters.
>
> > Specific Material performance, i.e. copper vs. steel and so on.
> Copper is quite strong, conductive and can be soldered easily. It is
> almost perfect for wire and small experimental antennas. It is a bit
> costly and heavy for beams, Yagis etc.
> Brass works nearly as well as copper, is cheaper and even more strong,
> but oftend breaks when frost.
> "Hard aluminum" (Al alloy) is fairly conductive, strong, lightweight
> and cheap. The main disadvantage is it cannot be soldered in a
> standard way. It is the favourite material for antennas made from
> tubing an/or bars. Pure aluminum is too soft, otherwise it has the
> same properties.
> Steel is good for towers, but I would not use it for active elements.
> It is quite lossy and ferromagnetic. Good corrosion protection is a
> must.
> On the contrary, copper plated steel (if available, e.g. from military
> surplus) is very good. The copper surface is very conductive, can be
> soldered and protects the steel core from corrosion. The steel core is
> strong and does not affect electical parameters (see higher).
> Another, more exotic materials ? Ask !
>
> > Can solid core work or must it be tubular?
> See higher: only the thin surface layer works. So electrically a pipe
> and a bar of the same outer diameter, length and material are
> identical. Consider mechanical properties.

>
> > What methods of protecting the metal used do not affect performance?
(paint?
> > laquer? clear coat? etc)
> Most paints do not absorb RF too much up to some GHz, but it must be
> tried. Copper and aluminum alloys usually do not need any protective
> coating.
>
> BR from Ivan OK1SIP

2837. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 12:48:11 UTC
From: KC8PMX <kc8pmx@nospamtm.net>
Message-ID: <fOP88.491$TS.60467@newshog.newsread.com>
Source record: 148821

They won't ship COD.....otherwise I would. Any business with the ARRL
requires a credit card. Even to ask a question. Apparently even for a
membership form too.

"SAM" <xxscottm@xxnetcommander.comxx> wrote in message
news:tsw88.14009$Mo3.834761@bin3.nnrp.aus1.giganews.com...
>
> "KC8PMX" <kc8pmx@nospamtm.net> wrote in message
>
> > As far as the ARRL materials, there is nowhere to buy them around here,
> with
> > the closest place being over 2 hours away. I would love to purchase
> amateur
> > radio texts, but there is nowhere to go and purchase these items.
>
> Just in case you were not aware, you can order ARRL reference material on
> line at www.arrl.org or mail order any item they offer.
>
>

2838. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 12:48:12 UTC
From: KC8PMX <kc8pmx@nospamtm.net>
Message-ID: <gOP88.492$TS.60467@newshog.newsread.com>
Source record: 148824

Right... again, my concern was, is that particular part a mechanical part of the antenna or electrical/radiating part of the antenna. The sole purpose of this antenna would be portable/emergency type of set-ups. Since there is a variety of materials that I could use to make the bottom part, that is why I posed the question. No where have I found content that addressed that fact.

Ryan

"Vito" <vito@crosslink.net> wrote in message
news:3C628D20.1AA126E4@crosslink.net...
> KC8PMX wrote:
> >
> > No, I am not overthinking it, and was asking a simple question. Every
> > diagram and material I have seen shows it using copper for the elements
> > part of the antenna and the bottom support.
> >
> > As far as the ARRL materials, there is nowhere to buy them around here,
> > with the closest place being over 2 hours away.
>
> AFAIK the "antenna" is just the "J" ... it doesnt matter what the
> support is made of so long as it is strong enough to support the rest of
> your creation. I have seen J-Poles mounted on the rear deck of
> automobiles.
>
> A quick <www.dogpile.com> search for "copper cactus" turned up this
> among many others: <http://www.n7qvc.com/copper.html> . It's made from
> household copper pipe E fittings available anywhere homes are built.
> Alternately, Arrow antenna <http://hometown.aol.com/Arrow146/index.html>
> makes good looking aluminum J-poles and Yagis out of arrow shafts as the
> name implies.
> 73 KA3DWW

2839. 300ohm twinlead matching section?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 13:33:18 UTC
From: Marty <nfn04028@naples.net>
Message-ID: <ysQ88.19586$Hb6.1699409@newsread1.prod.itd.earthlink.net>
Source record: 148826

The only place I have to put up an antenna (stealth type) will accommodate only about 25ft of wire and it has to be an inverted V configuration to avoid proximity to a lot of metal.

With 75ohm coax to the tuner I can receive a surprising number of stations on 20 and 10 meters, but not unexpectedly the SWR is out of sight if I try to transmit.

Can I put in a section of the twinlead to get this thing to match on 20, as is done with the g5rv? If so, how long should it be?
(I know ladder line is usually used, but it is too visible. And I have translucent twinlead.)

Any suggestions would be appreciated.

2840. Re: 300ohm twinlead matching section?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 13:54:54 UTC
From: jan-martin.hertzsch@rz.hu-berlin.de
Message-ID: <a40lbefao1@lnews.rz.hu-berlin.de>
Source record: 148827

Marty <nfn04028@naples.net> wrote:
> The only place I have to put up an antenna (stealth type) will accommodate
> only about 25ft of wire and it has to be an inverted V configuration to
> avoid proximity to a lot of metal.

> Can I put in a section of the twinlead to get this thing to match on 20, as
> is done with the g5rv? If so, how long should it be?

Depending on the tuner, i. e. if it has an output for balanced line,
you might consider running twin-lead all the way from the tuner to the
antenna. I'd expect that your short V antenna could then be tuned at
least on the bands above 10 MHz. This even works for a 7 m random wire
folded three times by almost right angles, working against a lousily
earthed balcony railing (as is the case for my "main portable QTH").

Any antenna is better than no antenna.

73, Jan-Martin (DL2LFH)

2841. Re: J pole information-help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 13:56:22 UTC
From: "Ken Coghill III, WB4ZOH" <wb4zoh@arrl.net>
Message-ID: <3C63D82C.C8491926@arrl.net>
Source record: 148828

Victor -
Try this site: http://www.packetradio.com/jpol.htm I've successfully built this antenna, using the alternative feed method (SO-239) and mounted on a 10 foot tube of schedule 80 PVC; cheap! Also, there are numerous discussions as to construction a simple choke balun at the feed point; about 4 small loops of coax. However, I've tried a choke balun on this version of the J-Pole and it made no difference.

Good luck & 73's

--
Ken Coghill III, WB4ZOH
This message has been scanned for viruses: NONE FOUND!

"Victor Andri¿½ Moinhos" wrote:

> Hello,
> I am biulding a Jpole antenna but I have a few questions:
> My Jpole is according to next shematic, but I doni¿½t know if it is correct,
> any one can help me.
> In the web shematics the 3/4 wave section is conected to 1/4 wave section
> with conductive material, is that correct?
> And the continuation of the 3/4 wave what is the function, in the shematics
> is about 20inchs, is that section only the support or is it part of tha
> antenna?
> Can anyone give mee sites that explains all details in construction of this
> antenna
> Best regards
>
> 3/4wave section (center coax)
> I (1/2" cooper pipe)
> I
> I
> I
> I 1/4 wave section
> I I (1/2" cooper pipe)
> I I
> I -- coax -- I
> I cable I
> IIIIIIIIIIIIIII -non conductive material
> I
> I
> I -non conductive material
> I
> I

2842. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 14:01:22 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <WNZjPIqmWy=P1IpMRMUYFE+5H8aE@4ax.com>
Source record: 148829

"KC8PMX" <kc8pmx@nospamtm.net> wrote:

>They won't ship COD.....otherwise I would.

That's not much of an excuse. Try Amateur Electronic Supply, HRO and other major ham supplier places. They sell all the basic ham books, and they will accept a check by mail if you don't do business by credit card.

> Any business with the ARRL
>requires a credit card.

That simply isn't true. You can order ARRL publications by mail, sending them a check or money order.

The ARRL Amateur Radio Handbook and ARRL Antenna Book are two references any ham should have on his bookshelf. They also have books on vhf antennas, such as the j-pole you're building.

Bob
k5qwg

> Even to ask a question. Apparently even for a
>membership form too.
>
>
>"SAM" <xxscottm@xxnetcommander.comxx> wrote in message
>news:tsw88.14009$Mo3.834761@bin3.nnrp.aus1.giganews.com...
>>
>> "KC8PMX" <kc8pmx@nospamtm.net> wrote in message
>>
>> > As far as the ARRL materials, there is nowhere to buy them around here,
>> with
>> > the closest place being over 2 hours away. I would love to purchase
>> amateur
>> > radio texts, but there is nowhere to go and purchase these items.
>>
>> Just in case you were not aware, you can order ARRL reference material on
>> line at www.arrl.org or mail order any item they offer.
>>
>>
>

2843. Re: J pole information-help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 14:29:02 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C63E0AE.631E0645@crosslink.net>
Source record: 148830

"Victor Andrï¿½ Moinhos" wrote:
>
> Hello,
> I am biulding a Jpole antenna but I have a few questions:
> My Jpole is according to next shematic, but I donï¿½t know if it is correct,
> any one can help me.

Look at the pictures on <http://www.n7qvc.com/copper.html> Note that
there are no nonconductive parts like in your schematic.

> In the web shematics the 3/4 wave section is conected to 1/4 wave section
> with conductive material, is that correct?

Yes. In a "copper cactus" the same copper pipe is used for the whole
antenna.

> And the continuation of the 3/4 wave what is the function, ...

AFAIK, only to provide mechanical support. As K0YCN pointed out, you
should have a few turns of coax at the feedpoint to form a balun.

2844. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 15:04:00 UTC
From: n7ws@yahoo.com
Message-ID: <3c63e73e.208433478@news.triconet.org>
Source record: 148831
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On Fri, 08 Feb 2002 01:58:11 -0800, Roy Lewallen <w7el@eznec.com> wrote:

|Schelkunoff uses entirely transmission line principles for his analysis.
|He first shows how a conical antenna can be analyzed as a constant
|impedance transmission line, then derives factors to account for the
|equivalent change of impedance with distance from the source that a
|cylindrical (e.g., wire) dipole represents. The process is nicely
|summarized in a series of articles in Ham Radio magazine beginning in
|April 1977 by Joseph Boyer titled "The Antenna-Transmission Line
|Analog".

Amazing. As I read Peter's post (below) I was thinking about Joe's article too!

Wes N7WS
|
|Roy Lewallen, W7EL
|
|"Peter O. Brackett" wrote:
|>
|> . . .
|
|> The antenna guru's and the textbooks and papers to which Roy refers simply
|> do not consider
|> this as an "antenna" problem, or more likely they don't consider it as a
|> valid approach to solving an
|> antenna problem cuz it uses Kirchoff's laws with voltages and currents
|> rather than some integration of
|> Maxwell's field equations.
|>
|> Heh, heh... antenna jocks can outsmart themselves by insisting that there
|> are no voltages only "line integrals", etc...
|> . . .

2845. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 15:15:43 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a40q2v$i1n$1@slb6.atl.mindspring.net>
Source record: 148832
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Roy:

Thanks for that HR reference, I remember that now, it was a good series.
As of course was HRn Magazine in general (Sigh!).

As you know, all distributed networks, antennas included, have an infinity
of
singularities. For practical purposes, in any sufficiently narrow frequency
range,
say over an amateur HF band, to get good impedance results, it may only be
necessary to model, say one or, only a few of those singularities.

To a first approximation the input impedance of such an antenna is closely
modeled by a series RLC circuit. The problem is to determine the values
for R, L and C in terms of the antenna physical characteristics...
resistivity,
length, diameter, height, frequency, surroundings, e.g. nearby ground
planes, etc..

A short analytic formula for antenna input impedance even taking into
account
secondary effects could be to model the antenna using say the first couple
of
singularities. i.e. model the the antenna using only 7 parameters with some
sub-parameter modifiers, as three subnetworks in parallel namely:

1.) The static capacitance of the antenna [Co] in parallel with...
2.) A series RLC network at the fundamental [R1, L1, C1], in parallel
with...
3.) A series RLC network at the second harmonic [R2, L2, C2]

[The R's would need to be composed of three components: the DC wire
resistance, plus a skin effect modifier, plus the radiation resistance at
the appropriate
frequencies, etc...]

Do you know of anyone who has done this? Schelkunoff ? Others?

Perhaps this is what Reg does. I wonder?

Download Reg's program and check it out... it's not very *big*. Which
is true of all of Reg's *free* software, heh, heh...

Of course all I have to do is fire up your EZNEC and run an NEC FEM analysis
right here on my laptop to get "exact" results from a numerical
integrator...

For $99 you can't beat that!

Just can't carry it around in your head, or on the back of an envelope.

Compare Reg's program with the size of the EZNEC executable!

Why open a walnut with a sledgehammer?

--Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C63A133.ED5CE2C7@eznec.com...
> Schelkunoff uses entirely transmission line principles for his analysis.
> He first shows how a conical antenna can be analyzed as a constant
> impedance transmission line, then derives factors to account for the
> equivalent change of impedance with distance from the source that a
> cylindrical (e.g., wire) dipole represents. The process is nicely
> summarized in a series of articles in Ham Radio magazine beginning in
> April 1977 by Joseph Boyer titled "The Antenna-Transmission Line
> Analog".
>
> Roy Lewallen, W7EL
>
> "Peter O. Brackett" wrote:
> >
> > . . .
>
> > The antenna guru's and the textbooks and papers to which Roy refers
simply
> > do not consider
> > this as an "antenna" problem, or more likely they don't consider it as a
> > valid approach to solving an
> > antenna problem cuz it uses Kirchoff's laws with voltages and currents
> > rather than some integration of
> > Maxwell's field equations.
> >
> > Heh, heh... antenna jocks can outsmart themselves by insisting that
there
> > are no voltages only "line integrals", etc...
> > . . .

2846. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 15:22:01 UTC
From: jcplpsm@aol.communicate
Message-ID: <20020208102201.02598.00000231@mb-fi.aol.com>
Source record: 148833

>They won't ship COD.....otherwise I would. Any business with the ARRL

No, but I think you can print off your order form, include shipping and tax, and send it via mail with a postal money order. The address is posted under ordering information.

2847. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 15:32:53 UTC
From: n7ws@yahoo.com
Message-ID: <3c63eeee.210401840@news.triconet.org>
Source record: 148834
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On Fri, 08 Feb 2002 15:04:00 GMT, n7ws@yahoo.com (Wes Stewart) wrote:

[snip]
|
|Amazing. As I read Peter's post (below) I was thinking about Joe's article too!
|

He also wrote a four part series: "The Multi-Band Trap Antenna" in CQ, Feb-May 1977, that uses the same concepts.

Wes N7WS

2848. Re: 300ohm twinlead matching section?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 16:31:10 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C63FD4E.3677E8F0@IEEE.org>
Source record: 148835

Marty wrote:
>
> The only place I have to put up an antenna (stealth type) will accommodate
> only about 25ft of wire and it has to be an inverted V configuration to
> avoid proximity to a lot of metal.
>
> With 75ohm coax to the tuner I can receive a surprising number of stations
> on 20 and 10 meters, but not unexpectedly the SWR is out of sight if I try
> to transmit.
>
> Can I put in a section of the twinlead to get this thing to match on 20, as
> is done with the g5rv? If so, how long should it be?
> (I know ladder line is usually used, but it is too visible. And I have
> translucent twinlead.)
>
> Any suggestions would be appreciated.

A halfwavelength of 300 ohm, 0.9VF twinlead on 14.2 MHz is about 32 feet.
So feed your Inv-V with a 32ft piece of 300 ohm twinlead and check the
SWR. It should be approximately equal to what you have now. Then:
1. Chop one foot off the 300 ohm twinlead and read the 20m & 10m SWR.
2. If the SWR is not satisfactory, repeat step 1.

You will find an optimum length for 20m and a different optimum length
for 10m. If they are close to the same length, take the average. If
they are not close to the same length, choose one band over the other.
--
cheers, CAM, W5DXP

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2849. Re: 300ohm twinlead matching section?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 16:33:42 UTC
From: Marty <nfn04028@naples.net>
Message-ID: <G5T88.19847$Hb6.1738820@newsread1.prod.itd.earthlink.net>
Source record: 148836

Should have mentioned that my tuner doesn't have a balanced output; hence
the use of coax and need for the matching section. Otherwise I would have
used all twinlead as suggested.

"Marty" <nfn04028@naples.net> wrote in message
news:ysQ88.19586$Hb6.1699409@newsread1.prod.itd.earthlink.net...
> The only place I have to put up an antenna (stealth type) will
accommodate
> only about 25ft of wire and it has to be an inverted V configuration to
> avoid proximity to a lot of metal.
>
> With 75ohm coax to the tuner I can receive a surprising number of stations
> on 20 and 10 meters, but not unexpectedly the SWR is out of sight if I try
> to transmit.
>
> Can I put in a section of the twinlead to get this thing to match on 20,
as
> is done with the g5rv? If so, how long should it be?
> (I know ladder line is usually used, but it is too visible. And I have
> translucent twinlead.)
>
> Any suggestions would be appreciated.
>
>
>
>
>
>

2850. Re: J-Pole Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 16:34:30 UTC
From: derswede@aol.comspam.com
Message-ID: <20020208113430.03649.00000356@mb-cg.aol.com>
Source record: 148837

> Every diagram and material I have seen shows it
> using copper for the elements
> part of the antenna and the bottom support.

Ryan...I use a piece of PVC for my Jpole portable support, works FB. The fixed mount is a steel pipe on which the Jpole just sits, no fixed connection. For portable use, the PVC is what I use. I will be going to a mast....but it will make no electrical difference as to your question. Nice simple antenni, go for it. Lemme know if you have any further questions at kg4gsc at qrz dot com.

Happy Hamming!
A
"...if one tolerates bad manners, they grow worse. I must find the oaf who did this thing, explain to him his offense, give him a chance to apologise, then kill him." (R.A. Heinlein, "The Cat Who Walks Through Walls")

2851. Re: Can You Believe these CC&Rs?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 16:57:14 UTC
From: Bill Grimwood <bill@grimwood.net>
Message-ID: <9kT88.111245$h31.7993831@e420r-atl1.usenetserver.com>
Source record: 148838

And all this time you westerners and Yankees have been callin us southerners racists.

"Al Lorona, Jr." <al_lorona@agilent.com> wrote in message news:3C5F8CC6.A5A349CC@agilent.com...
>
>
> Aren't you glad you don't live in Southern California? In case you need
> a little more justification, here are some excerpts from my
> association's Declaration of Restrictions:
>
>
> "This Declaration of Restrictions made this 12th day of March, 1940, by
> Rancho Santa Anita Inc., a California Corporation,..."
>
> "1. No part of any of said realty shall ever be sold , conveyed, leased,
> or rented to any person not of the white or Caucasian race.
>
> "2. No part of any of said realty shall ever at any time be used or
> occupied or be permitted to be used or occupied by any person not of the
> white or Caucasian race, except such as are in the employ of the
> resident owners or resident tenants of said property."
>
>
> The document goes on to list all of the prohibited structures and
> actions, and then this:
>
>
> "11. If at any time any of said paragraphs numbers 1 to 10, inclusive,
> or any part thereof, shall be adjudged or held to be illegal or invalid,
> such illegality or invalidity shall in no wise affect or render illegal
> or invalid any of the other terms, conditions, covenants, and
> restrictions of said paragraph, or of any other paragraph or part
> thereof, but each and all of said other terms, conditions, covenants,
> and restrictions, notwithstanding said illegality or invalidity, shall
> be and remain in full force and effect."
>
>
> How do you like that?
>
> Al W6LX

2852. IC-746pro Vs IC-756pro

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 17:38:13 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C640D05.9A5E8463@IEEE.org>
Source record: 148839
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

The IC-756pro (not II) is about the same price as the new
IC-746pro. Which is the best deal for the money? thanks,
--
cheers, CAM, W5DXP

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2853. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 17:41:15 UTC
From: richardharrison@webtv.net
Message-ID: <817-3C640DBB-18@storefull-114.iap.bryant.webtv.net>
Source record: 148842

Roy Lewalen wrote:
"None of these make any "explicit algebraic expressions deduced by algebraic reasoning which any competent electrical engineer should be able to do for himself"."

I think Reg was the originator of that burr. That may be a stretch, but Ed Laport is fairly easy to follow and he works out radiation resistance for vertical antennas and gives formulas as well as tables and graphs. Arnold B. Bailey in "TV and Other Receiving Antennas" gives a plot of 1/2-wave antenna feedpoint resistance versus distance from the center of the rod for the feedpoint attachments. It is specific to an L/D of 300 for the rod. The feedpoint resistance varies from zero ohms where the attachments are shorted together at the center of the rod, to 1000 ohms all the way out to the ends of the rod.

The formula Bailey gives is:
Ro = Rmax times sin squared (pi A/2)
A is 1/2 the distance between attachment points in terms of wavelength

Best regards, Richard Harrison, KB5WZI

2854. Recommend SMA plug style (crimp, non-crimp)?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 18:02:22 UTC
From: cgalbrai <cgalbrai@umich.edu>
Message-ID: <a41mup$j3n$1@newstest.laserlink.net>
Source record: 148840

Hi gang,

I've never used SMA connectors before. Can someone recommend a favorite type? I am seeing all sorts, with several of the "crimp" or "solder" type. Also, any tips on installing these on RG-174, 58, 8x appreciated! 73, Chris KA8WFC

2855. Re: IC-746pro Vs IC-756pro

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 18:08:35 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <DuU88.405$Dq3.394094@paloalto-snr2.gtei.net>
Source record: 148848
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

IF you don't care about the 2 meter coverage of the 746, the 756 is probably the better choice...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message news:3C640D05.9A5E8463@IEEE.org...
> The IC-756pro (not II) is about the same price as the new
> IC-746pro. Which is the best deal for the money? thanks,
> --
> cheers, CAM, W5DXP
>
>
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2856. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 18:16:45 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <gCU88.407$Dq3.402072@paloalto-snr2.gtei.net>
Source record: 148849

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0202071800.15666fb0@posting.google.com...
> "Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<KbA88.273$sk6.573661@paloalto-snr2.gtei.net>...
> > I'm puzzled as to why ANY such device is "needed" - I operate my 706 into a
screwdriver, and
also an
> > SGC 230 autotuner... I merely place the function switch in the AM position, key the rig
while
> > monitering SWR, and awaaaay we go! WHY the "need" for some "special" device?
> >
> > --
> > Gary - KJ6Q
>
> I mainly want it for home use. I don't change freq enough when mobile
> to worry about it. For me , it would come in handy when I'm tuning my
> tuner, say when on 160m. Sure, I can put it on AM and test with the
> full 40 watts no problems, but many times I'm on the CW portion of the
> band, and hate to have audio or noise on my carrier. I've usually got
> TV's etc going in the background. So I end up usually using RTTY and
> going into the menu and cutting it back. And yes, I know as Cecil
> says, that you can test with full power and let the protection circuit
> cut back, but I'm paranoid. That makes me nervous at 100w out. Fairly
> new radio too... I like to baby my finals. They get enough abuse with
> my normal operation. :/ MK

UMMmm - has no one noticed that you don't HAVE to key the 706 at FULL power - *I* simply
reduce
power manually to 10 watts or so, and tune away - and I dern sure don't need something
plugged into
the backside of the 706 to do it - it's a single push of the button and dial the power
level I want.
Especially handy with the Ameritron 500 watt amp I use, since I sometimes need/want
different drive
levels, demending on what antenna is in use at the time.

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

2857. Re: $26 ICOM CIV CT17 PC CONTROLER for 706/746/756 and many others

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 18:19:44 UTC
From: Chaos <chaos@no.spam.com>
Message-ID: <4BU88.72$6I1.46806@news.uswest.net>
Source record: 148841

Bruce, what an unethical creep you are...

Not only do you spam the group with ads for your overpriced crap, your spam automatically connects the unsuspecting to Pay Pal.

May you burn in Hell

2858. Re: The size of the cable for 2,4GHz Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 18:56:15 UTC
From: Will <wpmoore@mindspring.com>
Message-ID: <uh786u4lthldamchg78ouuq1dks2viuh8j@4ax.com>
Source record: 148843

I looked at the attenuation charts for various cables for an external
WLAN antenna. LM200 looked ok for 10-15 feet where you might like
some flexibility, but I'd use LM400 for 10-100 feet.

On Wed, 6 Feb 2002 11:30:21 +0100, "fachman" <fachman@sprintnet.pl>
wrote:

>Hi
>
>I have heard that the size of the cable matters. I do know that if the
>shorter then its better, but i do also heard that its size must be the
>multipler of the lenght of the radio wave for the best results. So do you
>know what size of the cable i should use?
>
>Greetings
>

2859. Cushcraft R7000 Vertical Antenna---Tech Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 19:22:30 UTC
From: Mike Kulyk <mkulyk@optonline.net>
Message-ID: <WzV88.19003$th4.7128498@news02.optonline.net>
Source record: 148844

Hello

A friend has a R7000 vertical antenna. The problem is that it does not perform well on 15 meters.

Anyone encounter the same problem and what might the fix be. I did hear of a rivet on the 15 meter trap causing a problem.

Mike WB2GLW

2860. Re: Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 19:26:42 UTC
From: richardharrison@webtv.net
Message-ID: <7448-3C642672-11@storefull-112.iap.bryant.webtv.net>
Source record: 148846

Mike Luther wrote:
"Polyphaser has or had a web site devoted to the science of protection of things which must remain working."

Get all the free information you can from Polyphaser and others. They have some good information. But, Polyphaser is really devoted to selling Polyphaser.

I`ve worked for years in many broadcast stations and many more years working with industrial radio stations. Of these hundreds of stations, none had gas tubes across the antenna feedlines. None of these 24-7-365 operating stations received lightning damage of consequence, though many were solitary in their positions on the highest sites for miles around and often hit by lightning. They just kept on operating.

We found the solution to our lightning exposure, besides the usual practices, was broadcast tower lighting chokes in every wire in the power service including all grounded wires. This prevents an instantaneous difference of potential from causing a large current flow through protected equipment. It gives arrestors a chance to work. It allows the earth around the station to momentarily rise to some high lightning induced potential without instantly forcing a huge discharge through your equipment to the powerline which may very well be connected to earth at a very different voltage.

Think about it. Constant operation in hundreds of stations at diverse locations on the globe all with no damage.

Best regards, Richard Harrison, KB5WZI

2861. Re: Cushcraft R7000 Vertical Antenna---Tech Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 19:39:07 UTC
From: ac6v <ac6v1@ix.netcom.com>
Message-ID: <3C64295B.7BDB11F7@ix.netcom.com>
Source record: 148845

Mike my R-7000 has had a problem where the aluminum wire coming out of the trap corrodes or has a loose connection due to the flimsy way Cushcraft secured it to the outer case of the trap.

The fix is discussed at URL:
http://www.eham.net/reviews/detail/298

Good Luck
--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
==========
Mike Kulyk wrote:

> Hello
>
> A friend has a R7000 vertical antenna. The problem is that it does not
> perform well on 15 meters.
>
> Anyone encounter the same problem and what might the fix be. I did hear of a
> rivet on the 15 meter trap causing a problem.
>
> Mike WB2GLW

2862. Re: Cushcraft R7000 Vertical Antenna---Tech Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 19:55:54 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c642d4d@news.bnb-lp.com>
Source record: 148847

Hello Mike,
On a related note I have a sketch of the inside of the R-7 "black box"
with layout and component values on my site. A larger version of the
image is also available for download. Just search from my homepage for
R-7

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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www.ab7sl.com

2863. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 20:21:39 UTC
From: RellikJm@yahoo.com
Message-ID: <937a202b.0202081221.7c68c650@posting.google.com>
Source record: 148850

> Dunno, sounds like you bought the wagon before the horse. You normally
> wouldn't use a 4:1 balun with either one of those antennas. Or at
> least I wouldn't. But if you want to try, for a dipole just hook one
> side to hot, and the other leg to ground. Normally, a long wire would
> be hooked to hot, and the ground side grounded to earth. You don't
> mention the feedline used, so hard to tell what you have in mind. Are
> you using a tuner and ladder line? Does the tuner already have a 4:1
> balun in it? IE: provisions for a balanced output? If you are using
> coax, you would want a 1:1 balun for a dipole. I normally wouldn't use
> a balun at all on a long wire, unless it happens to be a 4:1 already
> in a tuner. But than again , normally I wouldn't even use a long
> wire/random wire. I'm not that crazy about them. All you need to match
> a long wire is a simple L network tuner. A MFJ 39.99 special will do
> the job. You don't need a balun at all on a coax fed dipole. But it's
> good practice to use one to reduce currents on the shield of the coax.
> You don't want it acting like part of the antenna. MK

Well I bough the 4:1 balun for my LDG Z-11 QRP autotuner. I feed the balun with RG-58. I bought the balun under the recomedation for long wires. By basic station set up is a Yaesu Ft-817 to the Z-11 QRP autotuner to I am hoping the 4:1 balun for use with longwires. Kinda a backpacker rig. Make sense?

Jay

2864. Co-linear v discone

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 20:27:10 UTC
From: "Derek R. Smith" <derek@multnomah.demon.co.uk>
Message-ID: <TRH$d9CeSDZ8Ewzf@multnomah.demon.co.uk>
Source record: 148851

I am looking to buy a new aerial for use with a NRD 525. (Yes I know the audio could be better but the RF performance seems pretty good).
I listen to amateur bands mostly (50, 144 and 432Mhz) but also like to listen to other transmissions in the aircraft and adjacent bands.
Below 30Mhz is no problem as I have a suitable 'long wire' and balun.
Location here precludes the use of several separate aerials and I visited the local Ham radio shop to buy a discone. I was advised that a co-linear would perform better on the ham bands for which it was designed, and would be no worse at the other frequencies in between.
I am now confused because I know the discone will provide little or no gain, but it should be relatively flat across the frequency range of interest.
A co-linear will give gain at its design frequencies but surely there will dips in the performance in between and these dips are likely to provide inferior performance to a properly designed discone?
I have also seen advertisements for a "Royal Discone" that claims to provide gain at the three amateur band frequencies and enhanced discone performance everywhere else. Is this a discone, a co-linear or something else? Can the claims be true?
I'd be grateful for some opinions from any of the many aerial/antenna experts out there.
TIA
Derek
--
Derek R. Smith.

2865. Re: Recommend SMA plug style (crimp, non-crimp)?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 20:42:30 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <a41d7d$1alu@r02n01.cac.psu.edu>
Source record: 148852

Hi Chris:
I prefer the crimp on type, but then I have the tooling to do it. The problem is that the tools to crimp SMA connectors are not interchangeable with other brands of connectors. So if you buy AMP SMA connectors you need a AMP crimp tool. Also you will need a different crimp tool for each size of cable. This is not a problem with the solder type but they are harder to put on.
My advice is to follow the manufactures instructions "EXACTLY", close is not good enough.
It might be better if you only need a few cables with SMA connectors to buy them from some supplier that can do the job right as the crimp tooling is costly and the center contact is tough to solder if you are not skilled at soldering.

--
John Passaneau, W3JXP
Physics Dept. Electronics Shop
Penn State University
104 Davey Lab, University Park , Pa. 16802
814.863.4297, jxp16@psu.edu

"cgalbrai" <cgalbrai@umich.edu> wrote in message
news:a41mup$j3n$1@newstest.laserlink.net...
> Hi gang,
>
> I've never used SMA connectors before. Can someone recommend a favorite
> type? I am seeing all sorts, with several of the "crimp" or "solder"
type.
> Also, any tips on installing these on RG-174, 58, 8x appreciated! 73,
Chris
> KA8WFC
>
>

2866. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 20:46:55 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C64393F.8CB5D48B@IEEE.org>
Source record: 148853

Jay wrote:
> Well I bough the 4:1 balun for my LDG Z-11 QRP autotuner. I feed the
> balun with RG-58. I bought the balun under the recomedation for long
> wires. By basic station set up is a Yaesu Ft-817 to the Z-11 QRP
> autotuner to I am hoping the 4:1 balun for use with longwires. Kinda a
> backpacker rig. Make sense?

Where are you going to find a longwire antenna with a feedpoint
impedance of 200+j0 ohms?
--
cheers, CAM, W5DXP

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2867. eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 21:06:33 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c643ddd@news.bnb-lp.com>
Source record: 148854
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Many of us Ham's have been pioneers for some time by offering electronic
QSL card service. Now the ARRL is accepting eQSL's for DXCC credit.....

http://www.eqsl.cc/qslcard/DXCCInfo.cfm

I qsl 100% electronically....check my web site!

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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Official W9INN Antennas Page
www.ab7sl.com

2868. A3S & A3WS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 21:13:36 UTC
From: kk9t@earthlink.net
Message-ID: <3c643ef4.30649498@news.earthlink.net>
Source record: 148855

I am wanting to mount an A3WS on the same mast as my existing A3S.
Does anyone know how much space I need to allow between them and is it
better to mount them with the masts parallel or perpendicular?

Tnx
KK9T

2869. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 21:30:34 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c64437e@news.bnb-lp.com>
Source record: 148856
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Yes..one must first register with eQSL (even if you never use their services) to read about this great eQSL / DXCC news breakthrough....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

2870. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 21:42:25 UTC
From: "Carl R. Stevenson" <wa6vse-shack@fast.net>
Message-ID: <3c644789_1@news7.fast.net>
Source record: 148857
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c643ddd@news.bnb-lp.com...
> Many of us Ham's have been pioneers for some time by offering
electronic
> QSL card service. Now the ARRL is accepting eQSL's for DXCC
credit.....
>
> http://www.eqsl.cc/qslcard/DXCCInfo.cfm

However, if you read the details, this only seems to apply if you have
eQSL print and mail a physical card to you by postal mail (and only
in the US, at least at this time) at a cost of $1 per card ... this
seems
to defeat the economy of eQSLing compared to "the old way." It also
would seem to put eQSL at an economic disadvantage compared
to the ARRL's proposed "LOTW" ... if I were eQSL I wouldn't be so
happy about this. (I'm not complaining about eQSL's charge for
printing and mailing a card ... that doesn't seem unreasonable for
the service ... I just view the process as an unnecessary step which
adds unnecessary cost ... to the disadvantage of the eQSL folks.)

DISCLAIMER: I am NOT affiliated with eQSL in any way and I'm
not really an awards chaser ... for me, it's just the principle of the
thing, where I see the eQSL folks as having come up with a good
idea that can save hams a great deal of cost on QSLing, and it
appears to me that the ARRL is making things tough for them in
ways that I view as arbitrary and unnecessary.

Carl - wa6vse

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=OM8g
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2871. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 22:00:09 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c644a68@news.bnb-lp.com>
Source record: 148858
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Hello Carl,
This decision and news was just released so there are a few loose-ends yet....soon it will be world-wide. The granting of permission for eQSL - DXCC cards acceptance was for any and all cards. The nice people at eQSL will be adding world wide capability very soon...

DXCC qsl'ing is now -cheaper- and -faster- than ever....a huge and bold step in the right direction.

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

2872. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 22:20:05 UTC
From: aa1ll@email.com
Message-ID: <e85be400.0202081420.3523bb00@posting.google.com>
Source record: 148859
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

"Jim Weir" <jim@rst-engr.com> wrote in message news:<u5u4oobppkm0d9@corp.supernews.com>...
> Let's presume some simple antennas --
>
> a rod or whip of finite diameter over a theoretically infinite ground plane
>
> a simple dipole of finite diameter far away from any conducting earth.
>
>
> What are the simplified formulas for calculating R and X at the feed point
> of these antennas, factoring in the finite width of the elements?
...
.
.
> Jim

Hi Jim,
To determine antenna reactance you can use a transmission line
approximation, with:

Zo=60[ln(H/a) - 1]

where
Zo=transmission line characteristic impedance
H=antenna wire length
a=wire radius.

This is for a vertical (unbalanced) monopole and is 1/2 of a dipole's
(balanced) reactance. It is independent of ground; i.e., assumes free
space.

Then you can use:

X=-Zo/(tan(theta))

where theta is the electrical length, equal 360(H/lambda) degrees.
You can also throw in an extra 5 degrees for the first quarter wave
to account for end effect.

This seems to get you close enough and seems to agree with NEC2 to
within several percent when I have used it, even for multiple
wavelengths. The Zo equation is in an old printing of Jordan, chapter
14, and I've seen in in some of the ARRL pubs.

Radiation resistance is more difficult to calculate because it
(practically) depends on conductor losses and ground effects.

73, Paul, AA1LL
Mason, NH
http://www.qsl.net/aa1ll

2873. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 22:45:24 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c6454e9_1@corp.newsgroups.com>
Source record: 148861

Hi Cam and all
The Z11 Tuner has a tuining range of between about 5 and 800 ohms if I recall correctly thus with the balun they claim u can tune up to 2400 ohm impedence which will work with some long wires.. it's not the best way to go but it will work in a pinch hi ,
happy Haming
73 Dave

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C64393F.8CB5D48B@IEEE.org...
> Jay wrote:
> > Well I bough the 4:1 balun for my LDG Z-11 QRP autotuner. I feed the
> > balun with RG-58. I bought the balun under the recomedation for long
> > wires. By basic station set up is a Yaesu Ft-817 to the Z-11 QRP
> > autotuner to I am hoping the 4:1 balun for use with longwires. Kinda a
> > backpacker rig. Make sense?
>
> Where are you going to find a longwire antenna with a feedpoint
> impedance of 200+j0 ohms?
> --
> cheers, CAM, W5DXP
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> Check out our new Unlimited Server. No Download or Time Limits!
> -----== Over 80,000 Newsgroups - 19 Different Servers! ==-----

---
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Version: 6.0.320 / Virus Database: 179 - Release Date: 1/30/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

2874. Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 22:56:38 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <ACY88.118945$h31.8086766@e420r-atl1.usenetserver.com>
Source record: 148860
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Hi Folks,
I'm interested in a Diamond SG7900A, dual band mobile antenna. I'm thinking about mounting it high (atop the rollbar) of my Jeep but I'll also be strapping a canoe up there from time to time as well. I've seen the tiny picture of the "one touch fold over design" and am curious if it's a good choice or should I look for another mount point.
Has anybody had experience of the fold over mechanism corroding or popping downward under road conditions? I'd appreciate general impressions or personal experience opinions on the fold over design as well as the antenna in general. I'd also appreciate thoughts on such a high gain antenna in hilly (not mountainous) terrain. Feel free to add any other considerations as the thread strikes you.
73's,
Drink, WP3JQ

2875. Re: Co-linear v discone

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 23:16:57 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <9fm86usfu57u8gdos1mnafl0jk9b6n5rtq@4ax.com>
Source record: 148862

On Fri, 8 Feb 2002 20:27:10 +0000, "Derek R. Smith"
<derek@multnomah.demon.co.uk> wrote:

>I am looking to buy a new aerial for use with a NRD 525. (Yes I know the
>audio could be better but the RF performance seems pretty good).
>I listen to amateur bands mostly (50, 144 and 432Mhz) but also like to
>listen to other transmissions in the aircraft and adjacent bands.
>Below 30Mhz is no problem as I have a suitable 'long wire' and balun.
>Location here precludes the use of several separate aerials and I
>visited the local Ham radio shop to buy a discone. I was advised that a
>co-linear would perform better on the ham bands for which it was
>designed, and would be no worse at the other frequencies in between.

That seems a safe generalization.

>I am now confused because I know the discone will provide little or no
>gain, but it should be relatively flat across the frequency range of
>interest.

For receiving, that doesn't matter as much.

>A co-linear will give gain at its design frequencies

Where it will exhibit gain

> but surely there
>will dips in the performance in between and these dips are likely to
>provide inferior performance to a properly designed discone?

Probably not. Could be better.

>I have also seen advertisements for a "Royal Discone" that claims to
>provide gain at the three amateur band frequencies and enhanced discone
>performance everywhere else. Is this a discone, a co-linear or something
>else? Can the claims be true?
>I'd be grateful for some opinions from any of the many aerial/antenna
>experts out there.
>TIA
>Derek

Hi Derek,

You have to be careful with discones. If you have any concern about
the launch angle from one, you want to stay within a 3:1 tuning range
of the lowest frequency. Some discones can tune over a 10:1 range,
but at higher frequencies, radiation starts to steer straight up.

73's
Richard Clark, KB7QHC

2876. Re: A3S & A3WS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 23:24:46 UTC
From: kenneth m cubilo <kce@freeway.net>
Message-ID: <3c646055$0$18505$2c3e98f8@news.voyager.net>
Source record: 148863

hi i have the two antenna's separated by 6 feet here. the a3s is on top
and the a3ws on the bottom, both in line with each other, no problems
just great performance

T wrote:
>
> I am wanting to mount an A3WS on the same mast as my existing A3S.
> Does anyone know how much space I need to allow between them and is it
> better to mount them with the masts parallel or perpendicular?
>
> Tnx
> KK9T

--
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2877. Re: Co-linear v discone

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 23:34:21 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C64605B.48D3F145@icok.net>
Source record: 148864

Derek,
If you want one antenna to cover more than one band, I think I'd use the 'dis-cone' which is designed to work over a large frequency range. A 'co-linear' antenna would have gain, but only on a fairly narrow frequency range. On other than the band(s) it was designed for, the co-linear antenna wouldn't offer any benefit over the dis-cone, and may not perform as well.
'Doc

2878. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-08 23:53:41 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <47n86ucr34711t3h95jodduj002bjmhmm8@4ax.com>
Source record: 148865

Gary - Think about it for a minute. Assuming a 706Mk II on SSB.

Your method, and not necessarily in this order:
1. Push (Mode) button 3 times to get to AM.
2. Assuming 706 is not on Q1, Push (Display) for 2 seconds to select
Q1.
3. Rotate main dial to select the desired output.
4. While steering with your knees, hold the mike button down to
transmit with one hand, and move the screwdriver up or down for
minimum SWR with the remaining hand.
5. Rotate main dial for maximum power (or whatever.)
6. Push (Display) for 2 seconds to get back to the display you were
in.
7. Push (Mode) button to get back to SSB.
8. Start transmitting.
Hope I didn't forget something.

Method using a little $10 or less plug for the back of the 706.
1. Push (Tune) button.
2. Move screwdriver up or down for minimum SWR. (Note one hand still
free to steer with.)
3. Start transmitting when tune signal drops out.

Don't you detect a little difference in the amount of operator
intervention?

Of course with my method (using AM-COM controller), I just push the
(Tune) button. :-)

Dick - W6CCD

On Fri, 08 Feb 2002 18:16:45 GMT, "Gary - KJ6Q" <davison7@gte.net>
wrote:

>UMMmm - has no one noticed that you don't HAVE to key the 706 at FULL power - *I* simply
reduce
>power manually to 10 watts or so, and tune away - and I dern sure don't need something
plugged into
>the backside of the 706 to do it - it's a single push of the button and dial the power
level I want.
>Especially handy with the Ameritron 500 watt amp I use, since I sometimes need/want
different drive
>levels, demending on what antenna is in use at the time.

2879. Re: CC&R's and antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 00:00:56 UTC
From: Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna68pm0.maf.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 148866

On Fri, 8 Feb 2002 11:28:01 +0000 (UTC), Bill Nelson <billn@spock.peak.org> wrote:
> The last I heard, the FCC has refused to override the CC&Rs, even though

Except for television and small (<=1m) dishes. That was enabled by
the Telecommunications act of 1996. http://www.fcc.gov/telecom.html

I believe it was section 207, and the FCC has issued several
rules or revisions thereof implementating that section. Eg:
http;//www.fcc.gov/Bureaus/Cable/Orders/1996_TXT/fcc96328.txt
II.5.(a)

Some additional rule making went into effect last fall, IIRC, adding
internet access antenna of similar size to the allowed list.

sdb
--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

2880. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 00:06:47 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C646817.DA343BF8@IEEE.org>
Source record: 148867

Pastor-KC1DI wrote:
> Hi Cam and all
> The Z11 Tuner has a tuining range of between about 5 and 800 ohms if I
> recall correctly thus with the balun they claim u can tune up to 2400 ohm
> impedence which will work with some long wires..

But the inductance of the balun is unlikely to be 10K ohms. If one
is driving an impedance of 1000-j1000, for instance, the typical 4:1
balun is essentially abused and relatively nonfunctional.
--
cheers, CAM http://www.qsl.net/w5dxp

2881. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 00:28:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a41qpf$1bvejo$1@ID-124126.news.dfncis.de>
Source record: 148868
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

```
--
****************************
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****************************
Paul Gili <aa1ll@email.com> wrote in message
news:e85be400.0202081420.3523bb00@posting.google.com...
> "Jim Weir" <jim@rst-engr.com> wrote in message
news:<u5u4oobppkm0d9@corp.supernews.com>...
> > Let's presume some simple antennas --
> >
> > a rod or whip of finite diameter over a theoretically infinite ground
plane
> >
> > a simple dipole of finite diameter far away from any conducting earth.
> >
> >
> > What are the simplified formulas for calculating R and X at the feed
point
> > of these antennas, factoring in the finite width of the elements?
> ...
> .
> .
> > Jim
>
>
> Hi Jim,
> To determine antenna reactance you can use a transmission line
> approximation, with:
>
> Zo=60[ln(H/a) - 1]
>
> where
> Zo=transmission line characteristic impedance
> H=antenna wire length
> a=wire radius.
>
> This is for a vertical (unbalanced) monopole and is 1/2 of a dipole's
> (balanced) reactance. It is independent of ground; i.e., assumes free
> space.
>
> Then you can use:
```

>
> X=-Zo/(tan(theta))
>
> where theta is the electrical length, equal 360(H/lambda) degrees.
> You can also throw in an extra 5 degrees for the first quarter wave
> to account for end effect.
>
> This seems to get you close enough and seems to agree with NEC2 to
> within several percent when I have used it, even for multiple
> wavelengths. The Zo equation is in an old printing of Jordan, chapter
> 14, and I've seen in in some of the ARRL pubs.
>
> Radiation resistance is more difficult to calculate because it
> (practically) depends on conductor losses and ground effects.
>
> 73, Paul, AA1LL
> Mason, NH
==========

Paul, you are on the right track.. But Roy will have problems - it involves one-wire transmission lines.

Reg, G4FGQ

2882. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 01:26:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a42q1n$19r2h1$1@ID-124126.news.dfncis.de>
Source record: 148779

```
> the typical 4:1
> balun is essentially abused
==========================
I think you have available the IEEE technical dictionary. What does it have
to say about 'abused' ?
---
Reg.
```

2883. Re: Lightning

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 02:23:08 UTC
From: mike.luther@ziplog.com
Message-ID: <u6920cdtdvj554@corp.supernews.com>
Source record: 148769

In <7448-3C642672-11@storefull-112.iap.bryant.webtv.net>, richardharrison@webtv.net (Richard Harrison) writes:
>Mike Luther wrote:

I have no argument at all about the below you posted Richard

>I`ve worked for years in many broadcast stations and many more years
>working with industrial radio stations. Of these hundreds of stations,
>none had gas tubes across the antenna feedlines. None of these 24-7-365
>operating stations received lightning damage of consequence, though many
>were solitary in their positions on the highest sites for miles around
>and often hit by lightning. They just kept on operating.

You are right on target.

>We found the solution to our lightning exposure, besides the usual
>practices, was broadcast tower lighting chokes in every wire in the
>power service including all grounded wires. This prevents an
>instantaneous difference of potential from causing a large current flow
>through protected equipment. It gives arrestors a chance to work. It
>allows the earth around the station to momentarily rise to some high
>lightning induced potential without instantly forcing a huge discharge
>through your equipment to the powerline which may very well be connected
>to earth at a very different voltage.
>
>Think about it. Constant operation in hundreds of stations at diverse
>locations on the globe all with no damage.
>
>Best regards, Richard Harrison, KB5WZI

The reason I posted the suggestion that I did was that a novice at all this is probably going to be technically engulfed in, "Gee, what's all this here?", in trying to accomplish this with what seemed available from the way the question was posted!

You are totally correct in what you advocate in my view. That accepted, if one can spend a relatively few dollars with a bolt-in product, some copper strip, and not think much about frequency of coils, how they are connected and such, the fair degree of protection seems a good first way for a novice to contemplate. Find the parts, Polyphaser or el cheapo, and then go radiate!

Then, as one's interest builds, one's dreams build with it, and one has the satisfaction of looking up in the sky and saying, "Gee, look what's out there!", the real professionalism which you do advocate and exhibit here for all to see will also take hold Richard. There are many

antennas which I would dearly love to build and use, but are out of my reach. But second place or third place is far from nothing, so how to stay in second or third place is worth while knowing .. that's all!

--> Sleep well; OS/2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

2884. Re: IC-746pro Vs IC-756pro

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 02:25:26 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C648895.DD766E21@att.net>
Source record: 148770
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

CAM, the 756 PRO is much more radio than the 746 PRO which in turn is heads and shoulders above the original 746. The disadvantage of the 756 PRO is that it doesn't have two-meters like the 746 and 746PRO.

For the $$, I vote for the 756 PRO hands down.

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

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CAM wrote:
>
> The IC-756pro (not II) is about the same price as the new
> IC-746pro. Which is the best deal for the money? thanks,

2885. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 02:36:29 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <MW%88.1465$PY4.654146@paloalto-snr1.gtei.net>
Source record: 148772

I suppose my resistance to that "tuning gadget' has lots to do with the fact that I *rarely* am
doing any antenna tuning while the vehicle is in motion - I usually settle onto a favorite section
of the band, and if I later want to change, it's usually during a "pit stop" anyway...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:gCU88.407$Dq3.402072@paloalto-snr2.gtei.net...
> "Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0202071800.15666fb0@posting.google.com...
> > "Gary - KJ6Q" <davison7@gte.net> wrote in message
> news:<KbA88.273$sk6.573661@paloalto-snr2.gtei.net>...
> > > I'm puzzled as to why ANY such device is "needed" - I operate my 706 into a screwdriver, and
> also an
> > > SGC 230 autotuner... I merely place the function switch in the AM position, key the rig while
> > > monitering SWR, and awaaaay we go! WHY the "need" for some "special" device?
> > >
> > > --
> > > Gary - KJ6Q
> >
> > I mainly want it for home use. I don't change freq enough when mobile
> > to worry about it. For me , it would come in handy when I'm tuning my
> > tuner, say when on 160m. Sure, I can put it on AM and test with the
> > full 40 watts no problems, but many times I'm on the CW portion of the
> > band, and hate to have audio or noise on my carrier. I've usually got
> > TV's etc going in the background. So I end up usually using RTTY and
> > going into the menu and cutting it back. And yes, I know as Cecil
> > says, that you can test with full power and let the protection circuit
> > cut back, but I'm paranoid. That makes me nervous at 100w out. Fairly
> > new radio too... I like to baby my finals. They get enough abuse with
> > my normal operation. :/ MK
>
> UMMmm - has no one noticed that you don't HAVE to key the 706 at FULL power - *I* simply reduce
> power manually to 10 watts or so, and tune away - and I dern sure don't need something

plugged
into
> the backside of the 706 to do it - it's a single push of the button and dial the power
level I
want.
> Especially handy with the Ameritron 500 watt amp I use, since I sometimes need/want
different
drive
> levels, demending on what antenna is in use at the time.
>
> --
> Gary - KJ6Q
> **********
> Two things we'll never see:
> 1. Perpetual motion...
> 2. A liberal Democrat complaining
> about "Too much government"
>

2886. Re: Can You Believe these CC&Rs?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 02:37:33 UTC
From: n2ey@aol.com
Message-ID: <20020208213733.16311.00000887@mb-da.aol.com>
Source record: 148773

In article <3C603A37.9016B003@tampabay.rr.com>, Dennis Kaylor
<k4oxg@tampabay.rr.com> writes:

>if this is true what you said is in the CCR you should be able to take them
>to court for a minimum of discrimination and racism and if they are illegal
>in that area then the entire contract is void
>
The racist parts were rendered null and void years ago by the civil rights and
equal housing laws. No court would uphold those parts of the CC&Rs.

But ONLY those parts are rendered null and void. The rest are unaffected.

(standard "I'm not a lawyer" disclaimer applies)

73 de Jim, N2EY

2887. Loading Coils

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 02:38:00 UTC
From: "P@ul/GW&#65533;GVQ" <gw0gvq@onetel.net.uk>
Message-ID: <KW%88.7428$YA2.1338765@news11-gui.server.ntli.net>
Source record: 148771

I have just discarded a 1/2 size G5RV that I used in my other QTH. It had loading coils to allow it to be tuned up on 80mtrs. I now have moved QTH and am able to get a Full Size G5RV in . I have been told that I can use the coils to allow it to tune up on 160mtrs. I wonder if Anyone knows anything regarding this eg. how much more copper wire would I need to put on each leg after the coils have been attached and most importantly is it possible
hi..... GW0GVQ

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Version: 6.0.323 / Virus Database: 180 - Release Date: 08/02/02

2888. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 03:32:59 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <bp596ukncuq1ckhl65ljb45oc8u7jvkttl@4ax.com>
Source record: 148774

Well, that's certainly the best thing to do. If you ever get an
Am-Com you will find it tunes so easily that tuning underway is not
much different than using a cel-phone. Of course they aren't always
safe to use while driving either. Suppose it depends a lot on the
person doing it. I have been operating mobile for 51 years, and have
never found it to be too much of a distraction. YMMV.

73, Dick - W6CCD

On Sat, 09 Feb 2002 02:36:29 GMT, "Gary - KJ6Q" <davison7@gte.net>
wrote:

>I suppose my resistance to that "tuning gadget' has lots to do with the fact that I
rarely am
>doing any antenna tuning while the vehicle is in motion - I usually settle onto a favorite
section
>of the band, and if I later want to change, it's usually during a "pit stop" anyway...

2889. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 04:14:41 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202082014.50927b8d@posting.google.com>
Source record: 148775

"Gary - KJ6Q" <davison7@gte.net> wrote in message news:<gCU88.407

I earlier said:

So I end up usually using RTTY and
> > going into the menu and cutting it back.

I never tune my antenna tuner with full power out.
>
> UMMmm - has no one noticed that you don't HAVE to key the 706 at FULL power - *I* simply reduce
> power manually to 10 watts or so, and tune away - and I dern sure don't need something plugged into
> the backside of the 706 to do it - it's a single push of the button and dial

Uh, thats what I'm trying to get away from. Instead of switching the mode, then going into the menu, dialing it back, exiting the menu to see the SWR meter,tuning,back to the menu to turn it back up, and then switching back to the desired mode, I click one button. Maybe two if I have to switch modes. I hate having to get in the menu every time to turn the power down and back up. You have to exit the menu for the SWR meter to work. So that mean twice to the menu for each tuning. I'd much prefer NO going to the menu at all. MK

2890. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 04:57:51 UTC
From: "R.U. Amused?" <n6ttd@spamsuxarrl.net>
Message-ID: <j%198.15016$fK1.79941@rwcrnsc54>
Source record: 148776
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur,rec.ham-radio,alt.ham-radio

Atually, the area I live in is very nice, but really just a housing tract. There is no home owners association, but there are CC&R's. I guess the only way to enforce them is through individuals taking other individuals to court.

I am still not sure what I am going to do about my antenna situation. I have talked to a few neighbors that don't seem to mind the idea of an antenna, but everything is still up in the air. Meanwhile, my IC746 sits by on my desk waiting for use.

James

2891. Re: IC-706 Tuner Socket

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 05:18:04 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <fi298.2183$PY4.761069@paloalto-snr1.gtei.net>
Source record: 148777

The OTHER thing I shoulda mentioned, is that I don't use the SWR reading on the 706 - I use an
outboard field strength meter that sits slightly above and behind the detachable faceplate, which is
itself mounted on the top edge of my trucks instrument panel. Thus, it removes several steps in the
not-too-complicated procedure of antenna tuning... But that new Am-Com tuner sure looks slick - had
a nice chat on 20 meters with the inventor/developer of it - got all the nitty-gritty details, and
can't wait to get my quarters saved up to buy one! :-)

--
Gary - KJ6Q
****
"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:bp596ukncuq1ckhl65ljb45oc8u7jvkttl@4ax.com...
> Well, that's certainly the best thing to do. If you ever get an
> Am-Com you will find it tunes so easily that tuning underway is not
> much different than using a cel-phone. Of course they aren't always
> safe to use while driving either. Suppose it depends a lot on the
> person doing it. I have been operating mobile for 51 years, and have
> never found it to be too much of a distraction. YMMV.
>
> 73, Dick - W6CCD
>
>
> On Sat, 09 Feb 2002 02:36:29 GMT, "Gary - KJ6Q" <davison7@gte.net>
> wrote:
>
> >I suppose my resistance to that "tuning gadget' has lots to do with the fact that I *rarely* am
> >doing any antenna tuning while the vehicle is in motion - I usually settle onto a favorite
section
> >of the band, and if I later want to change, it's usually during a "pit stop" anyway...
>

2892. Runways and towers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 05:41:08 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C64B674.27784364@coqui.net>
Source record: 148778

An issue came up about tall structures ADJACENT to airport runways and
having done some cursory research, I'm seeing that this is often a
locally controlled matter. I'm seeing things like a 100' tower within
2500' laterally from a runway are prohibited in some areas.
I'd appreciate some accurate references as to height vs. distance
dictated by the FAA in absence of any local regulations.
Any help or links would be appreciated.

-Bill WX4A

2893. Re: Runways and towers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 10:25:50 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a42tfe$s4c$13@quark.scn.rain.com>
Source record: 148780

.Your Friend Bill <none@coqui.net> wrote:
> An issue came up about tall structures ADJACENT to airport runways and
> having done some cursory research, I'm seeing that this is often a
> locally controlled matter. I'm seeing things like a 100' tower within
> 2500' laterally from a runway are prohibited in some areas.
> I'd appreciate some accurate references as to height vs. distance
> dictated by the FAA in absence of any local regulations.
> Any help or links would be appreciated.

Check the FCC and FAA web pages.

Even in areas where there are restrictions, exceptions can be made,
with sufficient lighting and proper delays to get the notices published.

Of course, if your antenna would be close to the standard glide path on
an approach, your options are very limited.

At the airport I used to use, there was a commercial radio station. If
I recall correctly, each tower was around 350 feet tall. It was only
about 1000 feet off to one side of the runway.

--
Bill Nelson (billn@peak.org)

2894. Re: Icom CR-502 High Stability Xtal Unit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 11:39:09 UTC
From: DL7JSK <dl7jsk@darc.de>
Message-ID: <a431q3bbu07$1@news.t-online.com>
Source record: 148781
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.swap

Me no longer.Now I have it.

"DL7JSK" <truckdrivingman@hotmail.com> schrieb im Newsbeitrag
news:a0vue7ien07$1@news.t-online.com...
> Me too.Please reply to tom.ansorg@t-online.de
>
> Thanx and 73
> Tom
>
> "Neil" <DontDoIt@ImNotHere.com> schrieb im Newsbeitrag
> news:u8l63uk0jf9ud2n402fqm30ublo4ej0cd2@4ax.com...
> > Hi all. I'm looking for an Icom CR-502 High Stability Crystal Unit.
> > Please reply to K1VY@arrl.net or call me at one of the numbers below.
> >
> > Thanks.
> >
> > Neil
> > (603) 465-2788
> > (800) 962-2949
> > New Hampshire
> >
>
>

2895. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 13:30:13 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a43894vkc1@slb6.atl.mindspring.net>
Source record: 148808

From IEEE dictionary:

.
.
.
ab-end (ab.end') adj. 1. Abnormal (computer) program end. 2. Straying from the usual program end; wandering past subroutine termination point. 3. Varying from type; abnormal data type created in error by errant code structure or errant object class; OOPSLA.

ab-hor (an.hor) n. 1. Queer woman of questional reputation.

ab-used (ab.used') adj. 1. Any of various abnormal uses of resistance. 2. Dynamic resistance used in place of real resistor; e.g. 3. Dissipationless resistance used in place of actual resistor. 4. Imaginary resistor: v. Constant Reactance. [< L < Gk. < a- without + sense of use of resistance]
.
.
.

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:a42q1n$19r2h1$1@ID-124126.news.dfncis.de...
> > the typical 4:1
> > balun is essentially abused
> ==========
> I think you have available the IEEE technical dictionary. What does it have
> to say about 'abused' ?
> ---
> Reg.
>
>
>

2896. Info Wtd: ASAC Auto Screwdriver Controller

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 14:07:23 UTC
From: Barry <luminosity@madriver.com>
Message-ID: <3C652D08.5DD55CC8@madriver.com>
Source record: 148782

I would appreciate any input by anyone using this device.
Pro or Con.
They seem to have all of their bases covered in the product discription.
http://www.amcominc.com/productdetail.cfm?Prod_ID=957
No more terrorizing the YL while trying to manually tune my BB3,
while driving down winding mountain roads here in Vermont.
Tnx / 73 -Barry N1QWA

--

Luminosity Studios est.1975
Fine Architectual Stained Glass & Custom Lighting
Arroyo Craftsman / Mica Lamp Co / Quoizel
Located in The Old Church Rt.100
Waitsfield, Vermont 05673
(802) 496-2231

Slide Show:
http://y42.photos.yahoo.com/bc/luminositystudios/slideshow?.dir=/Luminosity+Studios&.view=l

2897. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 15:51:52 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C654598.AEF87105@IEEE.org>
Source record: 148783

Reg Edwards wrote:
>
> > the typical 4:1
> > balun is essentially abused
> ==========================
> I think you have available the IEEE technical dictionary. What does it have
> to say about 'abused' ?

I'm speaking from experience, Reg. I once was a balun abuser.
--
cheers, CAM http://www.qsl.net/w5dxp

2898. Re: Info Wtd: ASAC Auto Screwdriver Controller

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 16:00:58 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C6547BA.B4B74850@IEEE.org>
Source record: 148784

Barry wrote:
> I would appreciate any input by anyone using this device.
> Pro or Con.
> They seem to have all of their bases covered in the product discription.
> http://www.amcominc.com/productdetail.cfm?Prod_ID=957
> No more terrorizing the YL while trying to manually tune my BB3,
> while driving down winding mountain roads here in Vermont.

It's nice but seems to be overkill to me. The tuner is almost as expensive as the screwdriver antenna. Somewhere I read about a screwdriver tuner that put out an audio tone, high for high SWR and low for low SWR, so a ham could listen instead of watch the SWR meter. I added some components inside my Daiwa SWR meter that removes power to the screwdriver motor when the SWR goes low. It uses no more than $10 worth of additional parts inside the SWR meter.
--
cheers, CAM http://www.qsl.net/w5dxp

2899. Re: Info Wtd: ASAC Auto Screwdriver Controller

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 16:16:37 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <hpia6u8l6sld6vnuf96ueil41te0ek9smv@4ax.com>
Source record: 148785

All I can say is you should have bought one when they were $189. :-)

Dick - W6CCD

On Sat, 09 Feb 2002 09:07:23 -0500, Barry <luminosity@madriver.com>
wrote:

>I would appreciate any input by anyone using this device.
>Pro or Con.
>They seem to have all of their bases covered in the product discription.
>http://www.amcominc.com/productdetail.cfm?Prod_ID=957
>No more terrorizing the YL while trying to manually tune my BB3,
>while driving down winding mountain roads here in Vermont.
>Tnx / 73 -Barry N1QWA

2900. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 16:20:24 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C654C2E.9B9F36B0@icok.net>
Source record: 148786

Jay,
Something you might try, with the coax feed line and a
long wire or random wire antenna is to use a ground stake
for the 'other side' of the balun secondary. If the tuner
doesn't 'like' the match on any particular band, change the
length of the long/random wire...
'Doc
PS - You can use the same basic set up without the balun,
probably never know the difference.

2901. Re: Info Wtd: ASAC Auto Screwdriver Controller

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 16:28:07 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C654DF1.689C071A@icok.net>
Source record: 148787

Barry,
Wish I could tell you how they work, but unfortunately
I don't have one. There were at least one or two articles
about a simular device for mobile antennas in very old QST
magazines. As a guess, I'd say it was 20 years ago (about).
A Collins surplus variable inductor, couple of servo motors,
and a sensing network from a 'remote' SWR meter were used
to keep the SWR constant (sort of). The 'ASAC' controller
looks like it would be much easier to live with.
'Doc

2902. HAM Textbooks [was: Re: J-Pole Question]

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 16:37:06 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <Tac98.120113$h31.8338349@e420r-atl1.usenetserver.com>
Source record: 148788

73 & GD KC8PMX,
Living on an island, a thousand miles away from the nearest stateside
mall, I sure know how you feel. I have to resort to mail order. You might
have to turn to catalogs and a phone call to get your hands on some of this
material.
Cordial 73's,
Drink, WP3JQ

"KC8PMX" <kc8pmx@nospamtm.net> wrote in message
news:Ohv88.393$TS.46572@newshog.newsread.com...
> No, I am not overthinking it, and was asking a simple question. Every
> diagram and material I have seen shows it using copper for the elements
part
> of the antenna and the bottom support.
>
> As far as the ARRL materials, there is nowhere to buy them around here,
with
> the closest place being over 2 hours away. I would love to purchase
amateur
> radio texts, but there is nowhere to go and purchase these items.
>
> Thanks anyways...
>
>
> "Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
> news:3C6130C9.255E1FE5@tampabay.rr.com...
> > that section is used to mount the antenna so it needs to be stiff and
> strong
> > after reading your last two posts i think you are over thinking this
stuff
> its
> > just antenna construction not rocket science
> > you need to buy the ARRL antenna book and the ARRL handbook both will
tell
> you
> > most of what you need/wamt to learn
> >
> > KC8PMX wrote:
> >
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> > > I ------------------>>>>>
> > > I
> > > I
> > > I
> > >
> > > My question is the part of the J-pole antenna that is marked by the
line
> and
> > > arrows, does this part of the antenna HAVE to be a metallic material
or
> can
> > > other material be used?
> > > Can't seem to find the answer to my question so I am posing it here.
> > >
> > > Thanks in advance.
> > >
> > > Ryan KC8PMX
> >
>
>

2903. Re: Info Wtd: ASAC Auto Screwdriver Controller

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 17:01:33 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <2dla6uc6f0kplo81umk5m0j4om251m4p7n@4ax.com>
Source record: 148789

The March 2002 QST will have a new product article on the Am-Com.
Haven't got mine yet.

Dick - W6CCD

On Sat, 09 Feb 2002 16:28:07 GMT, 'Doc <w5lz@icok.net> wrote:

>
>
>Barry,
> Wish I could tell you how they work, but unfortunately
>I don't have one. There were at least one or two articles
>about a simular device for mobile antennas in very old QST
>magazines. As a guess, I'd say it was 20 years ago (about).
>A Collins surplus variable inductor, couple of servo motors,
>and a sensing network from a 'remote' SWR meter were used
>to keep the SWR constant (sort of). The 'ASAC' controller
>looks like it would be much easier to live with.
> 'Doc

2904. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 17:38:41 UTC
From: LRod-removethispart-@pobox.com
Message-ID: <3c655d48.127310797@netnews.worldnet.att.net>
Source record: 148790
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Wed, 06 Feb 2002 21:07:24 -0600, Jim Adney <jadney@vwtype3.org>
wrote:

> You're exactly right, but there is also a company named Eutectic which
> makes soldering and brazing alloys. This may be what he was referring
> to.

How about that. You learn something everyday.

Thanks.

LRod

2905. How ground Tail pipe?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 18:32:46 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <iXd98.810$1F2.18606@sea-read.news.verio.net>
Source record: 148791

Could you share your experience with me? I have tons of ignition and other types of noise (S-8 average on the IC-706) coming from my antenna (a screwdriver on a foldover bumper hitch mount), which is located about a foot or two from the tailpipe on my new Toyota Sienna van, making it difficult, and certainly not enjoyable, to work the HF bands.

If I turn off the engine, all the noise disappears. If I disconnect the antenna, again it all disappears, so I know it's coming from the engine and not coming through the dc power or other control lines).

So, I figure it's most likely the tail pipe, being so close to the antenna, and tons of mobile books say to ground the tail pipe in one or more places, or move the antenna. I can't move the antenna, but I don't have a clue how to ground it.

So, I need some advice. How do you actually ground the tail pipe? Do you drill holes in it to attach some copper grounding strap with self-taping screws? Do you hose clamps to clamp a piece of copper grounding strap to it? Do you scrape it to bear metal and then apply that non-oxidize stuff ("butter") they use on beams to keep the corrosion down and the conductivity up? How do you connect the grounding strap to the underchasis of the car...drill more holes? How many straps does it usually take? How long can the straps be and still be effective? How do you seal the connections so the rain, wet, mud, etc., under the car doesn't make short work of it?

In other words, I'm not very mechanically inclined and really getting too old to climb all over under the car...how do I do this as simply, yet effectively as possible? Any advice is appreciated. Is there a commercial radio place that does noise reduction for a reasonable price in the SF Bay area?

Thanks,

Greg, N6GK

2906. Field Day Special - Gain vs F/B

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 19:57:49 UTC
From: "Sharon, Innkeeper - The Mockingbird Inn" <sandbird@netdoor.com>
Message-ID: <1bf98.39601$EP1.2945026@bin6.nnrp.aus1.giganews.com>
Source record: 148792

In designing W7EL's "Field Day Special", I notice that several different elememt spacings yield acceptable 2:1 bandwith.

Am I correct in assuming that the narrowest spacings yield the greatest forward gain & the wider spacings yield the best F/B ratio?

I don't have NEC to model the antenna.

2907. Re: How ground Tail pipe?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 20:06:04 UTC
From: Hamaholic <middlefinger4@home.coma>
Message-ID: <Mif98.34676$X64.11969767@news1.rdc2.pa.home.com>
Source record: 148793

Greg, If your engine block is grounded your tailpipe will also be grounded.

"Greg Knapp" <gknapp@freshrain.org> wrote in message
news:iXd98.810$1F2.18606@sea-read.news.verio.net...
Could you share your experience with me? I have tons of ignition and other types of noise (S-8 average on the IC-706) coming from my antenna (a screwdriver on a foldover bumper hitch mount), which is located about a foot or two from the tailpipe on my new Toyota Sienna van, making it difficult, and certainly not enjoyable, to work the HF bands.

If I turn off the engine, all the noise disappears. If I disconnect the antenna, again it all disappears, so I know it's coming from the engine and not coming through the dc power or other control lines).

So, I figure it's most likely the tail pipe, being so close to the antenna, and tons of mobile books say to ground the tail pipe in one or more places, or move the antenna. I can't move the antenna, but I don't have a clue how to ground it.

So, I need some advice. How do you actually ground the tail pipe? Do you drill holes in it to attach some copper grounding strap with self-taping screws? Do you hose clamps to clamp a piece of copper grounding strap to it? Do you scrape it to bear metal and then apply that non-oxidize stuff ("butter") they use on beams to keep the corrosion down and the conductivity up? How do you connect the grounding strap to the underchasis of the car...drill more holes? How many straps does it usually take? How long can the straps be and still be effective? How do you seal the connections so the rain, wet, mud, etc., under the car doesn't make short work of it?

In other words, I'm not very mechanically inclined and really getting too old to climb all over under the car...how do I do this as simply, yet effectively as possible? Any advice is appreciated. Is there a commercial radio place that does noise reduction for a reasonable price in the SF Bay area?

Thanks,

Greg, N6GK

2908. Re: How ground Tail pipe?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 20:48:54 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <WWf98.1968$ql1.404020@paloalto-snr1.gtei.net>
Source record: 148794

"Hamaholic" <middlefinger4@home.coma> wrote in message
news:Mif98.34676$X64.11969767@news1.rdc2.pa.home.com...
> Greg, If your engine block is grounded your tailpipe will also be grounded.

UMMmm - sorry - WRONG!

Any more than a grounded vertical antenna is "grounded" and won't radiate RF...

An UNgrounded length of exhaust pipe is ENTIRELY capable of radiating random RF energy, EVEN IF it
IS grounded at one end - and UNLESS it is additionally grounded at one or more points along its
length, it IS capable of radiating RF energy JUST AS a vertical antenna will!

The method *I* use is to thoroughly expose clean metal somewhere at the midpoint of the exhaust
pipe, then apply a liberal amount of No-ox anti corrosion paste to both the pipe AND the ground
strap to be used. THEN I use a stainless steel radiator hose clamp to secure the strap to the pipe.
Keep the grounding strap as short and direct as possible, leaving sufficient slack to allow for
normal pipe motion. You will likely need to ocassionally recheck connections as over-the-road
corrosion and exhaust heat compromise the connections. Of course, more than one such ground may be
necessary. Don't overlook other potential sources for interference - today's vehicles have MANY
potential sources of interference - I had to totally shield all underhood wiring with aluminum foil
to eliminate interference, as well as liberal bonding of various body elements - but NOW my truck is
ABSOLUTELY noise free!

>
> "Greg Knapp" <gknapp@freshrain.org> wrote in message
> news:iXd98.810$1F2.18606@sea-read.news.verio.net...
> Could you share your experience with me? I have tons of ignition and other
> types of noise (S-8 average on the IC-706) coming from my antenna (a
> screwdriver on a foldover bumper hitch mount), which is located about a foot
> or two from the tailpipe on my new Toyota Sienna van, making it difficult,
> and certainly not enjoyable, to work the HF bands.
>
> If I turn off the engine, all the noise disappears. If I disconnect the
> antenna, again it all disappears, so I know it's coming from the engine and
> not coming through the dc power or other control lines).

>
> So, I figure it's most likely the tail pipe, being so close to the antenna,
> and tons of mobile books say to ground the tail pipe in one or more places,
> or move the antenna. I can't move the antenna, but I don't have a clue how
> to ground it.
>
> So, I need some advice. How do you actually ground the tail pipe? Do you
> drill holes in it to attach some copper grounding strap with self-taping
> screws? Do you hose clamps to clamp a piece of copper grounding strap to it?
> Do you scrape it to bear metal and then apply that non-oxidize stuff
> ("butter") they use on beams to keep the corrosion down and the conductivity
> up? How do you connect the grounding strap to the underchasis of the
> car...drill more holes? How many straps does it usually take? How long can
> the straps be and still be effective? How do you seal the connections so
> the rain, wet, mud, etc., under the car doesn't make short work of it?
>
> In other words, I'm not very mechanically inclined and really getting too
> old to climb all over under the car...how do I do this as simply, yet
> effectively as possible? Any advice is appreciated. Is there a commercial
> radio place that does noise reduction for a reasonable price in the SF Bay
> area?
>
> Thanks,
>
> Greg, N6GK

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
>
>
>

2909. Re: Runways and towers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 21:04:58 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c659248_3@news1.prserv.net>
Source record: 148795

Bill and Bill:

The controlling document is FAA AC70/7460-2J. The FCC has a version under one of their numbers also. The usual ham criteria is that notification and lighting not be required, and closer/taller objects are permitted, as long as they are marked and lighted according to AC70/7460-1K. Take, for example, the control tower at any airport of any size. However, the FCC has gotten real picky about non-functioning tower lights on structures requiring them, levying fines up to $10,000 per day for violations. I personally know of one NOAV which was issued to a microwave tower belonging to Central Power and Light Co. in South Texas for that amount. It was one which was in a flight path, but was permitted if marked and lighted. Top beacon burned out, nobody noticed, and a FAA guy saw it and had FCC issue the violation notice. They lawyered it down, but still ended up paying a substantial fine when investigation showed it had been off for several days.

--
Crazy George
Remove NO and SPAM from return address
Bill Nelson <billn@spock.peak.org> wrote in message
news:a42tfe$s4c$13@quark.scn.rain.com...
> .Your Friend Bill <none@coqui.net> wrote:
> > An issue came up about tall structures ADJACENT to airport runways and
> > having done some cursory research, I'm seeing that this is often a
> > locally controlled matter. I'm seeing things like a 100' tower within
> > 2500' laterally from a runway are prohibited in some areas.
> > I'd appreciate some accurate references as to height vs. distance
> > dictated by the FAA in absence of any local regulations.
> > Any help or links would be appreciated.
>
> Check the FCC and FAA web pages.
>
> Even in areas where there are restrictions, exceptions can be made,
> with sufficient lighting and proper delays to get the notices published.
>
> Of course, if your antenna would be close to the standard glide path on
> an approach, your options are very limited.
>
> At the airport I used to use, there was a commercial radio station. If
> I recall correctly, each tower was around 350 feet tall. It was only
> about 1000 feet off to one side of the runway.
>
> --
> Bill Nelson (billn@peak.org)
>

2910. Re: How ground Tail pipe?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 21:08:07 UTC
From: richardharrison@webtv.net
Message-ID: <15736-3C658FB7-14@storefull-113.iap.bryant.webtv.net>
Source record: 148796

Greg wrote:
"---how do I do this as simply as--- possible?"

Your exhaust system is bolted to your engine (manifold). The tailpipe is insulated by a rubberized canvas strap used to keep engine vibration from your car.

Electrically short the final tailpipe hanger with a clip-lead. Make the lead a short and heavy flex-conductor. Use alligator (crocodile) clips on the ends of the heavy conductor.

You can have electrical conducton without mechanical vibration transmission if you keep it flexible. You could bolt a flex strap in place, but a good clip-lead will last forever and is easy to try and leave permanently if it works.

Remember the clip-lead is back there, and it can temportarily get you out of an electrical pinch some time in the future.

Best regards, Richard Harrison, KB5WZI

2911. Re: Field Day Special - Gain vs F/B

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 21:39:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C6596F8.A9F02D1B@eznec.com>
Source record: 148797

How are you determining the bandwidth?

Roy Lewallen, W7EL

"Sharon, Innkeeper - The Mockingbird Inn" wrote:
>
> In designing W7EL's "Field Day Special", I notice that several different
> elememt spacings yield acceptable 2:1 bandwith.
>
> Am I correct in assuming that the narrowest spacings yield the greatest
> forward gain & the wider spacings yield the best F/B ratio?
>
> I don't have NEC to model the antenna.

2912. Re: Field Day Special - Gain vs F/B

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 22:26:54 UTC
From: "Sharon, Innkeeper - The Mockingbird Inn" <sandbird@netdoor.com>
Message-ID: <Omh98.42822$EP1.3081262@bin6.nnrp.aus1.giganews.com>
Source record: 148798

Via your software FDSP ver 4.02.

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C6596F8.A9F02D1B@eznec.com...
> How are you determining the bandwidth?
>
> Roy Lewallen, W7EL
>
> "Sharon, Innkeeper - The Mockingbird Inn" wrote:
> >
> > In designing W7EL's "Field Day Special", I notice that several
different
> > elememt spacings yield acceptable 2:1 bandwith.
> >
> > Am I correct in assuming that the narrowest spacings yield the greatest
> > forward gain & the wider spacings yield the best F/B ratio?
> >
> > I don't have NEC to model the antenna.
>

2913. Re: Field Day Special - Gain vs F/B

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 22:33:26 UTC
From: "Sharon, Innkeeper - The Mockingbird Inn" <sandbird@netdoor.com>
Message-ID: <Wsh98.47090$6o2.3264878@bin4.nnrp.aus1.giganews.com>
Source record: 148799

I'm using your software Roy, FDSP ver. 4.02.

"Sharon, Innkeeper - The Mockingbird Inn" <sandbird@netdoor.com> wrote in
message news:1bf98.39601$EP1.2945026@bin6.nnrp.aus1.giganews.com...
> In designing W7EL's "Field Day Special", I notice that several different
> elememt spacings yield acceptable 2:1 bandwith.
>
> Am I correct in assuming that the narrowest spacings yield the greatest
> forward gain & the wider spacings yield the best F/B ratio?
>
> I don't have NEC to model the antenna.
>
>
>

2914. Re: How ground Tail pipe?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 22:34:57 UTC
From: Jon G2FHF <jon.g2fhf@ntlworld.com>
Message-ID: <ayh98.27001$H37.3197763@news2-win.server.ntlworld.com>
Source record: 148800

Here in the UK we have earth bonding connectors, which are use for bonding household water piping to earth. A large one should fit the exhaust of your truck, that is if you have them over there. Good luck.

Jon G2FHF
"Greg Knapp" <gknapp@freshrain.org> wrote in message news:iXd98.810$1F2.18606@sea-read.news.verio.net...
Could you share your experience with me? I have tons of ignition and other types of noise (S-8 average on the IC-706) coming from my antenna (a screwdriver on a foldover bumper hitch mount), which is located about a foot or two from the tailpipe on my new Toyota Sienna van, making it difficult, and certainly not enjoyable, to work the HF bands.

If I turn off the engine, all the noise disappears. If I disconnect the antenna, again it all disappears, so I know it's coming from the engine and not coming through the dc power or other control lines).

So, I figure it's most likely the tail pipe, being so close to the antenna, and tons of mobile books say to ground the tail pipe in one or more places, or move the antenna. I can't move the antenna, but I don't have a clue how to ground it.

So, I need some advice. How do you actually ground the tail pipe? Do you drill holes in it to attach some copper grounding strap with self-taping screws? Do you hose clamps to clamp a piece of copper grounding strap to it? Do you scrape it to bear metal and then apply that non-oxidize stuff ("butter") they use on beams to keep the corrosion down and the conductivity up? How do you connect the grounding strap to the underchasis of the car...drill more holes? How many straps does it usually take? How long can the straps be and still be effective? How do you seal the connections so the rain, wet, mud, etc., under the car doesn't make short work of it?

In other words, I'm not very mechanically inclined and really getting too old to climb all over under the car...how do I do this as simply, yet effectively as possible? Any advice is appreciated. Is there a commercial radio place that does noise reduction for a reasonable price in the SF Bay area?

Thanks,

Greg, N6GK

Outgoing mail is certified Virus Free by AVG Anti Virus.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.320 / Virus Database: 179 - Release Date: 30/01/02

2915. Re: A3S & A3WS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 22:46:36 UTC
From: Per Enocson <per.enocson@telia.com>
Message-ID: <gFh98.17341$n4.2950431@newsc.telia.net>
Source record: 148802

Hi, I aksed the same question to Cushcraft tech support and here I quote
what I bot back:

"1/2 0f the boom length of the antenna operating at higher frequency is
sufficient for spacing.
The light weight antenna will be on top.
Cushcraft Technical Support"

So put the A3WS on top of the A3S, at a vertical distance of 1/2 the boom
length or the A3S (my interpretation of above).

73ï¿½s de Per / SM0WRA

"T" <kk9t@earthlink.net> skrev i meddelandet
news:3c643ef4.30649498@news.earthlink.net...
> I am wanting to mount an A3WS on the same mast as my existing A3S.
> Does anyone know how much space I need to allow between them and is it
> better to mount them with the masts parallel or perpendicular?
>
> Tnx
> KK9T

2916. windom antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 23:19:07 UTC
From: Web <WebFx27@hotmail.com>
Message-ID: <L7i98.37865$th4.11144135@news02.optonline.net>
Source record: 148801

any likes or dislikes thinking about getting one

web

2917. Re: HAM Textbooks [was: Re: J-Pole Question]

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 23:45:11 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <YLNIPNLp9k0UsVKpJPxKsk=4MCIS@4ax.com>
Source record: 148803

"Drink" <REMOVE_THISdrink@coqui.net> wrote:

> 73 & GD KC8PMX,
> Living on an island, a thousand miles away from the nearest stateside
>mall, I sure know how you feel. I have to resort to mail order.

I live in the continental USA, in a city with over a million people, and I have
to resort to mail order, too :-)

Bob
k5qwg

> You might
>have to turn to catalogs and a phone call to get your hands on some of this
>material.
> Cordial 73's,
> Drink, WP3JQ
>
>"KC8PMX" <kc8pmx@nospamtm.net> wrote in message

2918. Re: How ground Tail pipe?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-09 23:48:39 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <rzi98.1069$Xu.1666861@paloalto-snr2.gtei.net>
Source record: 148804

I just cut four pieces of 1 inch ground braid strap about 12" long, drove down to a muffler shop, and had them braze one end of the strap to various points on the exhaust pipe, and the other end of the straps to points on the frame.

It cost me $15.00 and 20 minutes time to do it. The nice thing about brazing rather than clamping is that the connections are much better electrically, and they won't deteriorate over time from the rain, snow, etc. that gets kicked up under the car.

73 de W6DKN

"Jon G2FHF" <jon.g2fhf@ntlworld.com> wrote in message news:ayh98.27001$H37.3197763@news2-win.server.ntlworld.com...
> Here in the UK we have earth bonding connectors, which are use for bonding
> household water piping to earth. A large one should fit the exhaust of your
> truck, that is if you have them over there. Good luck.
>
> Jon G2FHF
> "Greg Knapp" <gknapp@freshrain.org> wrote in message
> news:iXd98.810$1F2.18606@sea-read.news.verio.net...
> Could you share your experience with me? I have tons of ignition and other
> types of noise (S-8 average on the IC-706) coming from my antenna (a
> screwdriver on a foldover bumper hitch mount), which is located about a foot
> or two from the tailpipe on my new Toyota Sienna van, making it difficult,
> and certainly not enjoyable, to work the HF bands.
>
> If I turn off the engine, all the noise disappears. If I disconnect the
> antenna, again it all disappears, so I know it's coming from the engine and
> not coming through the dc power or other control lines).
>
> So, I figure it's most likely the tail pipe, being so close to the antenna,
> and tons of mobile books say to ground the tail pipe in one or more places,
> or move the antenna. I can't move the antenna, but I don't have a clue how
> to ground it.
>

> So, I need some advice. How do you actually ground the tail pipe? Do you
> drill holes in it to attach some copper grounding strap with self-taping
> screws? Do you hose clamps to clamp a piece of copper grounding strap to
it?
> Do you scrape it to bear metal and then apply that non-oxidize stuff
> ("butter") they use on beams to keep the corrosion down and the
conductivity
> up? How do you connect the grounding strap to the underchasis of the
> car...drill more holes? How many straps does it usually take? How long
can
> the straps be and still be effective? How do you seal the connections so
> the rain, wet, mud, etc., under the car doesn't make short work of it?
>
> In other words, I'm not very mechanically inclined and really getting too
> old to climb all over under the car...how do I do this as simply, yet
> effectively as possible? Any advice is appreciated. Is there a
commercial
> radio place that does noise reduction for a reasonable price in the SF
Bay
> area?
>
> Thanks,
>
> Greg, N6GK
>
>
> ---
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> Version: 6.0.320 / Virus Database: 179 - Release Date: 30/01/02
>
>

2919. Re: How ground Tail pipe?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 00:04:37 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C65B8F8.CFE81945@icok.net>
Source record: 148805

Greg,
First, try temporarily grounding the pipe to see if
it is the problem. If it is, then it shouldn't be too
difficult to find someone to 'tack' weld a wire/strap to
the pipe and to the frame of the vehicle. If the temporary
grounding doesn't 'cure' the problem, you've saved some
time and money. 'Tack' or 'spot' welding is a permanent
'fix', clamps/etc, are temporary.
'Doc

2920. Re: windom antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 00:12:31 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C65BAD1.C55D9330@icok.net>
Source record: 148806

Web,
Depends on if you mean a true 'Windom' antenna, or one of
the 'Carolina Windom' type antennas. The 'Carolina Windoms's
work comparably to a dipole on the design frequency. Some
change in radiation pattern, but on the whole about the same.
A true 'Windom' antenna requires a very good ground system
and is a vertically polarized antenna fed with a single wire
feed line, 'worked' against ground. Be prepared for lots of
RFI to start with, then improve your ground system more. Works
more or less like any vertical...
'Doc

2921. Re: windom antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 00:23:55 UTC
From: Web <WebFx27@hotmail.com>
Message-ID: <v4j98.38427$th4.11328936@news02.optonline.net>
Source record: 148807

Yes I was reffering to the Carolina Windom and how they rate vs. a G5RV

"'Doc" <w5lz@icok.net> wrote in message news:3C65BAD1.C55D9330@icok.net...
> Web,
> Depends on if you mean a true 'Windom' antenna, or one of
> the 'Carolina Windom' type antennas. The 'Carolina Windoms's
> work comparably to a dipole on the design frequency. Some
> change in radiation pattern, but on the whole about the same.
> A true 'Windom' antenna requires a very good ground system
> and is a vertically polarized antenna fed with a single wire
> feed line, 'worked' against ground. Be prepared for lots of
> RFI to start with, then improve your ground system more. Works
> more or less like any vertical...
> 'Doc

2922. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 01:05:56 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a453ol$1cjghg$1@ID-124126.news.dfncis.de>
Source record: 148818

Dissipationless resistance is certainly abused on this newsgroup. Why the
description was ever invented I can't imagine.

Regarding Cecil's confession, baluns are often associated with (ferrite)
rings. I notice sexual abuse is not mentioned. How often is the dictionary
updated ?
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
news:a43894vkc1@slb6.atl.mindspring.net...
> From IEEE dictionary:
>
> .
> .
> .
> ab-end (ab.end') adj. 1. Abnormal (computer) program end. 2. Straying
from
> the usual program end; wandering past subroutine termination point. 3.
> Varying from type; abnormal data type created in error by errant code
> structure or errant object class; OOPSLA.
>
> ab-hor (an.hor) n. 1. Queer woman of questional reputation.
>
> ab-used (ab.used') adj. 1. Any of various abnormal uses of resistance. 2.
> Dynamic resistance used in place of real resistor; e.g. 3.
Dissipationless
> resistance used in place of actual resistor. 4. Imaginary resistor: v.
> Constant Reactance. [< L < Gk. < a- without + sense of use of resistance]
> .
> .
> .
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:a42q1n$19r2h1$1@ID-124126.news.dfncis.de...
> > > the typical 4:1
> > > balun is essentially abused
> > ==========
> > I think you have available the IEEE technical dictionary. What does it
> have
> > to say about 'abused' ?
> > ---

> > Reg.
> >
> >
> >
>
>

2923. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 01:55:33 UTC
From: Adam MAURER <vk4cp@bigpond.comNOSPAM>
Message-ID: <Gnk98.4130$BE4.11235@newsfeeds.bigpond.com>
Source record: 148809
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Yeah, and watch this "convenience" see the demise of DXpeditions!
DXpeditions rely heavily on income & donations that is included with the
request for a good ol QSL card.

I hope you advocates of e-QSLing have already worked the rare ones on all
band/mode combos, coz it'll be a different ball game now.

Adam, VK4CP

Website: http://www.qsl.net/vk4cp/

Charles Johnston <ctj92@cableone.net> wrote in message
news:3c644a68@news.bnb-lp.com...
> Hello Carl,
> This decision and news was just released so there are a few loose-ends
> yet....soon it will be world-wide. The granting of permission for eQSL -
> DXCC cards acceptance was for any and all cards. The nice people at eQSL
> will be adding world wide capability very soon...
>
> DXCC qsl'ing is now -cheaper- and -faster- than ever....a huge and
> bold step in the right direction.
>
> --
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

2924. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 02:47:42 UTC
From: ik7565@erols.com
Message-ID: <3C65DF4E.6B299C9A@erols.com>
Source record: 148810
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

If the DXpeditions don't upload their logbooks then we can always go
direct.

73 de Ian
N8IK

Adam MAURER wrote:
>
> Yeah, and watch this "convenience" see the demise of DXpeditions!
> DXpeditions rely heavily on income & donations that is included with the
> request for a good ol QSL card.
>
> I hope you advocates of e-QSLing have already worked the rare ones on all
> band/mode combos, coz it'll be a different ball game now.
>
> Adam, VK4CP
>
> Website: http://www.qsl.net/vk4cp/
>
> Charles Johnston <ctj92@cableone.net> wrote in message
> news:3c644a68@news.bnb-lp.com...
> > Hello Carl,
> > This decision and news was just released so there are a few loose-ends
> > yet....soon it will be world-wide. The granting of permission for eQSL -
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> > DXCC qsl'ing is now -cheaper- and -faster- than ever....a huge and
> > bold step in the right direction.
> >
> > --
> >
> > 73 / DX
> >
> > Charles T Johnston
> > Prescott, Arizona - U.S.A.
> > charles@ab7sl.com
> >
> > AB7SL - Ham Radio Pages
> > Official W9INN Antennas Page
> > www.ab7sl.com
> >
> >
> >

> >

2925. ICOM AT150

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 02:54:23 UTC
From: Michael <paracop@bellsouth.net>
Message-ID: <3C65E0DF.4B50168E@bellsouth.net>
Source record: 148811

Looking for an Icom AT150 or AH-2a in working condition.

2926. Re: windom antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 03:15:52 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C65E5C3.93A58E46@icok.net>
Source record: 148812

Web,
It still depends on how you make the comparison. Since
the two antennas aren't the same 'electrical' lengths on
their design frequencies, the comparison is sort of 'slewed'
to start with. On bands other than what they were designed
for, they probably come out somewhere close to 'even'.
'Doc
PS - I'm not a fan of either antenna, but they do work.

2927. More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 04:14:21 UTC
From: hurstjsj <hurstjsj@gte.net>
Message-ID: <xsm98.3288$ql1.732224@paloalto-snr1.gtei.net>
Source record: 148816

Here are some ideas on mobile ignition noise reduction.

1. Keep in mind that there are probably many ways the ignition noise is being coupled into the antenna system. If one has say, only two equal sources causing an S9 noise level removing one will drop the noise only a small amount (-3db). It's therefore important not to try just one "fix" at a time but to leave all supression "fixes" in until the noise is reduced to a satisfactory level. You can then remove them one at time to see which ones are necessary. Usually the last needed "fix" will result in a DRAMATIC improvement.

2. I added all the usual things under the hood of my Caprice wagon (grounding the hood, the block etc.) with only a small improvement. I then went under the car and added ground wires from the trans to chassis and tailpipe to chassis with only a small effect. When I finally grounded the metal fuel line the noise dropped about 6 S units to a satisfactory level. And no, it wasn't fuel pump noise that was eliminated it was ignition noise on the fuel line and gas tank that was bypassed to chassis.

3. I discovered that the noise on the transmission, tailpipe, etc. could actually be measured with a diode probe connected (by a very short lead) to a DVM. I initially used 1/2 inch wide braid about 6 inches long between the trans pan screws and the chassis. I could actually see the voltage drop change from 0 to several mV as I move the signal side of the probe along the 6 in. length of the braid! This convinced me that the signal sources from the ignition system into the drive train, exhaust, fuel lines are very low Z and it takes a very low impedance lead to bypass these noise conductors (over a wide frequency range) to the chassis. I found that 3 or 4 paralled #16 wires worked better than the 1/2 inch braid. Connections to the chassis were made with 1/4 in. sheet-metal screws.

4. Items under the car like the drive train , muffler and gas tank are a part of the "top electrode" of the car to ground "capacitor". Noise on these are actually in series with part of the car's coupling to ground and are not necessarily "radiated" into the antenna. This would imply that large area noise sources closest to the ground are the most significant.

Any thoughts?

John, KU6X

2928. How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 04:19:13 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c65f80d_3@news1.prserv.net>
Source record: 148814

OK, gang. I haven't posted a question in a couple of days, but here is today's: I just scrolled through the listings in the ham section of you know where, and I see an awful lot of posts to sell ham gear by people who obviously have no idea what the stuff is. How do they come by this equipment and have no contact with ham radio? I can only think of two ways, neither of which I like. One is theft, the other is estate sales by widows who weren't properly prepared by their ham husbands about how to dispose of the equipment properly. Anyone have a more reasonable explanation of how they get their hands on it?
--
Crazy George
Remove NO and SPAM from return address

2929. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 04:20:35 UTC
From: n7ws@yahoo.com
Message-ID: <3c65f39a.17201995@news.triconet.org>
Source record: 148815
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Sun, 10 Feb 2002 11:55:33 +1000, "Adam MAURER" <vk4cp@bigpond.comNOSPAM>
wrote:

|Yeah, and watch this "convenience" see the demise of DXpeditions!
|DXpeditions rely heavily on income & donations that is included with the
|request for a good ol QSL card.

Nah. They'll just require a "donation" via Paypal before your call shows up on
eQSL's "service."

Just think... you not only need a rig and antenna, you'll need Mastercard too
<g>.

I think I'll stick to green stamps and mail. I like getting 'real' QSLs and I
give the incoming DX stamps to the neighbor girl for her collection.

Wes N7WS

2930. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 05:20:23 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C6602FE.7A1E816D@icok.net>
Source record: 148817

Crazy George,
I think a third alternative is that people lie.
'Doc

2931. antenna tester

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 07:19:14 UTC
From: amr_gazzar@hotmail.com
Message-ID: <161bc9bb.0202092319.5a7b30b3@posting.google.com>
Source record: 148919

I hered about a device called antenna tester it is just a
RF-generator plus a SWR measurements .
it is for antenna installation .
i dont know waht is its benifit for antenna installation .
i mean i have static frequency channels(i.e TV channels) and of course
static antenna lenght (i.e fixed)
then what may i gain with that tester.
another question:
i know that a receiving antenna must be in the order of half the
wavelength
. is that apply for a transimitting one ?

2932. Mini windom antenna (need help)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 07:40:20 UTC
From: Terry@mitchell.demon.nl
Message-ID: <19bf1bcf.0202092340.70db379c@posting.google.com>
Source record: 148920

Does somebody have experience with this antenna : mini windom antenna
that I want to buy (63,51 Euro) it's for the Yaesu FGR-100, because I
don't have so much space to put another antenna on the balcony. But
I'm look for response from
SWL's or amateurs who are using or used this antenna.

Thanks for all the feedback,

Terry Mitchell

2933. Re: windom antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 07:48:09 UTC
From: DGB <dgbcms@netnet.net>
Message-ID: <3c662510$0$3043$39cecf19@news.twtelecom.net>
Source record: 148921

I've had one up for 4 years now, it's the full size 160m version. Also during that time have had full wave horizontal loops for 80 & 160, fed with ladderline and the classic 135' dipole, fed with ladderline as well. Also had a couple of G5RV's up at one time as well.

The highest I can get any of them is 65' due to limited tree heights.

On 160 it is definitely better then the loops. On 80 the loop is better for close in. On 40 it reaches out further. The 80m loop is consistently better on 17 and 12m. On the rest of the bands it depends on propagation.

It's a durable antenna using copperweld. G5RV's don't hold a candle to any of them. Wish I had another one for a different orientation in direction ... someday. I'm very pleased with it, my MP loads it without a tuner on all the bands.

73 Dwight W9YQ in WI

"Web" <WebFx27@hotmail.com> wrote in message news:L7i98.37865$th4.11144135@news02.optonline.net...
> any likes or dislikes thinking about getting one
>
> web
>
>

2934. Re: Mini windom antenna (need help)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 08:21:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a45b34$1ac5d1$3@ID-124126.news.dfncis.de>
Source record: 148923

Don't be a mug. Save your hard-earned cash. Why not hang up a few feet of scrap wire. Any sort. It will be at least as good.

2935. Re: Azimuthal Maps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 08:30:38 UTC
From: CA <sm6pxj@hotmail.com>
Message-ID: <6cq98.9166$O5.21086@nntpserver.swip.net>
Source record: 148922

Tried this one?
http://hem.passagen.se/sm3gsj/index.htm

/sm6pxj

Al wrote:
>Is there a site which generates azimuthal maps similar to
>
>http://www.wm7d.net
>
>but the map is a more recognizable projection of a specific area? In other
>words if I generate an azimuthal map centered on Texas, the US and South
>America look pretty good, Africa is barely recognizable, and Europe and
Asia
>do not resemble Europe and Asia at all. I would like to see a map of Europe
>or Asia (only) showing the projection lines coming from Texas. I realize
>that the lines would no longer be straight, they would probably be portions
>of a sine wave, but I would be able to identify countries within Europe.
>
>All information will be greatly appreciated. Thank you.
>
>Al
>KA5JGV

2936. Re: How ground Tail pipe?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 08:57:23 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3C6635F3.39B76E0A@ipeg.com>
Source record: 148924

> Greg Knapp wrote:
>
> So, I need some advice. How do you actually ground the tail pipe?

Greg,

I have my local muffler shop weld 1/4 X 1" bolts to the tailpipe and the frame. Takes only a couple of minutes and usually costs about $10. They also let me install the straps while the rig is in the air. In and out in 15 minutes. What I use is flexible braid strapping secured under a big, nasty star washer at each point. I use one connection on each section of tailpipe. Seems to work.

marty...
N7MX

2937. Re: Field Day Special - Gain vs F/B

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 10:31:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C664BE8.62363E3E@eznec.com>
Source record: 148925

As long as you have a current magnitude ratio (I MAG) near 1 and relative phase (REL PHA) near zero, you'll have a good front/back ratio. The gain won't change much with moderate differences in spacing, and it's not very sensitive to moderate changes in current magnitude and phase. So at a single frequency, the spacing won't matter much as long as you can get about the right current magnitude and phase. But take a look at how the values in the I MAG and REL PHA columns change with frequency. With closer spacing, you might find that they change more than they do with wider spacing. This means that your f/b ratio will deteriorate more as you go away from the design frequency.

The EZNEC demo program is useful for looking at the pattern and seeing just how much it'll change with frequency. A FDSP model is one of the example files. To see the pattern at any frequency, simply modify the second current source of that model to reflect the values from the FDSP program. For example, if the FDSP program shows I MAG = 0.9296 and I PHA = 142.1 at 14.20 MHz, change the EZNEC Source 2 Amplitude to 0.9296, the Source 2 Phase to 142.1, and the frequency to 14.2 MHz to see the pattern at that frequency. This way you can see what the pattern will be at each frequency for a particular design. You can get the EZNEC demo from http://eznec.com. It's free.

Roy Lewallen, W7EL

"Sharon, Innkeeper - The Mockingbird Inn" wrote:
>
> Via your software FDSP ver 4.02.
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:3C6596F8.A9F02D1B@eznec.com...
> > How are you determining the bandwidth?
> >
> > Roy Lewallen, W7EL
> >
> > "Sharon, Innkeeper - The Mockingbird Inn" wrote:
> > >
> > > In designing W7EL's "Field Day Special", I notice that several
> different
> > > elememt spacings yield acceptable 2:1 bandwith.
> > >
> > > Am I correct in assuming that the narrowest spacings yield the greatest
> > > forward gain & the wider spacings yield the best F/B ratio?
> > >
> > > I don't have NEC to model the antenna.
> >

2938. Re: windom antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 12:29:08 UTC
From: Web <WebFx27@hotmail.com>
Message-ID: <olt98.39675$th4.12961979@news02.optonline.net>
Source record: 148927

Thank you DGB and Doc

web

"Web" <WebFx27@hotmail.com> wrote in message
news:L7i98.37865$th4.11144135@news02.optonline.net...
> any likes or dislikes thinking about getting one
>
> web
>
>

2939. Re: Soldering Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 12:37:51 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C66687D.49D1DDCC@bellatlantic.net>
Source record: 148926
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'd used Acid Flux (The liquid kind you buy in a bottle for Plumbers)
initially. Soak it in the stuff for a minute or so, then use a torch to burn it
off. Do that a couple times then rinse it off. Then Solder it with your
standard Rosin flux based 60/40 solder and a big Weller pistol grip solder gun.
Never a problem.. works every time for me.

'73 KI4Z

J Titcomb wrote:

> Aloha, anyone got any suggestions for soldering weathered stranded wire? I'm
> trying to revive my G5RV which blew down during the last storm here. I've
> tried wire brushing it, sanding it, using flux...none of these work. Is
> there some homebrew secret for cleaning corrosion from copper wire, making
> it like new so it can be soldered? Some acid wash or something? Mahalo, I
> appreciate the help.
>
> Jim KH6IX

2940. Re: windom antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 14:02:55 UTC
From: ve3ab@mondenet.ca
Message-ID: <3c667ccd.620401@news.mondenet.com>
Source record: 148928

I built my own windom type antenna..full size dipole length on 80 meters..fed with (heavy duty 400 ohm window type feeder approx 65 ft) all the way into the shack to my johnsons matchbox. I get good reports on all bands (generally). It seems to exhibit some directivity on 10 meters off the long end..on 20 seems to load and work very well..Id say its a good general purpose wire antenna and if you could only put one wire up..id recommend it..Earl VE3AB

On Sat, 09 Feb 2002 23:19:07 GMT, "Web" <WebFx27@hotmail.com> wrote:

>any likes or dislikes thinking about getting one
>
> web
>
>

2941. Re: Azimuthal Maps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 14:28:50 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3C6683A2.57DDD2CF@hiwaay.net>
Source record: 148929

I am surprised that no-one has mentioned the Geoclock program. An option of it is to have an azimuthal map, centered on ones own location, with the ability to enter a prefix and get bearings (to and from) and the local time there. An added bonus is the sunrise and sunset times. it shows the daylight and dark patterns, in real time, along with the Sun and Moon overhead positions.

I keep the program minimized, and can call it up fast, to get both the ID of a call prefix (I cannot remember them all) and the bearing. The display is the map, and the bearing is shown.Many different maps are included, at different scales, in additon to the world azimuth map.

I just upgraded mine, from a version I have run for several years.

go to: http://www.geoclock.com

Bill-W4BSG

CA wrote:
>
> Tried this one?
> http://hem.passagen.se/sm3gsj/index.htm
>
> /sm6pxj
>
> Al wrote:
> >Is there a site which generates azimuthal maps similar to
> >
> >http://www.wm7d.net
> >
> >but the map is a more recognizable projection of a specific area? In other
> >words if I generate an azimuthal map centered on Texas, the US and South
> >America look pretty good, Africa is barely recognizable, and Europe and
> Asia
> >do not resemble Europe and Asia at all. I would like to see a map of Europe
> >or Asia (only) showing the projection lines coming from Texas. I realize
> >that the lines would no longer be straight, they would probably be portions
> >of a sine wave, but I would be able to identify countries within Europe.
> >
> >All information will be greatly appreciated. Thank you.
> >
> >Al
> >KA5JGV

2942. Re: Field Day Special - Gain vs F/B

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 14:30:50 UTC
From: "Sharon, Innkeeper - The Mockingbird Inn" <sandbird@netdoor.com>
Message-ID: <uuv98.49345$QS5.3599139@bin2.nnrp.aus1.giganews.com>
Source record: 148930

Thanks for the helpful info Roy. I'll be cutting & raising the FDSP today.
I'm trying to improve my signal on the 20 meter phone band from a temporary
location. I'm using a dipole now which i'll leave up for comparison.

Thanks again.

"Sharon, Innkeeper - The Mockingbird Inn" <sandbird@netdoor.com> wrote in
message news:1bf98.39601$EP1.2945026@bin6.nnrp.aus1.giganews.com...
> In designing W7EL's "Field Day Special", I notice that several different
> elememt spacings yield acceptable 2:1 bandwith.
>
> Am I correct in assuming that the narrowest spacings yield the greatest
> forward gain & the wider spacings yield the best F/B ratio?
>
> I don't have NEC to model the antenna.
>
>
>

2943. varnish on wire antenna affect RF capabilities??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 14:43:12 UTC
From: carkenord@juno.com
Message-ID: <4346b55e.0202100643.14d7569@posting.google.com>
Source record: 148931

I am going to erect a wire HF antenna...for 10-80 meters. This will be in a very smoggy, hostile environment. I know from experience that bare wire at this location gets corroded and brittle within a short time.

I am going to use 16 gauge stranded Copperweld wire. Not insulated. I have _ A LOT_ of it on hand, already paid for.

I am thinking of coating this stranded wire with a good UV resistant varnish that I also have on hand, that I have experience with.

Lets assume that the varnish penetrates well, and that each individual strand is 90% coated with varnish, on average.

Will this thin coating of varnish have a negative on my transmit and receive capabilities, at the 100 watt level? If yes, could you please quantify the effect, in a general manner?

Lee Carkenord KA0FPJ

2944. Re: varnish on wire antenna affect RF capabilities??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 15:38:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a464h4$1cc6ga$1@ID-124126.news.dfncis.de>
Source record: 148933

It will not have the slightest noticeable electrical effect.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

Lee Carkenord <carkenord@juno.com> wrote in message
news:4346b55e.0202100643.14d7569@posting.google.com...
> I am going to erect a wire HF antenna...for 10-80 meters. This will
> be in a very smoggy, hostile environment. I know from experience that
> bare wire at this location gets corroded and brittle within a short
> time.
>
> I am going to use 16 gauge stranded Copperweld wire. Not insulated.
> I have _ A LOT_ of it on hand, already paid for.
>
> I am thinking of coating this stranded wire with a good UV resistant
> varnish that I also have on hand, that I have experience with.
>
> Lets assume that the varnish penetrates well, and that each individual
> strand is 90% coated with varnish, on average.
>
> Will this thin coating of varnish have a negative on my transmit and
> receive capabilities, at the 100 watt level? If yes, could you please
> quantify the effect, in a general manner?
>
> Lee Carkenord KA0FPJ

2945. Antenna tuner observations.....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 15:39:56 UTC
From: Bill Russell <willy@global2000.net>
Message-ID: <it2d6u8joehcstp8qccvdqtfj6cqia0ats@4ax.com>
Source record: 148932

Hi all,
Just a few thoughts on my search for the "perfect antenna tuner". As some of u might remember from my last posts, I was looking for the best antenna tuner I could use on my 130ft. dipole fed with 450 ohm window line. Well after much searching, reading opinions some of which were posted on this new group and buying a $1000 tuner made by a reputable manufacture, I discovered the following:

The $1000 tuner went back the next day. This tuner was very well made used excellent parts including a big current balun at the input of the tuner. I did an AB test between this tuner and a Johnson 250watt matchbox and the Johnson blew it away for tuning balanced lines. I did the same tests with a borrowed MFJ with the same results. The Johnson was also borrowed and I needed to buy my own but I needed a bigger unit to handle full power and that was the reason for my search. I finally bought a kilowatt Johnson matchbox on ebay (epay) and am very happy. The $1000 tuner would only tune 160 and 80 meters using the above antenna with 67 feet of feedline. Both Johnsons tuned the antenna fine. The $1000 unit had a lot of insertion loss on the receive signal. The Johnson was 2 to 5 s units stronger on receive. I dont know the losses on transmitt because I could not measure it. The theory involved explaining the differences between the different tuners is a lot over my head but the things I read about link coupled tuners compared to "single ended tuners using a balun" was right on the money. If you want to tune a balanced antenna fed with balanced line.....use a link coupled tuner with the same design as the old Johnsons. I know there is more to the design than just the link coupling such as the differential voltage divider Johnson used but as i said, this is a little over my head.
Anyway I just though some of u might want to know what I discovered.

BTW.....this is NOT a review of the $1000 tuner as I am sure it works fine tuning coax.

Bill KC2IFR

2946. AR-22 with XL-1 Problem/questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 16:25:03 UTC
From: Rick Ruhl <ricker@cssincorp.com>
Message-ID: <r5x98.122095$h31.8662069@e420r-atl1.usenetserver.com>
Source record: 148934

I picked up an AR-22 rotor with an XL-1 controller at a hamfest yesterday. Went to test it and found a minor issue with it. I'm sure with all the experiences hams in this group, you can help me find an answer. BTW, which AR-22 is this. Ive seen that there are manuals for two different types.

On the bottom of the rotor, it has

AR22 SER4 Z7

and on the control box;

XL-1 November 1980.

Hooked up the rotor and calibrated the XL-1. It will turn 360 degrees, then back, then on the 3rd 360 turn, the rotor and control box will stop at a random point. Turning the rotor control either way doesn't make the power come back on or the rotor turn.

However, if I unplug the control box and leave it sitting for a little while, come back in and turn it on, then it'll work fine for 1 or 2 360 degree turns. Looking on Deja archive (yes, I know it's google archives now <grin>), there's a mention of capacitor issue similar to this.

1. Does this sound like a capacitor problem

2. If so, where is this capacitor located?(in the rotor or in the control box) and what's the best place to get a replacement.

3. If not, where should I start looking for the issue?

Thanks

Rick - W4PC

2947. Tower WTB in central Iowa

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 16:27:42 UTC
From: torreylm@aol.com
Message-ID: <20020210112742.08112.00000500@mb-cj.aol.com>
Source record: 148935

I'm moving to Des Moines, Iowa in April 2002. I'd like to erect a tower at my new QTH. There I WTB a tower in the 55' to 72' range.

Also any help with where to go for construction permit, etc for the DesMoines area would be much appreciated.

Contact me:

Torrey Mitchell N9AUJ
Best email: torreym@uic.edu

2948. Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 16:28:42 UTC
From: DL7JSK <dl7jsk@darc.de>
Message-ID: <a4675cacb06$1@news.t-online.com>
Source record: 148936

Hi OMs
I have an old army dipole for 2m,which I want to feed with a coax cable.But first I have to determine the impedance.Will it have any influence on the swr,when I connect the coax cable directly to the dipole ? Then I could determine the exact Z and construct a balun.Can I do it like this ?

73
Tom

2949. DX INFO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 17:01:51 UTC
From: DX <nouvelles.dx@libertysurf.fr>
Message-ID: <a468vtlfp1@norfair.nerim.net>
Source record: 148938

For DX info, try the e-group "DX INFO"

Our address :

http://www.dromadaire.com/f5sld/dx

73 and good DX !
Vince'

2950. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 17:04:04 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C66A804.D57E305E@coqui.net>
Source record: 148937

DL7JSK wrote:
>
> Hi OMs
> I have an old army dipole for 2m,which I want to feed with a coax cable.But
> first I have to determine the impedance.Will it have any influence on the
> swr,when I connect the coax cable directly to the dipole ? Then I could
> determine the exact Z and construct a balun.Can I do it like this ?
>
> 73
> Tom

IF its a dipole for the frequency you want to use, the impedance will
generally be darn close to 72 ohms which is a good enough match for
standard 50/75 ohm coax.
GL,
Bill

2951. VHF LPA design question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 17:04:15 UTC
From: post_to_usenet@hotmail.com
Message-ID: <b6b4e772.0202100904.279ed030@posting.google.com>
Source record: 148939
Body handling: Inline uuencoded payload not displayed: LPA_VHF.ZIP

Hi,

I would like to know if it is possible to use 2 coax cables
as the transmission line between elements in a LPA, so as
to get a 100 ohm .65 VF line between elements. Like in:

```
|
| |
| | |
| | | |
| ____ ___ | __ ___ |___ __ |
+)___ \ / __)+)_ \ / __)+)_ \ / _)+\
____\/ /___ ___\/ /__ ___\/ /_ \ _
+)____/\____)+)___/\___)+)___/\__)+--)_ \
| | | | \ \
| 2x50ohm | | | | |
| between | | | | 75 ohm coax
| elements | | | feedline with
| | | some kind of
~ ~ balun
```

If the answer is yes, would you then join the braids between
the two coax? (I suppose yes), and more important: would you
join the braids between coax coming from the previous element
and those going to the next elemnt?

This would be for the attached antenna model. SWR OK @ 75 ohm
in 115~285 MHz, but above 220 MHz the vertical pattern seems
to become a "cloud warmer".

Do you think it could be built?

Toni

[Inline uuencoded payload not displayed: LPA_VHF.ZIP]

2952. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 18:25:45 UTC
From: DL7JSK <dl7jsk@darc.de>
Message-ID: <a46e0e$6oe$03$1@news.t-online.com>
Source record: 148941

Ok,but how reliable is a swr measure on a dipole with coax cable without a stub or balun ? Would the presence of a stub change the swr ?

Tom

" .Your Friend Bill" <none@coqui.net> schrieb im Newsbeitrag news:3C66A804.D57E305E@coqui.net...
> DL7JSK wrote:
> >
> > Hi OMs
> > I have an old army dipole for 2m,which I want to feed with a coax cable.But
> > first I have to determine the impedance.Will it have any influence on the
> > swr,when I connect the coax cable directly to the dipole ? Then I could
> > determine the exact Z and construct a balun.Can I do it like this ?
> >
> > 73
> > Tom
>
> IF its a dipole for the frequency you want to use, the impedance will
> generally be darn close to 72 ohms which is a good enough match for
> standard 50/75 ohm coax.
> GL,
> Bill
>

2953. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 18:27:28 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <kYy98.28932$Pz4.194101@rwcrnsc53>
Source record: 148940

Since ham radio equipment is not a controlled substance, I don't see the point of the question.
--
CW
KC7NOD

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message news:3c65f80d_3@news1.prserv.net...
> OK, gang. I haven't posted a question in a couple of days, but here is
> today's: I just scrolled through the listings in the ham section of you
> know where, and I see an awful lot of posts to sell ham gear by people who
> obviously have no idea what the stuff is. How do they come by this
> equipment and have no contact with ham radio? I can only think of two ways,
> neither of which I like. One is theft, the other is estate sales by widows
> who weren't properly prepared by their ham husbands about how to dispose of
> the equipment properly. Anyone have a more reasonable explanation of how
> they get their hands on it?
> --
> Crazy George
> Remove NO and SPAM from return address
>
>

2954. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 18:29:40 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c66bc38_3@news.iglou.com>
Source record: 148942

Crazy:
Yes most of it is lies. First, if the seller claims to know nothing, it
makes the potential buy feel more smart and to think he's getting a bargin.
Second. If something goes wrong with the deal i.e. the rig is broken, the
sell can play dumb.

--
Steve Ellington
N4LQ
"'Doc" <w5lz@icok.net> wrote in message news:3C6602FE.7A1E816D@icok.net...
>
>
> Crazy George,
> I think a third alternative is that people lie.
> 'Doc

2955. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 19:44:20 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C66CD94.6DE73D80@coqui.net>
Source record: 148943

N4LQ wrote:
>
> Crazy:
> Yes most of it is lies. First, if the seller claims to know nothing, it
> makes the potential buy feel more smart and to think he's getting a bargin.
> Second. If something goes wrong with the deal i.e. the rig is broken, the
> sell can play dumb.
>
> --
> Steve Ellington
> N4LQ
> "'Doc" <w5lz@icok.net> wrote in message news:3C6602FE.7A1E816D@icok.net...
> >
> >
> > Crazy George,
> > I think a third alternative is that people lie.
> > 'Doc

A dead giveaway is the guy who is a well-known gear seller who hasn't
plugged it in to try it out.
But, in fairness, alot of this stuff DOES show up at yard sales, CB
jamborees, estate auctions, and speaking with some knowledge-divorcees
will sell good gear for pennies on the dollar just as revenge :-)....and
dumpster diving. I'm sure we've all heard the story about the SX-88
found sitting beside a dumpster.
-Bill

2956. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 19:48:24 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C66CE88.152953C4@coqui.net>
Source record: 148944

50/75 ohm coax to a dipole doesn't need any stub or balun. Worst case
reading with a 50-ohm rig/meter would be about 1.4:1
You mention that its an 'army' dipole for 144 Mhz...I don't know what
that might be but you can simply measure the length of it to determine
if its in fact made for 144 MHz.
Trying it is highly recommended if the length is somewhat accurate.
-Bill

DL7JSK wrote:
>
> Ok,but how reliable is a swr measure on a dipole with coax cable without a
> stub or balun ? Would the presence of a stub change the swr ?
>
> Tom
>
> " .Your Friend Bill" <none@coqui.net> schrieb im Newsbeitrag
> news:3C66A804.D57E305E@coqui.net...
> > DL7JSK wrote:
> > >
> > > Hi OMs
> > > I have an old army dipole for 2m,which I want to feed with a coax
> cable.But
> > > first I have to determine the impedance.Will it have any influence on
> the
> > > swr,when I connect the coax cable directly to the dipole ? Then I could
> > > determine the exact Z and construct a balun.Can I do it like this ?
> > >
> > > 73
> > > Tom
> >
> > IF its a dipole for the frequency you want to use, the impedance will
> > generally be darn close to 72 ohms which is a good enough match for
> > standard 50/75 ohm coax.
> > GL,
> > Bill
> >

2957. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 20:17:23 UTC
From: DL7JSK <dl7jsk@darc.de>
Message-ID: <a46khn$qp5$00$1@news.t-online.com>
Source record: 148945

It's an R&S dipole.The frequency range is from 120 to 160 MHz.And since when don't you need a stub to run a dipole directly on a coaxcable ?? A symmetric antenna to an unsymmetric cable ??

73
Tom

p.s.: ur reply adress don't work !

" .Your Friend Bill" <none@coqui.net> schrieb im Newsbeitrag news:3C66CE88.152953C4@coqui.net...
> 50/75 ohm coax to a dipole doesn't need any stub or balun. Worst case
> reading with a 50-ohm rig/meter would be about 1.4:1
> You mention that its an 'army' dipole for 144 Mhz...I don't know what
> that might be but you can simply measure the length of it to determine
> if its in fact made for 144 MHz.
> Trying it is highly recommended if the length is somewhat accurate.
> -Bill
>
>
>
> DL7JSK wrote:
> >
> > Ok,but how reliable is a swr measure on a dipole with coax cable without a
> > stub or balun ? Would the presence of a stub change the swr ?
> >
> > Tom
> >
> > " .Your Friend Bill" <none@coqui.net> schrieb im Newsbeitrag
> > news:3C66A804.D57E305E@coqui.net...
> > > DL7JSK wrote:
> > > >
> > > > Hi OMs
> > > > I have an old army dipole for 2m,which I want to feed with a coax
> > cable.But
> > > > first I have to determine the impedance.Will it have any influence on
> > the
> > > > swr,when I connect the coax cable directly to the dipole ? Then I could
> > > > determine the exact Z and construct a balun.Can I do it like this ?
> > > >
> > > > 73
> > > > Tom

> > >
> > > IF its a dipole for the frequency you want to use, the impedance will
> > > generally be darn close to 72 ohms which is a good enough match for
> > > standard 50/75 ohm coax.
> > > GL,
> > > Bill
> > >
>

2958. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 20:43:23 UTC
From: mailfrmpa@aol.com
Message-ID: <20020210154323.18909.00000615@mb-mf.aol.com>
Source record: 148946

I am a regular garage sale fanatic, and have gotten some very good buys that way- dad's or uncle old stuff.

Kï¿½MB

2959. Re: How ground Tail pipe?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 20:47:38 UTC
From: mailfrmpa@aol.com
Message-ID: <20020210154738.18909.00000616@mb-mf.aol.com>
Source record: 148947

I use self-tapping SS screw and put one ia every section of tailpipe, run the strap to a nearby body member, and use the same type of screw there. Tailpipe bonding was the only thing I have done that lowered rx noise to my '95 Jeep Cherokee by a noticable amount.

Kï¿½MB

2960. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 21:17:58 UTC
From: "R.U. Amused?" <n6ttd@spamsuxarrl.net>
Message-ID: <asB98.24951$fK1.212848@rwcrnsc54>
Source record: 148948

It is too bad it isn't. I remember when reputable dealers and hams used to only sell the gear to someone who had a license. I wish that was still a practice these days. I wouldn't sell a car to some kid who didn't have a license.

"CW" <clinton.magers@attbi.com> wrote in message
news:kYy98.28932$Pz4.194101@rwcrnsc53...
> Since ham radio equipment is not a controlled substance, I don't see the
> point of the question.
> --
> CW
> KC7NOD
>
> "Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
> news:3c65f80d_3@news1.prserv.net...
> > OK, gang. I haven't posted a question in a couple of days, but here is
> > today's: I just scrolled through the listings in the ham section of you
> > know where, and I see an awful lot of posts to sell ham gear by people
who
> > obviously have no idea what the stuff is. How do they come by this
> > equipment and have no contact with ham radio? I can only think of two
> ways,
> > neither of which I like. One is theft, the other is estate sales by
> widows
> > who weren't properly prepared by their ham husbands about how to dispose
> of
> > the equipment properly. Anyone have a more reasonable explanation of
how
> > they get their hands on it?
> > --
> > Crazy George
> > Remove NO and SPAM from return address
> >
> >
>
>

2961. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 21:47:29 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C66EA59.74DC32AD@icok.net>
Source record: 148949

Tom,
There will be no difference in impedance if you do not
use a balun or stub with the dipole. There will be a
difference in the radiation pattern, though.
Paul / W5LZ

2962. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 21:52:43 UTC
From: richardharrison@webtv.net
Message-ID: <17878-3C66EBAB-140@storefull-118.iap.bryant.webtv.net>
Source record: 148951

Tom, DL7JSK wrote:
"And since when don`t you need a stub to run a dipole directly on coax cable?"

If you are using the dipole at its resonant frequency it may be a good impedance match to the cable, Then, if you`ve made the outside of the cable an unattractive path for the signal, you don`t need a stub.

For accommodating an unbalanced transmission line at a balanced antenna, an extra 1/2-wave of coax may be inserted in the feed to one of the elements of the dipole to make a coax balun. This multiplies the line feed impedance seen by the antenna by a factor of four. A 1/4-wave "bazzooka" is another fix.

A quarter-wave stub can shunt an antenna feed with no ill effect. It may even improve the bandwidth. If the quarter-wave stub were adjustable like a slide-trombone it could be used to tune out antenna reactance.

Tom`s R&S dipole may have a stub for tuning or balancing. We don`t know enough.

Best regards, Richard Harrison, KB5WZI

2963. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 22:13:46 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c66f44e_4@news1.prserv.net>
Source record: 148950

There's a TS-440 in there now listed as being found in the trunk of a car
just before the car went into the crusher.

--
Crazy George
Remove NO and SPAM from return address
.Your Friend Bill <none@coqui.net> wrote in message
news:3C66CD94.6DE73D80@coqui.net...
> N4LQ wrote:
> >
> > Crazy:
> > Yes most of it is lies. First, if the seller claims to know nothing, it
> > makes the potential buy feel more smart and to think he's getting a
bargin.
> > Second. If something goes wrong with the deal i.e. the rig is broken,
the
> > sell can play dumb.
> >
> > --
> > Steve Ellington
> > N4LQ
> > "'Doc" <w5lz@icok.net> wrote in message
news:3C6602FE.7A1E816D@icok.net...
> > >
> > >
> > > Crazy George,
> > > I think a third alternative is that people lie.
> > > 'Doc
>
> A dead giveaway is the guy who is a well-known gear seller who hasn't
> plugged it in to try it out.
> But, in fairness, alot of this stuff DOES show up at yard sales, CB
> jamborees, estate auctions, and speaking with some knowledge-divorcees
> will sell good gear for pennies on the dollar just as revenge :-)....and
> dumpster diving. I'm sure we've all heard the story about the SX-88
> found sitting beside a dumpster.
> -Bill
>

2964. Re: VHF LPA design question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 22:39:07 UTC
From: antennas
Message-ID: <9ktd6u8mt1vqgsdkn380e3235dpn265b74@4ax.com>
Source record: 148952

To begin with, the dimensions of your elements are more along the
lines for 137-141 MHz. I find the best performance with the longest
element at 0.51 wl at the lowest frequency and the shortest element at
0.35 wl at the highest frequency needed.

73

On 10 Feb 2002 09:04:15 -0800, post_to_usenet@hotmail.com (Toni)
wrote:

>Hi,
>
>I would like to know if it is possible to use 2 coax cables
>as the transmission line between elements in a LPA, so as
>to get a 100 ohm .65 VF line between elements. Like in:
>
>|
>| |
>| | |
>| | | |
>| ____ ___ | __ ___ |___ __ |
>+)___ \ / __)+)_ \ / __)+)_ \ / _)+\
> ____\/ /___ ___\/ /__ ___\/ /_ \ _
>+)____/____)+)___/___)+)___/__)+--)_ \
>| | | | \ \
>| 2x50ohm | | | | |
>| between | | | | 75 ohm coax
>| elements | | | feedline with
>| | | some kind of
> ~ ~ balun
>
>If the answer is yes, would you then join the braids between
>the two coax? (I suppose yes), and more important: would you
>join the braids between coax coming from the previous element
>and those going to the next elemnt?
>
>This would be for the attached antenna model. SWR OK @ 75 ohm
>in 115~285 MHz, but above 220 MHz the vertical pattern seems
>to become a "cloud warmer".
>
>Do you think it could be built?
>
>Toni

2965. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 22:43:39 UTC
From: DL7JSK <dl7jsk@darc.de>
Message-ID: <a46t43$b0g$04$1@news.t-online.com>
Source record: 148954

> Tom`s R&S dipole may have a stub for tuning or balancing. We don`t know
> enough.
So do I.It has been in the cellar of a friend who has died now.I made a stub of RG174 and connected it to my dummy in this way I'd connect it to the dipole.Then I cut it off and short-circuited it until the swr was 1,1.The crazy thing was,that the length is now 30 cm,and not 50 cm regarding the k factor,as a quarter-wave stub should be.

73
Tom

2966. Ghetto Antenna 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 22:45:08 UTC
From: jimvm111 <jimvm111@earthlink.net>
Message-ID: <UJC98.33122$3E5.2361135@newsread2.prod.itd.earthlink.net>
Source record: 148953

Has anyone tried one of these?
http://www.siccoproductionz.com/powerpuff1.html

2967. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 23:27:14 UTC
From: richardharrison@webtv.net
Message-ID: <17878-3C6701D2-151@storefull-118.iap.bryant.webtv.net>
Source record: 148956

Tom, DL7JSK wrote:
"---the length is now 30 cm, and not 50 cm regarding the k factor as a quarter-wave stub should be."

A quarter wave at 2 meters is about 50 cm but the velocity factor in most coax is about 2/3. So, 30 cm for a short-circuit stub which behaves as a parallel resonant circuit, sounds about right.

Best regards, Richard Harrison, KB5WZI

2968. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-10 23:44:26 UTC
From: " .Your Friend Bill" <none@coqui.net>
Message-ID: <3C6705DA.47ADBE51@coqui.net>
Source record: 148955

"R.U. Amused?" wrote:
>
> It is too bad it isn't. I remember when reputable dealers and hams used to
> only sell the gear to someone who had a license. I wish that was still a
> practice these days. I wouldn't sell a car to some kid who didn't have a
> license.
>

Some reputable hams and dealers still observe this practice. I don't
think widows of SKs and estate hawkers ever gave it much thought, tho.

-Bill

2969. Re: Tower WTB in central Iowa

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 00:32:15 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <jiE98.24279$5J3.3838624941@newssvr16.news.prodigy.com>
Source record: 148957

If you are moving to one of those upscale burbs of Des Moines, watch out for antenna restrictions. If you are moving in Des Moines itself, buy a couple of Doberman's to guard it.

"Torreylm" <torreylm@aol.com> wrote in message news:20020210112742.08112.00000500@mb-cj.aol.com...

> I'm moving to Des Moines, Iowa in April 2002. I'd like to erect a tower at my
> new QTH. There I WTB a tower in the 55' to 72' range.
>
> Also any help with where to go for construction permit, etc for the DesMoines
> area would be much appreciated.
>
> Contact me:
>
> Torrey Mitchell N9AUJ
> Best email: torreym@uic.edu
>

2970. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 00:38:32 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C671288.4582A882@IEEE.org>
Source record: 148958

Reg Edwards wrote:
> Dissipationless resistance is certainly abused on this newsgroup. Why the
> description was ever invented I can't imagine.

It helps to describe the resistive part of the characteristic impedance
of a transmission line?

> Regarding Cecil's confession, baluns are often associated with (ferrite)
> rings. I notice sexual abuse is not mentioned. How often is the dictionary
> updated ?

Did you know that rings allow one to last longer?
--
cheers, CAM http://www.qsl.net/w5dxp

2971. Re: Antenna tuner observations.....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 00:43:05 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C671399.E0C042F2@IEEE.org>
Source record: 148959

Bill Russell wrote:
>
> Hi all,
> Just a few thoughts on my search for the "perfect antenna tuner". As
> some of u might remember from my last posts, I was looking for the
> best antenna tuner I could use on my 130ft. dipole fed with 450 ohm
> window line.

That's exactly the antenna I use and I don't use an antenna tuner.
See how on my web page.
--
cheers, CAM http://www.qsl.net/w5dxp

2972. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 01:15:42 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c671f37_3@news1.prserv.net>
Source record: 148960

So, after a dozen or so responses, I am given to understand that any auction deal on the place starts with a good dose of deceit. That's a good way to run a business.

--
Crazy George
Remove NO and SPAM from return address

2973. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 01:34:24 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C671FA0.CEFC2C54@coqui.net>
Source record: 148961

Crazy George wrote:
>
> So, after a dozen or so responses, I am given to understand that any auction
> deal on the place starts with a good dose of deceit. That's a good way to
> run a business.
>
> --
> Crazy George
> Remove NO and SPAM from return address

No, only the bad news gets publicized. I think the odds are about equal
in getting ripped off when buying used gear most anywhere...here on
Usenet, Hamfests, ebay, 'widder' auctions or wherever. Online stuff has
the disadvantage that you can't see it personally but also has the
advantage of being your hamfest 24/7.
Just like used cars, you have to assume its not as good as advertised
and maybe there's something wrong with it that either the seller is not
saying or has no clue. Given that risk, one bids or pays accordingly.
A few questions to the seller often sorts the wheat from the
chaff...just like in any venue.
-BM

2974. Re: R & X for simple antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 01:55:42 UTC
From: axolotl <kevin@shorecomp.com>
Message-ID: <3C67249F.72CE4D9@shorecomp.com>
Source record: 148962
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

Roy Lewallen wrote:
The real formula is Hallen's integral equation,
> which can only be calculated numerically. The only (almost) closed form
> approximation I know of is Shelkunoff's approximation for straight wire
> dipoles, based on a transmission line analog.

If it helps, Shelkunoff covers most of it in "Advanced Antenna Theory"
(Wiley, 1952). The book may be easier to find than the paper. Just
looking at the pages makes my head hurt.

Kevin Gallimore

2975. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 02:13:24 UTC
From: richardharrison@webtv.net
Message-ID: <4449-3C6728C4-4@storefull-112.iap.bryant.webtv.net>
Source record: 148968

Reg wrote:
"Dissipationless resistance is certainly abused on this newsgroup. Why the description was ever invented I can`t imagine."

Reg feigns ignorance for his own amusement I suppose. Reg knows the definition of resistance is a ratio of voltage to current when these are in-phase.

A resistor, on the other hand, is a resistance device which converts electrical energy to heat energy.

Some authors carelessly confuse resistance with the resistor. Because of a tendency to assume a resistance to be a resistor, the term "dissipationless resistor" is needed.

Most radio people know power is not equally shared between a 50-ohm transmission-line and its 50-ohm load. Why? The 50 ohms of the transmission-line is dissipationless resistance.

Likewise, a Class-C amplifier can be perfectly matched to a load if necessary and still dissipate considerably less than its matched load does. Why? A good part of the internal resistance of the Class-C amplifier is dissipationless resistance.

Dissipationless resistance doesn`t store energy as reactance does, but limits energy movement without producing loss.

Best regards, Richard Harrison, KB5WZI

2976. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 02:26:18 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <dsae6ucu948qpg94l4nirqu301msru62t1@4ax.com>
Source record: 148963

On Sun, 10 Feb 2002 04:14:21 GMT, "hurstjsj" <hurstjsj@gte.net> wrote:

>Any thoughts?
>
>John, KU6X

Excellent analysis, John. Gonna have to go back and try to root out the remainder of my noise.

Thanks!

Bill, W7TI

2977. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 02:30:48 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <g1be6usvvlq7nmd6lhjtsn51gqn497nmip@4ax.com>
Source record: 148964

On Sun, 10 Feb 2002 21:17:58 GMT, "R.U. Amused?" <n6ttd@spamsuxarrl.net>
wrote:

>I wouldn't sell a car to some kid who didn't have a
>license.

"Kids" aren't allowed to drive. Would you sell a car to an adult who
didn't have a license? Owning a car or owning a ham radio can be done
by anyone (of legal age), not just ones with a license to use it.

No, no, I'm not in favor of unlicensed folks on the air. Just pointing
out what should be obvious.

Bill, W7TI

2978. Re: varnish on wire antenna affect RF capabilities??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 02:38:09 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <kabe6u4n2dbra76pc4acrf5t19n8vc62k8@4ax.com>
Source record: 148965

On 10 Feb 2002 06:43:12 -0800, carkenord@juno.com (Lee Carkenord) wrote:

>Will this thin coating of varnish have a negative on my transmit and
>receive capabilities, at the 100 watt level? If yes, could you please
>quantify the effect, in a general manner?

The only possible effect is a slight lowering of the resonant frequency of the antenna. Varnish acts like a dielectric in series with the field between the two halves of the antenna.

The effect is so slight though, I doubt you would even notice it unless you compared two identical antennas, one with and one without varnish.

May I offer some unsolicited advice? Move away from such a polluted area. You only get one set of lungs. Make 'em last.

73, Bill W7TI

2979. "Dogbone" insulators-Where can I find them?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 02:39:24 UTC
From: Tom Nelson <nelsonca@stormnet.com>
Message-ID: <3C672EDC.9113F191@stormnet.com>
Source record: 148869

I've been looking for some "dogbone" style center insulators for dipoles. Who has these things that won't cost an arm and leg + a few other extremities for shipping handling?

TNX in advance
Tom
KD6EVM

2980. J-Pole information

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 02:41:25 UTC
From: Victor Andr&#65533; Moinhos <raves@clix.pt>
Message-ID: <1013395033.26883@news.iol.pt>
Source record: 148966

Hello,

I am constructing a j pole antenna, acording to shematics the shild of the coax conect to the short section and the center coax conects to 3/4 wave leng section, but if the two sections are conected one to the other, so coax will be in short circuited !
Is this correct? If so, how does the transmitter works, if terminals are short circuited?

best regards,
Victor

2981. Re: Antenna tuner observations.....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 02:43:22 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <vsbe6uoqg7dc7j7d0frbp74g1b9bauplac@4ax.com>
Source record: 148967

On Sun, 10 Feb 2002 18:43:05 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

>That's exactly the antenna I use and I don't use an antenna tuner.
>See how on my web page.
>--
>cheers, CAM http://www.qsl.net/w5dxp

Very clever, Cam. The true spirit of ham radio.

73, Bill W7TI

2982. Re: J-Pole information

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 03:15:24 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <1jde6u4fquedktfvfj5u47vans3ab45v9t@4ax.com>
Source record: 148870

On Mon, 11 Feb 2002 02:41:25 GMT, "Victor Andrï¿½ Moinhos" <raves@clix.pt>
wrote:

>Hello,
>
>I am constructing a j pole antenna, acording to shematics the shild of the
>coax conect to the short section and the center coax conects to 3/4 wave
>leng section, but if the two sections are conected one to the other, so
>coax will be in short circuited !
>Is this correct? If so, how does the transmitter works, if terminals are
>short circuited?
>
>best regards,
>Victor

The connection IS a short circuit at LOW frequencies. At the frequency
of operation, it appears to be a 50 ohm resistor. The reason why is a
bit complicated, but a book on antennas and transmission lines should
help you to understand. It has to do with the time it takes for the
current to travel around the "J".

73, Bill W7TI

2983. Pro-Search rotor controller

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 03:29:16 UTC
From: rnjphoto@aol.com
Message-ID: <20020210222916.18258.00000312@mb-cb.aol.com>
Source record: 148871

Hi All,

Does anybody know if a rotor control unit made by Pro-Search Electronics of St. Louis, Mo. is supported by any company that may have bought them out? Its a control unit with key pad entry and digital readout that was purchased in 1984. The unit was used to drive a Ham IV rotor.

TIA, Ron N7RN

2984. Re: varnish on wire antenna affect RF capabilities??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 06:25:44 UTC
From: Robert Fanfant <fanfant1@attbi.com>
Message-ID: <ItJ98.32467$Pz4.215021@rwcrnsc53>
Source record: 148872

Possibly salt water environment?

-rob N7QT

"Bill Turner" <w7ti@dslextreme.com> wrote in message
news:kabe6u4n2dbra76pc4acrf5t19n8vc62k8@4ax.com...
> On 10 Feb 2002 06:43:12 -0800, carkenord@juno.com (Lee Carkenord) wrote:
>
> >Will this thin coating of varnish have a negative on my transmit and
> >receive capabilities, at the 100 watt level? If yes, could you please
> >quantify the effect, in a general manner?
>
> ----------
>
> The only possible effect is a slight lowering of the resonant frequency
> of the antenna. Varnish acts like a dielectric in series with the field
> between the two halves of the antenna.
>
> The effect is so slight though, I doubt you would even notice it unless
> you compared two identical antennas, one with and one without varnish.
>
> May I offer some unsolicited advice? Move away from such a polluted
> area. You only get one set of lungs. Make 'em last.
>
> 73, Bill W7TI
>

2985. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 07:57:55 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202102357.3198ef10@posting.google.com>
Source record: 148873

richardharrison@webtv.net (Richard Harrison) wrote in message news:<17878-3C6701D2-151@storefull-118.iap.bryant.webtv.net>...
> Tom, DL7JSK wrote:
> "---the length is now 30 cm, and not 50 cm regarding the k factor as a
> quarter-wave stub should be."
>
> A quarter wave at 2 meters is about 50 cm but the velocity factor in
> most coax is about 2/3. So, 30 cm for a short-circuit stub which behaves
> as a parallel resonant circuit, sounds about right.
>
> Best regards, Richard Harrison, KB5WZI

It's pretty close. For a dipole at 144 mhz, which shows an SWR of 1.4:1, as in an appx 70 ohm feed, I calculate the stub should be 19.02 cm below the feedpoint, and a stub length of 27.25 cm. The stub end would be closed. But I doubt I would bother with one myself. 1.4:1 is good enough. Besides, he can adjust the antenna if needed to get a good match. MK

2986. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 08:15:41 UTC
From: DL7JSK <dl7jsk@darc.de>
Message-ID: <a47ukh$1fe$06$1@news.t-online.com>
Source record: 148875

"Richard Harrison" <richardharrison@webtv.net> schrieb im Newsbeitrag
news:17878-3C6701D2-151@storefull-118.iap.bryant.webtv.net...
> Tom, DL7JSK wrote:
> "---the length is now 30 cm, and not 50 cm regarding the k factor as a
> quarter-wave stub should be."
>
> A quarter wave at 2 meters is about 50 cm but the velocity factor in
> most coax is about 2/3. So, 30 cm for a short-circuit stub which behaves
> as a parallel resonant circuit, sounds about right.
Oh,sorry. I calculated with k=0,97 (no idea why...) instead of 0,66.Of
course,then it sounds good

Tom

2987. Re: Impendance transformer question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 08:17:00 UTC
From: DL7JSK <dl7jsk@darc.de>
Message-ID: <a47umv$q5k$04$1@news.t-online.com>
Source record: 148874

> It's pretty close. For a dipole at 144 mhz, which shows an SWR of
> 1.4:1, as in an appx 70 ohm feed, I calculate the stub should be 19.02
> cm below the feedpoint, and a stub length of 27.25 cm. The stub end
> would be closed. But I doubt I would bother with one myself. 1.4:1 is
> good enough. Besides, he can adjust the antenna if needed to get a
> good match. MK

How did you calculate the 19,02 cm ?

Tom

2988. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 13:58:16 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C67CDF8.E65BD1EB@umich.edu>
Source record: 148876
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Charles Johnston wrote:
>
> DXCC qsl'ing is now -cheaper- and -faster- than ever....a huge and
> bold step in the right direction.

Yeah, I suppose it's inevitable, but I for one will not appreciate an electronic QSL as much as I do the old-style postcard kind. I like seeing the pictures chosen by the DX, I like it when I get a card with a hand-written message on it (yeah, that's pretty rare) and I like getting stamps from the DX country on their envelope.

Sure, lots of people now just print out a stick-on label for their card. Lots of people just use those generic callsign-and-qso-info cards. Lots of cards don't come with exotic stamps, since they arrived via the manager, or were metered instead of stamped. Still, I come home every day and the first thing I do is check the mailbox for QSL cards. The electronic ones just won't have the same thrill.

73 de Bob, KI8AB

2989. Re: "Dogbone" insulators-Where can I find them?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 14:33:08 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c67da39_3@news1.prserv.net>
Source record: 148878

You can use anything that keeps the wires from touching. I actually prefer small egg insulators, as they permit much shorter connections from the feedline to the elements. If you are stuck on dogbone, check with the Wireman or any of the other cable and antenna vendors listed in the ham magazines or on the general web sites.

--
Crazy George
Remove NO and SPAM from return address
Tom Nelson <nelsonca@stormnet.com> wrote in message
news:3C672EDC.9113F191@stormnet.com...
> I've been looking for some "dogbone" style center insulators for
> dipoles. Who has these things that won't cost an arm and leg + a few
> other extremities for shipping handling?
>
> TNX in advance
> Tom
> KD6EVM
>

2990. Re: varnish on wire antenna affect RF capabilities??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 14:35:31 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <lklf6ucslbtdc0o5gipfoqh3jrt3fhl6v7@4ax.com>
Source record: 148877

On Mon, 11 Feb 2002 06:25:44 GMT, "Robert Fanfant" <fanfant1@attbi.com>
wrote:

>Possibly salt water environment?
>
>-rob N7QT

In Denver?

73, Bill W7TI

2991. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 14:51:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a48n3g$1dcdoe$1@ID-124126.news.dfncis.de>
Source record: 148879

Richard Harrison <richardharrison@webtv.net> wrote in message
news:4449-3C6728C4-4@storefull-112.iap.bryant.webtv.net...
> Reg wrote:
> "Dissipationless resistance is certainly abused on this newsgroup. Why
> the description was ever invented I can`t imagine."
>
> Reg feigns ignorance for his own amusement I suppose. Reg knows the
> definition of resistance is a ratio of voltage to current when these are
> in-phase.
>
> A resistor, on the other hand, is a resistance device which converts
> electrical energy to heat energy.
>
> Some authors carelessly confuse resistance with the resistor. Because of
> a tendency to assume a resistance to be a resistor, the term
> "dissipationless resistor" is needed.
>
> Most radio people know power is not equally shared between a 50-ohm
> transmission-line and its 50-ohm load. Why? The 50 ohms of the
> transmission-line is dissipationless resistance.
>
> Likewise, a Class-C amplifier can be perfectly matched to a load if
> necessary and still dissipate considerably less than its matched load
> does. Why? A good part of the internal resistance of the Class-C
> amplifier is dissipationless resistance.
>
> Dissipationless resistance doesn`t store energy as reactance does, but
> limits energy movement without producing loss.

==========

Rich,

What is the formula for calculating the dissipationless resistance of a
Class-C triode amplifier? Fred E Terman doesn't seem to know.

Reg

2992. Re: Can You Believe these CC&Rs?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 15:31:50 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C67E3E6.915E5A3A@crosslink.net>
Source record: 148880

N2EY wrote:
>
> The racist parts were rendered null and void years ago by the civil rights and
> equal housing laws. No court would uphold those parts of the CC&Rs.
>
> But ONLY those parts are rendered null and void. The rest are unaffected.
>
Depends on the judge. There was a case in Md 20+ years ago where a CBr
was taken to court over his vertical. The judge cited an opinion in
which racial CC&Rs had been invalidated which said that CC&Rs' only
purpose was to protect property values and, since the HOA bringing that
suit hadn't proven that the dude's antenna lowered their property
values, they had no case. Obviously, YMMV from court to court but I'd
think that defense has been strengthened by recent federal laws
specifically exempting TV antennas. Recommend getting a legal opinion
from a local lawyer after researching
<www.findlaw.com/11stategov/va/laws.html> (replace "va" with your
state's abbreviation). No, I am not a lawyer either.
KA3DWW

2993. Re: "Dogbone" insulators-Where can I find them?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 15:36:19 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C67E4F3.38C716DA@crosslink.net>
Source record: 148881

Tom Nelson wrote:
>
> I've been looking for some "dogbone" style center insulators for
> dipoles. Who has these things that won't cost an arm and leg + a few
> other extremities for shipping handling?
>

Check in the electric fence section of your local farm supply store next
time you got to town to buy feed ... ;o)
73 KA3DWW

2994. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 16:48:09 UTC
From: richardharrison@webtv.net
Message-ID: <20469-3C67F5C9-93@storefull-118.iap.bryant.webtv.net>
Source record: 148884

Reg wrote:
"What is the formula for calculating the dissipationless resistance of a Class-C triode amplifier?"

Terman says that cut and try may be the best way to optimize Class-C amplifier design. That is, tweaking after one has schemed to make best use of the output devices` maximum capabilities.

Dissipationless resistance is not addressed. It is an inverse function of the conduction angle which affects other characteristics of the amplifier such as harmonic generation. Efficiency is addressed.

Efficiency is output over input. The d-c input and r-f output are easily measured.

The designer wants best utilization of the output devices, high output power, and efficiency. If the Class-C amplifier were lossless, all its internal resistance would be lossless and it would be 100% efficient. 70% isn`t bad and is better than 50% which would be the limit absent the lossless resistance.

Best regards, Richard Harrison, KB5WZI

2995. Re: Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 16:50:06 UTC
From: DonW <n7don_J_@yahoo.com>
Message-ID: <2DS98.42644$zJ.650886@news.easynews.com>
Source record: 148882
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Drink........ Can't comment on the performance of the SC7900A per se. I have 2 Diamond NR77HA dual banders, one on my S-10 (mag mount) and other on a Pont. TransSport. Never had a problem with the fold over mechanism or their performance in general. I did have a problem with the unit on the TransSport when I have the roof top carrier installed. The ant. is mounted at the left rear of the roof and air flow around the carrier would cause enough lift the ant. would fold over. Often would occur when a semi passed in opposite direction. I fixed with a piece of fishing line to guy the ant. to the roof rack.
The NR77HA is 39" overall length and I have to fold over to get into our 7 ft. garage door opening.

DonW

"Drink" <REMOVE_THISdrink@coqui.net> wrote in message news:ACY88.118945$h31.8086766@e420r-atl1.usenetserver.com...
> Hi Folks,
> I'm interested in a Diamond SG7900A, dual band mobile antenna. I'm
> thinking about mounting it high (atop the rollbar) of my Jeep but I'll also
> be strapping a canoe up there from time to time as well. I've seen the tiny
> picture of the "one touch fold over design" and am curious if it's a good
> choice or should I look for another mount point.
> Has anybody had experience of the fold over mechanism corroding or popping
> downward under road conditions? I'd appreciate general impressions or
> personal experience opinions on the fold over design as well as the antenna
> in general. I'd also appreciate thoughts on such a high gain antenna in
> hilly (not mountainous) terrain. Feel free to add any other considerations
> as the thread strikes you.
> 73's,
> Drink, WP3JQ
>
>
>

2996. antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 16:54:56 UTC
From: tucansam@whodis.org
Message-ID: <a48t0v$78r$1@news.panix.com>
Source record: 148885

Hi all,

I live in an apartment with a "no external antennas" rule. We have a fireplace that we never use.

Is it possible to mount an antenna *in* the chimnet, and get good results?

The chimney is brick, with a metal mesh top. I know both of these facts will deminish its ability, but would it be better (being higher) than simply mounting the antenna hanging from the ceiling inside?

Thanks.

--
569@72649.266

2997. Mat telescopique mobile ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 17:06:33 UTC
From: Pascal va2aba <va2aba@webnet.qc.ca>
Message-ID: <tSS98.1895$bJ6.191106368@news1.mtl.metronet.ca>
Source record: 148883

Bonjour je cherche des infos sur un mat telescopique
Qui ce place dans l'attache remorque de l'auto.

Ou quelque chose comme ca...

Merci

va2aba
Pascal

2998. Sound okay to use?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 18:35:43 UTC
From: Tazanator <tazanator1@attbi.com>
Message-ID: <3aU98.30749$fK1.3595719@rwcrnsc54>
Source record: 148886

okay ant has a 2:1 swr and a 100 ohm risastance ....sounds okay right?

2999. Re: Sound okay to use?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 18:39:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a494k0$1d9bdp$1@ID-124126.news.dfncis.de>
Source record: 148889

It might have a 25-ohm resistance. There is no way your SWR meter will tell
you which is which.

Reg.

==========

Tazanator <tazanator1@attbi.com> wrote in message
news:3aU98.30749$fK1.3595719@rwcrnsc54...
> okay ant has a 2:1 swr and a 100 ohm risastance ....sounds okay right?
>
>

3000. Re: 4:1 Baluns and LongWires

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 19:02:38 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C695937.7A525CF2@worldnet.att.net>
Source record: 148887

CAM wrote:

> Reg Edwards wrote:
> >
> > > the typical 4:1
> > > balun is essentially abused
> > ==========================
> > I think you have available the IEEE technical dictionary. What does it have
> > to say about 'abused' ?
>
> I'm speaking from experience, Reg. I once was a balun abuser.

I once read of a ham who, running an amp to balun-fed tribander, was well into a SSB contest when a passerby rapped on his door and announced that the ham's antenna was on fire. It was the balun, blazing away. I imagine that balun was feeling a bit abused.

3001. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 19:03:24 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <0AU98.507$cq2.303577@paloalto-snr1.gtei.net>
Source record: 148888

<tucansam@whodis.org> wrote in message news:a48t0v$78r$1@news.panix.com...
> Hi all,
>
> I live in an apartment with a "no external antennas" rule. We have a
> fireplace that we never use.
>
> Is it possible to mount an antenna *in* the chimnet, and get good
results?

Depends on the type of antenna and your definition of good. But it's lots
better than no antenna...

>
> The chimney is brick, with a metal mesh top. I know both of these facts
> will deminish its ability, but would it be better (being higher) than
> simply mounting the antenna hanging from the ceiling inside?

As long as you don't forget, and light the fireplace... :>) And if done
right, it could be pretty covert, which might come in handy if you happen
to take out the phones or televisions in the complex...

73 de W6DKN

3002. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 19:09:06 UTC
From: Joe <joe.amp@NOSPAMverizon.net>
Message-ID: <mFU98.14147$gf5.3212@nwrddc02.gnilink.net>
Source record: 148890

Mounting inside is going to be a RF radiation issue, massive TVI, it going
to get into everything including you.
You could put it on a track with a pulley and raise it at night.
Apartments, condo's ...Bla
Best to move.

-Joe

tucansam@whodis.org wrote in message ...
>Hi all,
>
>I live in an apartment with a "no external antennas" rule. We have a
>fireplace that we never use.
>
>Is it possible to mount an antenna *in* the chimnet, and get good results?
>
>The chimney is brick, with a metal mesh top. I know both of these facts
>will deminish its ability, but would it be better (being higher) than
>simply mounting the antenna hanging from the ceiling inside?
>
>Thanks.
>
>
>--
>569@72649.266

3003. Re: Sound okay to use?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 19:19:41 UTC
From: Tazanator <tazanator1@attbi.com>
Message-ID: <hPU98.35974$AV5.245708@rwcrnsc51.ops.asp.att.net>
Source record: 148891

units where from an MFJ 259 sorry should have said it...

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a494k0$1d9bdp$1@ID-124126.news.dfncis.de...
> It might have a 25-ohm resistance. There is no way your SWR meter will
tell
> you which is which.
> ---
> Reg.
>
> ============================
>
> Tazanator <tazanator1@attbi.com> wrote in message
> news:3aU98.30749$fK1.3595719@rwcrnsc54...
> > okay ant has a 2:1 swr and a 100 ohm risastance ....sounds okay right?
> >
> >
>
>

3004. Re: Sound okay to use?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 19:50:06 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a497od$1d02vb$3@ID-124126.news.dfncis.de>
Source record: 148892

If your MFJ 259 says it's 100 ohms then it is 100 ohms. You don't need an
SWR meter when you can measure R and X directly. What use can you make of
the SWR reading ?

Good DX

Reg

Tazanator <tazanator1@attbi.com> wrote in message
news:hPU98.35974$AV5.245708@rwcrnsc51.ops.asp.att.net...
> units where from an MFJ 259 sorry should have said it...
>
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:a494k0$1d9bdp$1@ID-124126.news.dfncis.de...
> > It might have a 25-ohm resistance. There is no way your SWR meter will
> tell
> > you which is which.
> > ---
> > Reg.
> >
> > ============================
> >
> > Tazanator <tazanator1@attbi.com> wrote in message
> > news:3aU98.30749$fK1.3595719@rwcrnsc54...
> > > okay ant has a 2:1 swr and a 100 ohm risastance ....sounds okay right?
==========================

3005. Re: Sound okay to use?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 20:28:10 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C68294F.A393E626@icok.net>
Source record: 148893

Tazanator,
Nope, doesn't sound okay. Ought'a be closer
1.0:1 and 50 ohms. It will work though, just not
the 'best'.
'Doc

3006. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 20:34:06 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C682AB1.7315ED9F@icok.net>
Source record: 148894

tucansam,
You will get some results, but nothing like it being
out side. It's probably the same, or slightly better than
the antenna being in-doors, maybe.
I think I'd like to see how you get the antenna into
the chimney! From the bottom, the antenna better be very
flexible. From the top, your neighbors will see you. (LOL)
'Doc

3007. Re: Sound okay to use?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 20:37:06 UTC
From: Tazanator <tazanator1@attbi.com>
Message-ID: <SXV98.31391$fK1.3604805@rwcrnsc54>
Source record: 148895

umm how do I do that with the 259...I got input and gate with the 2 meters
...

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a497od$1d02vb$3@ID-124126.news.dfncis.de...
> If your MFJ 259 says it's 100 ohms then it is 100 ohms. You don't need an
> SWR meter when you can measure R and X directly. What use can you make of
> the SWR reading ?
>
> Good DX
> ---
> Reg
>
>
> Tazanator <tazanator1@attbi.com> wrote in message
> news:hPU98.35974$AV5.245708@rwcrnsc51.ops.asp.att.net...
> > units where from an MFJ 259 sorry should have said it...
> >
> >
> > "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> > news:a494k0$1d9bdp$1@ID-124126.news.dfncis.de...
> > > It might have a 25-ohm resistance. There is no way your SWR meter will
> > tell
> > > you which is which.
> > > ---
> > > Reg.
> > >
> > > ============================
> > >
> > > Tazanator <tazanator1@attbi.com> wrote in message
> > > news:3aU98.30749$fK1.3595719@rwcrnsc54...
> > > > okay ant has a 2:1 swr and a 100 ohm risastance ....sounds okay
right?
> ==========================
>
>
>

3008. Re: Sound okay to use?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 20:53:37 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c682f51$1@news.bnb-lp.com>
Source record: 148896

Hello Tazanator,
As long as one's transmitter can tolerate a 2:1 vswr there is nothing "wrong" or "bad" about that value. It is not ideal (1:1) ..but nothing is in the "real-world".

As far as performance goes no one receiving you would be able to tell any signal strength difference if you were somehow able to switch back-and-forth between 1:1 and 2:1. With a 2:1 vswr nearly 90% of one's transmitter power is being radiated....

It takes a change in power of x4 to see a 1 s-unit increase in field strength. The difference between 90% radiated and 100% radiated in this scenario is miniscule at best.

If you - must - see a 1:1 then fine business..trim and adjust till you see it.... some people can't sleep at night if their vswr is above 1:1 !! They ought to quit fussing, bone-up on transmission line theory, and start enjoying their radios!

-

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3009. Re: Part number needed for discontinued Hustler antenna mount

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 21:23:15 UTC
From: John_Breland@Yahoo.Com
Message-ID: <d2e1c59f.0202111323.48c1e96f@posting.google.com>
Source record: 148897

Thanks guys, but I really want the Hustler mount, as it was extremely
well made. I think I paid about $25.00 for it in the early 90's. And
yes, by UHF I mean it accepted a PL259.

Thanks

Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
news:<3C63C8F4.1AD435D@tampabay.rr.com>...
> down here too i just bought one they are called acorn mounts i think and sell
> for around $8
>
> VE3TMT wrote:
>
> > "John" <John_Breland@Yahoo.Com> wrote in message
> > news:d2e1c59f.0202072200.34ca559@posting.google.com...
> > > Hi all.
> > >
> > > A few years back I had a mobile antenna mount that was made by
> > > Hustler. It used a hole in the fender like a factory AM/FM antenna
> > > would use. The mount had a uhf connector on the feeline side and a
> > > 3/8" female hole on the antenna side. This was just an antenna mount,
> > > no electronics involved.
> >
> > John,
> >
> > If by UHF you mean "accepts PL259", check your local Radio Shack. They are
> > still available up here anyway.
> >
> > Max

3010. Wanted - Cushcraft AV5 radial kit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 21:24:09 UTC
From: marieandpaul <marieandpaul@hotmail.com>
Message-ID: <a49cpp$4vr$1@knossos.btinternet.com>
Source record: 148898

I am looking for the radial kit for the cushcraft AV5. Please email me (marieandpaul@hotmail.com)

3011. Re: PROOF THAT ILLEGAL CBERS ARE CRIMINALS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 21:28:27 UTC
From: iron3@charter.net
Message-ID: <u6geui6slnpb18@corp.supernews.com>
Source record: 148899
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

Well sad to say, Ham radio even for emergencies is becoming a thing of the past. Newer technologies are here and coming, that Federal, State and local emergency services are using, that can be setup and be on the air in minutes. I like CW, but I can't think of any scenario where it would be absolutly needed, abeit nuclear war, where someone needs it. (In which case I for one, am not going to hang a dipole in a tre and pound a key..;P) or your homebrewing a transmitter from scratch on a desert island to call for coffee. Again, not downing CW, I enjoy CW, just technology has changed so much with satellite, microwave, etc. I don't think even alot of newer people are interested in it as they were 20 years ago. I think CW will be here as long as there is ham radio if nothing else than tradition. But there is a different people today coming in expecting different things like satellite, microwave, computer radio interface, etc. Not that thats bad, just times change.. Even homebrewing is becoming more of a "specialty". Mass production made alot of stuff in ham radio cheaper to buy than make. I personally like to make as much of my gear that I can. Also like to restore old receivers and transmitters, but the guys who do it are getting fewer. Lots of the old Elmers are SK or too old to teach anymore. For guys just coming in the hobby and even for guys like myself, you could learn alot from the old timers but not enough people are learning to take the place of the ones gone. I mostly grew up just when the old tube gear was going to solid state so right off I was handicapped with the old stuff not knowing anything or finding anyone that knew anyting about it. Most of the new gear is "Plug and Pray", fry a board you throw it out and get a new one, never understanding how it works.. I read my butt off on every book I could find. I really believe I would be much more knowledagble if I had some experienced Elmers around to show me some things. But I did ok considering I was learning a technology that most guys had forgotten. (probably alot of you guys were in the same boat..) I think mass production of gear and the loss of good Elmers have seriously crippled new people as far as learning. Shame really. Nothing like firing up an old rig and making a contact or hearing a station on a radio you repaired or made yourself. The thrill of something you made or repaired is something that few hams experience today. This is what I really think is missing today. Enough ranting..Thanks for reading..
"Zoran Brlecic" <WA7AA@attbi.com> wrote in message
news:3C5EC263.EB0D56FF@attbi.com...
> Vito wrote:
>
> > CW was a necessary evil left over from
> > the days before modulation was invented.
>
> And ham radio is probably a necessary evil left over from the days before
> cellphones and Internet were invented?

>
>
>
> 73 .... Zoran WA7AA
>
>
>
>
>

3012. Re: Sound okay to use?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 22:13:02 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C6841BE.B19DD777@shaw.ca>
Source record: 148900

Tazanator wrote:
>
> umm how do I do that with the 259...I got input and gate with the 2 meters
> ...
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:a497od$1d02vb$3@ID-124126.news.dfncis.de...
> > If your MFJ 259 says it's 100 ohms then it is 100 ohms. You don't need an
> > SWR meter when you can measure R and X directly. What use can you make of
> > the SWR reading ?
> >
> > Good DX
> > ---
> > Reg
> >
> >
> > Tazanator <tazanator1@attbi.com> wrote in message
> > news:hPU98.35974$AV5.245708@rwcrnsc51.ops.asp.att.net...
> > > units where from an MFJ 259 sorry should have said it...
> > >
> > >
> > > "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> > > news:a494k0$1d9bdp$1@ID-124126.news.dfncis.de...
> > > > It might have a 25-ohm resistance. There is no way your SWR meter will
> > > tell
> > > > you which is which.
> > > > ---
> > > > Reg.
> > > >
> > > > ==============================
> > > >
> > > > Tazanator <tazanator1@attbi.com> wrote in message
> > > > news:3aU98.30749$fK1.3595719@rwcrnsc54...
> > > > > okay ant has a 2:1 swr and a 100 ohm risastance ....sounds okay
> right?
> > ============================
> >
> >
> >

I think Reg has confused the MFJ-259 with the MFJ-259B. I
don't believe the
259 can measure Reactance, X.

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3013. Re: Sound okay to use?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 22:39:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a49hn0$1do2sm$1@ID-124126.news.dfncis.de>
Source record: 148902

> I think Reg has confused the MFJ-259 with the MFJ-259B. I
> don't believe the
> 259 can measure Reactance, X.
============================

Thanks Irv for the correction.

Even if the instrument does not measure X, and only measures Z, I think
the SWR meter is still superfluous.

When frequency is varied for minimum line input Z as indicated by the meter,
for practical purposes three conditions are simultaneously satisfied -

(1) X = 0
(2) Since X = 0, R = Z
(3) SWR is also a minimum = Z/Zo or Zo/Z.

With the ordinary transmitter, if Z is in the range 33 to 75 there's nothing
to worry about.

3014. Re: Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 22:44:28 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <uIX98.124208$h31.9152771@e420r-atl1.usenetserver.com>
Source record: 148901
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Thanks for the comments Don,
So, do you think my idea about folding over the antenna to put a canoe up there is a good idea?
73's,
Drink, WP3JQ
"DonW" <n7don_J_@yahoo.com (to reply remove "_J_")> wrote in message news:2DS98.42644$zJ.650886@news.easynews.com...
> Drink........ Can't comment on the performance of the SC7900A per se. I
> have 2 Diamond NR77HA dual banders, one on my S-10 (mag mount) and other on
> a Pont. TransSport. Never had a problem with the fold over mechanism or
> their performance in general. I did have a problem with the unit on the
> TransSport when I have the roof top carrier installed. The ant. is mounted
> at the left rear of the roof and air flow around the carrier would cause
> enough lift the ant. would fold over. Often would occur when a semi passed
> in opposite direction. I fixed with a piece of fishing line to guy the ant.
> to the roof rack.
> The NR77HA is 39" overall length and I have to fold over to get into our 7
> ft. garage door opening.
>
> DonW
>
> "Drink" <REMOVE_THISdrink@coqui.net> wrote in message
> news:ACY88.118945$h31.8086766@e420r-atl1.usenetserver.com...
> > Hi Folks,
> > I'm interested in a Diamond SG7900A, dual band mobile antenna. I'm
> > thinking about mounting it high (atop the rollbar) of my Jeep but I'll also
> > be strapping a canoe up there from time to time as well. I've seen the tiny
> > picture of the "one touch fold over design" and am curious if it's a good
> > choice or should I look for another mount point.
> > Has anybody had experience of the fold over mechanism corroding or popping
> > downward under road conditions? I'd appreciate general impressions or
> > personal experience opinions on the fold over design as well as the antenna
> > in general. I'd also appreciate thoughts on such a high gain antenna in
> > hilly (not mountainous) terrain. Feel free to add any other

> considerations
> > as the thread strikes you.
> > 73's,
> > Drink, WP3JQ
> >
> >
> >
>
>

3015. Dog Bone Insulators..try the petshop..lots of them there!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 23:27:31 UTC
From: ve3ab@mondenet.ca
Message-ID: <3c6852b3.4363132@news.mondenet.com>
Source record: 148904

Just thought Id post a silly one!- Actually ..those nylon dog bones are very tough and durable and come in sizes which resemble end insulators of antennas.
My dachshund hardly touches the ones I bought him..he much jprefers the rawhide ones he can digest..so I may clean up the others and put them in my junkbox..73 Earl VE3AB

3016. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-11 23:32:36 UTC
From: Joe <joe.amp@NOSPAMverizon.net>
Message-ID: <owY98.9962$Vt3.2792@nwrddc01.gnilink.net>
Source record: 148903

He is going to have to invest in night vision goggles and do like Batman
:)

'Doc wrote in message <3C682AB1.7315ED9F@icok.net>...
>
>
>tucansam,
> You will get some results, but nothing like it being
>out side. It's probably the same, or slightly better than
>the antenna being in-doors, maybe.
> I think I'd like to see how you get the antenna into
>the chimney! From the bottom, the antenna better be very
>flexible. From the top, your neighbors will see you. (LOL)
> 'Doc

3017. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 00:59:50 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0202111659.20c85e4e@posting.google.com>
Source record: 148905
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

"Adam MAURER" <vk4cp@bigpond.comNOSPAM> wrote in message
news:<Gnk98.4130$BE4.11235@newsfeeds.bigpond.com>...
> Yeah, and watch this "convenience" see the demise of DXpeditions!
> DXpeditions rely heavily on income & donations that is included with the
> request for a good ol QSL card.
>
> I hope you advocates of e-QSLing have already worked the rare ones on all
> band/mode combos, coz it'll be a different ball game now.
>
>
Don't bet on that. This thing is another techie brainfart whose time
will never come. Just like all those "e-commerce" brainfarts crashed
and burned a couple years back and dropped the tech stock markets thru
the cellar floors. There is no "law" which sez that the expeditions
"must" post their logs. Back to bizness as usual.
>
>
Boink.
>
>
>
> Adam, VK4CP
>
>
w3rv

3018. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 01:17:34 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <a49qi2$f5r$1@slb5.atl.mindspring.net>
Source record: 148906
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

"Brian Kelly" <kelly@dvol.com> wrote in message
news:d22b54c3.0202111659.20c85e4e@posting.google.com...
> "Adam MAURER" <vk4cp@bigpond.comNOSPAM> wrote in message
news:<Gnk98.4130$BE4.11235@newsfeeds.bigpond.com>...
> > Yeah, and watch this "convenience" see the demise of DXpeditions!
> > DXpeditions rely heavily on income & donations that is included with the
> > request for a good ol QSL card.
> >
> > I hope you advocates of e-QSLing have already worked the rare ones on
all
> > band/mode combos, coz it'll be a different ball game now.
> >
> >
> Don't bet on that. This thing is another techie brainfart whose time
> will never come. Just like all those "e-commerce" brainfarts crashed
> and burned a couple years back and dropped the tech stock markets thru
> the cellar floors. There is no "law" which sez that the expeditions
> "must" post their logs. Back to bizness as usual.
> >

Yeah. Get a horse!

--

It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net

3019. WTB: Black Satinless steel whip antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 01:22:07 UTC
From: David Panek <dpanek@mindspring.com>
Message-ID: <a49qsrhvn1@slb4.atl.mindspring.net>
Source record: 148907

Wanted:
Stainless steel whip antenna with black oxide coating. 102 inches or longer.
David Panek
KE4MLV
dpanek@mindspring.com

3020. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 02:15:30 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c687f29_4@news1.prserv.net>
Source record: 148908

As usual, the pundits reply without all the information necessary to give a
useful answer.

WHAT BANDS??????

For high HF and low VHF, I would look at replacing the mesh chimney cap with
a visually identical unit with the antenna integrated into it.

The question you asked is: " but would it be better (being higher) than
simply mounting the antenna hanging from the ceiling inside?"
and the straightforward answer to that is most likely yes, unless that
chimney is actually a metal smokepipe, which raises other possibilities for
HF.

--
Crazy George
Remove NO and SPAM from return address
<tucansam@whodis.org> wrote in message news:a48t0v$78r$1@news.panix.com...
> Hi all,
>
> I live in an apartment with a "no external antennas" rule. We have a
> fireplace that we never use.
>
> Is it possible to mount an antenna *in* the chimnet, and get good results?
>
> The chimney is brick, with a metal mesh top. I know both of these facts
> will deminish its ability, but would it be better (being higher) than
> simply mounting the antenna hanging from the ceiling inside?
>
> Thanks.
>
>
> --
> 569@72649.266

3021. Two repeaters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 02:30:49 UTC
From: n4dav <>
Message-ID: <nhvg6uso0ld93c4c592l7tuvejv04kgha8@4ax.com>
Source record: 148909

I want to use two UHF repeaters on one antenna, spaced about 20 Mhz apart. I know i need isolators, cavities, etc, but dont know exactly what or how it's hooked up. Can anybody draw a picture or otherwise help?

thanks
n4dav

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3022. ATU problem, advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 02:33:39 UTC
From: googlyelmo@earthlink.net
Message-ID: <3C687F0E.30410E16@earthlink.net>
Source record: 148910

While trying to "improve" the circuit of my MFJ-901B tuner, I think I may have fouled it up. I attempted to add a movable tap, using a short length of wire and an alligator clip, by removing the lead to one of the tap points I never use (tap 'K'). I unsoldered the two caps, in order to get easy access, and now that everything is back together, I can't get a match, or anything like it (off the scale SWR readings) on any frequency, any band.

Nothing else is changed, and I have ruled out the rig and the coax jumper between the rig and tuner by testing on a dummy load. The caps check good, nothing is shorted to ground there. I am a little confused about how to check the coil and coil switch, though. There is a lead from between the two caps to the top of the coil, and then 12 taps spaced along the coil, each running to a lug on the switch. For the time being I have removed the jumper I had added and not reinstalled the connection between the coil and switch for position 'K'. I used mimimal heat when soldering/unsoldering, and there is no apparent heat damage to the switch, so I am puzzled what could be wrong.

I did remove the factory supplied 4:1 balun, and have not reinstalled it. I am presently using the "wire" and "ground" lugs to connected to a ladderline fed V (the system works OK like that, out of balance maybe, but I plan to add a coax-choke-balun once I get the tuner working again). Like I said, all was well till this misguided attemtp on my part to improve things, which were perfectly workable to begin with!. Please help me fix my tuner so I can get back on the air! Thanks!

Will, KD7BFX

3023. Re: Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 03:26:34 UTC
From: DonW <n7don_J_@yahoo.com>
Message-ID: <KX%98.71523$zJ.1019831@news.easynews.com>
Source record: 148720
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

If I understand correctly, you'd fold over the antenna so the canoe could rest on the roll bar. Would that mean the antenna would be horizontal when the canoe was mounted? If that's the case, I'd assume you wouldn't be using your radio with the ant. folded. You might try mounting the ant. to one side so the canoe and ant. could co-exist. That's why I mounted the ant. on the Trans Sport at the LR so I could use a roof top carrier when we camped. It works fine.
Do you have any flat spots to use a mag. mount? You could move the ant. to jeep hood when the canoe was on top.
Another consideration is what are the relative dimensions of the antenna and where it folds. For example my 39" ant. folds at 33" so there is a 6" stub that might interfer with a canoe seat. You'd need to check it out.
Your best bet is to put the canoe in place and mock up an ant. and see what works best.
Don
N7DON

"Drink" <REMOVE_THISdrink@coqui.net> wrote in message news:uIX98.124208$h31.9152771@e420r-atl1.usenetserver.com...
> Thanks for the comments Don,
> So, do you think my idea about folding over the antenna to put a canoe up
> there is a good idea?
> 73's,
> Drink, WP3JQ

3024. Re: Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 04:43:23 UTC
From: Red Baron <Red@baron.net>
Message-ID: <3c689d6e$0$79561$4bb17d6e@news.dwave.net>
Source record: 148911
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

I have owned the diamond SG7900A for over a year. I have it mounted on the trunk lip of my Grand AM using diamond's K400 lip mount. This mount is excellent as well as the antenna. Please make sure you buy a good mount. I made the mistake of saving 25 bucks by purchasing an MFJ mount for my mini-van instead of a Diamond. Within two months the main screw used to adjust vertical alignment was rusted and would barely turn. It has been over a year now and the Diamond mount on the Grand AM is still rust free including all screws and misc. hardware.

I have no complaints with the antenna, it works great. The only thing I will caution you about your proposed installation is that you may very well not want the antenna on your roof rack. I guarantee that you will bend the antenna eventually.

I have the slightly smaller Diamond SG7500 on my Chrysler Mini-Van mounted at the top of the lift gate. I can't tell you how many times this antenna has hit the overhang at the Bank, Micky Ds, Garage, Etc (Still going strong, testament to quality). This antenna will bend if subjected to enough stress. I also would not want to travel with the antenna folded over. The antenna will begin to emulate a small helicopter if you get my drift. This feature is VERY nice for making it inside the occasional parking ramp, but it will get annoying if you need to constantly be hopping out to flip down the antenna.

I love my Diamond antennas both mobile and base. They are built of quality materials that don't rust or come loose with time and abuse. I can attest to this. Living in Wisconsin and having lots of road salt and grime will prove the rust worthiness of any antenna. You will be satisfied to. I guarantee it.

Matt - KB9VSE

"Drink" <REMOVE_THISdrink@coqui.net> wrote in message
news:ACY88.118945$h31.8086766@e420r-atl1.usenetserver.com...
> Hi Folks,
> I'm interested in a Diamond SG7900A, dual band mobile antenna. I'm
> thinking about mounting it high (atop the rollbar) of my Jeep but I'll
also
> be strapping a canoe up there from time to time as well. I've seen the
tiny
> picture of the "one touch fold over design" and am curious if it's a good
> choice or should I look for another mount point.
> Has anybody had experience of the fold over mechanism corroding or
popping
> downward under road conditions? I'd appreciate general impressions or

> personal experience opinions on the fold over design as well as the
antenna
> in general. I'd also appreciate thoughts on such a high gain antenna in
> hilly (not mountainous) terrain. Feel free to add any other
considerations
> as the thread strikes you.
> 73's,
> Drink, WP3JQ
>
>
>

3025. Re: Two repeaters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 05:13:15 UTC
From: richardharrison@webtv.net
Message-ID: <2203-3C68A46B-111@storefull-114.iap.bryant.webtv.net>
Source record: 148913

N4DAV wrote:
"I want to use two UHF repeaters on one antenna, spaced about 20 MHz apart."

The pass / reject circuits are much more satisfactorily explained with diagrams, pictures etc. A book will be a big help. On hand is Ken Sessions, Jr`s ""Radio Amateur`s F-M Repeater Handbook". Elsewhere I have a couple more books with almost identical information, but different authors.

These books describe the hybrid loops and cavities used for diplexing. The books credit Gil Boelke, W2EUP for describing the systems commonly used by amateurs.

Because the signal level of the transmitters is so enormous as compared with the tiny level with which the receivers must operate, the signal separations provided by the signal separation devices must be extremely good.

If I were building T / R sets, I`d build in magnetic separators. But they are very expensive. So for a one-off construcion, I`d be tempted to use separate dipoles. One for receivers, probably using a multicoupler to avoid interaction between receivers. Another antenna would be used for the transmitters, probably using a hybrid or hybrids to avoid interaction between the transmitters.

I would probably stack vertically polarized antennas one over the other so that they would be put in each other`s nulls to minimize coupling between antennas. Then I`d work on further minimizing coupling between all pieces of the system.

Best regards, Richard Harrison, KB5WZI

3026. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 05:14:15 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <lw1a8.11862$NP4.1367199@news20.bellglobal.com>
Source record: 148912

"Jake Brodsky"
> ...I like having enough land around my house
> so I can....***shoot spuds in the air***...
> without annoying my neighbors...

Excuse me, gotta ask. Potato Gun ?

3027. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 06:11:28 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4abmg$1ps$10@quark.scn.rain.com>
Source record: 148914

"R.U. Amused?" wrote:
>
> It is too bad it isn't. I remember when reputable dealers and hams used to
> only sell the gear to someone who had a license. I wish that was still a
> practice these days. I wouldn't sell a car to some kid who didn't have a
> license.

I remember the times when a reputable dealer (or ham) would sell a
transceiver to a unlicensed person. They would then tutor the person
in the code and enough theory to get their novice license.

Of course, that was when a Novice was limited to crystals and 75 watts.

--
Bill Nelson (billn@peak.org)

3028. Re: identify antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 06:14:08 UTC
From: thompson@mindspring.com
Message-ID: <a4abms$6o8$1@slb2.atl.mindspring.net>
Source record: 148915

Gary,

Are you talking about the Kirk Antennas? Kirk was W8FYR and he sold out to
a firm in Connecticut (Viking).
I don't think he ever made a tri-bander tho. Helicoidal he called them. I
had a big 5 el 20 that I sold to a W9
years ago. I picked up another from a local silent key which I gave to K9AY
as I had no manual. He used 3 or 4" fiberglass booms and the elements were
fiberglass with copper tape for the elements.
73 Dave K4JRB

Gary <gws@redbird.net> wrote in message
news:ef4073c.0202070833.51c6f9d5@posting.google.com...
> A number of years ago I picked up a triband antenna. It was a made by
> a 2 call area ham and sold a a semi commerical short production run
> antenna.
>
> Its a tri-band (10,15,20). The booms and elements are all fiberglass
> with imbeded copper wire inbetween the fiberglass to make up the
> antenna. Its reasonably light want and I wanted to start using it as a
> portable antenna.
>
> I dont have any assembly or tuning info.
>
> Anyknow have or know more about this antenna. I can provide digital
> pics if you need additional help
>
>
> Gary N8EMR

3029. WTB Mor-Gain 80/40 or Kansas dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 06:18:54 UTC
From: thompson@mindspring.com
Message-ID: <a4abvr$vk6$1@slb0.atl.mindspring.net>
Source record: 148916

I am again looking for a short dual band (80/40) antenna made in several variations.
Either the Mor-Gain 8040HD (please no more 80 to 10 versions) or Antennas West
PM or the Kansas dipole. I use them as vertical dipoles as the 80 meter is 66' long
Price and condition by e-mail only.

73 Dave K4JRB
thompson@mindspring.com

3030. Re: ATU problem, advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 06:57:02 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <fleh6ukoa9902sjbdk2vcht1deqk1qqg2q@4ax.com>
Source record: 148917

On Tue, 12 Feb 2002 02:33:39 GMT, googlyelmo@earthlink.net wrote:

>While trying to "improve" the circuit of my MFJ-901B tuner, I think I
>may have fouled it up. I attempted to add a movable tap, using a short
>length of wire and an alligator clip, by removing the lead to one of the
>tap points I never use (tap 'K'). I unsoldered the two caps, in order to
>get easy access, and now that everything is back together, I can't get a
>match, or anything like it (off the scale SWR readings) on any
>frequency, any band.
>
>Nothing else is changed, and I have ruled out the rig and the coax
>jumper between the rig and tuner by testing on a dummy load. The caps
>check good, nothing is shorted to ground there. I am a little confused
>about how to check the coil and coil switch, though. There is a lead
>from between the two caps to the top of the coil, and then 12 taps
>spaced along the coil, each running to a lug on the switch. For the time
>being I have removed the jumper I had added and not reinstalled the
>connection between the coil and switch for position 'K'. I used mimimal
>heat when soldering/unsoldering, and there is no apparent heat damage to
>the switch, so I am puzzled what could be wrong.
>
>I did remove the factory supplied 4:1 balun, and have not reinstalled
>it. I am presently using the "wire" and "ground" lugs to connected to a
>ladderline fed V (the system works OK like that, out of balance maybe,
>but I plan to add a coax-choke-balun once I get the tuner working
>again). Like I said, all was well till this misguided attemtp on my part
>to improve things, which were perfectly workable to begin with!. Please
>help me fix my tuner so I can get back on the air! Thanks!
>
>Will, KD7BFX

Hi Will,

You say you removed the balun and yet use the wire antenna connection?
Isn't that fed by the same balun you removed?

73's
Richard Clark, KB7QHC

3031. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 07:33:34 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <722E5B316F14B369.160BDA73DF3A33E0.B2BEE7B68E30C03E@lp.airnews.net>
Source record: 148918
Cross-posted to: rec.radio.amateur.antenna,rec.ham-radio,alt.ham-radio

On Thu, 07 Feb 2002 16:58:10 -0500, Jake Brodsky <frussle@erols.com>
wrote:

>Amen. They're slapping these $600k "cottages" on single acre lots.
>It looks like a bunch of overgrown suburban houses scaled up so that
>they're still too close to one another. Don't get me wrong, these
>houses are quite nice inside. But I like having enough land around my
>house so I can hoot, holler, shoot spuds in the air and keep animals
>without annoying my neighbors...

Amen to that, and if any of you guys with nice houses in the country
are planning to go SK soon, just leave me the house.

P.S. if you've got a tower, pick up a climbing belt in my size to go
with the house.

;)

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

3032. antenna tester

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 09:44:57 UTC
From: amr_gazzar@hotmail.com
Message-ID: <161bc9bb.0202120144.29be85cc@posting.google.com>
Source record: 148719

I hered about a device called antenna tester it is just a
RF-generator plus a SWR measurements .
it is for antenna installation .
i dont know waht is its benifit for antenna installation .
i mean i have static frequency channels(i.e TV channels) and of course
static antenna lenght (i.e fixed)
then what may i gain with that tester.
another question:
i know that a receiving antenna must be in the order of half the
wavelength
. is that apply for a transimitting one ?

3033. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 13:34:08 UTC
From: k7mem@myrealbox.com
Message-ID: <270a577d.0202120534.4b989ae4@posting.google.com>
Source record: 148721

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:<Iw1a8.11862$NP4.1367199@news20.bellglobal.com>...
> "Jake Brodsky"
> > ...I like having enough land around my house
> > so I can....***shoot spuds in the air***...
> > without annoying my neighbors...
>
> Excuse me, gotta ask. Potato Gun ?

Yes, Potato Gun. Very popular item with the teenagers in my area, Phoenix.

A 2-3 foot length of ABS pipe, a little combustable gas, a Gas Grill
ignition unit, and some potatoes. Great for launching some spuds into
the desert or the lake. If you have teenagers and you suddenly notice
that the ignition button from your Gas Grill is missing, you can bet
there is a potato gun in the makings.

--
Martin E. Meserve, K7MEM

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

3034. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 13:38:44 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <ig6i6uot0d03626lk73rnkk9b6da9auhme@4ax.com>
Source record: 148722

On Tue, 12 Feb 2002 00:14:15 -0500, "J. Harvey"
<JM001.Harvey@sympatico.ca> wrote:

>Excuse me, gotta ask. Potato Gun ?

Uhh, yes. It's highly entertaining --if you have the sense of humor
of a twelve year old. I find vegetable ballistics to be quite
amusing, especially when they reach altitudes of 500' in the air.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

3035. Re: How ground Tail pipe?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 13:54:50 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <K89a8.1286$1F2.23547@sea-read.news.verio.net>
Source record: 148723

My thanks to everyone who replied to my post for your practical descriptions of what has worked for you in the past. I'm going to try a number of them out over the next month and I'll report back how they worked. Again, thanks for the overwhelming response of pracical advice. You gave more advice in your posts than I have ever seen even in the books and magazine articles covering the subject! I think that is what makes this NG fantastic! I'm impressed!

73,

Greg, N6GK/m
"Greg Knapp" <gknapp@freshrain.org> wrote in message
news:iXd98.810$1F2.18606@sea-read.news.verio.net...
Could you share your experience with me? I have tons of ignition and other types of noise (S-8 average on the IC-706) coming from my antenna (a screwdriver on a foldover bumper hitch mount), which is located about a foot or two from the tailpipe on my new Toyota Sienna van, making it difficult, and certainly not enjoyable, to work the HF bands.

If I turn off the engine, all the noise disappears. If I disconnect the antenna, again it all disappears, so I know it's coming from the engine and not coming through the dc power or other control lines).

So, I figure it's most likely the tail pipe, being so close to the antenna, and tons of mobile books say to ground the tail pipe in one or more places, or move the antenna. I can't move the antenna, but I don't have a clue how to ground it.

So, I need some advice. How do you actually ground the tail pipe? Do you drill holes in it to attach some copper grounding strap with self-taping screws? Do you hose clamps to clamp a piece of copper grounding strap to it? Do you scrape it to bear metal and then apply that non-oxidize stuff ("butter") they use on beams to keep the corrosion down and the conductivity up? How do you connect the grounding strap to the underchasis of the car...drill more holes? How many straps does it usually take? How long can the straps be and still be effective? How do you seal the connections so the rain, wet, mud, etc., under the car doesn't make short work of it?

In other words, I'm not very mechanically inclined and really getting too old to climb all over under the car...how do I do this as simply, yet effectively as possible? Any advice is appreciated. Is there a commercial radio place that does noise reduction for a reasonable price in the SF Bay area?

Thanks,

Greg, N6GK

3036. ARES (was Re: PROOF THAT ILLEGAL ...)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 13:56:08 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C691EF8.DF261C98@crosslink.net>
Source record: 148724
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

iron3@charter.net wrote:
>
> Well sad to say, Ham radio even for emergencies is becoming a thing of the
> past. Newer technologies are here....

Don't scrap your ARES nets just yet. If 9-11 is any indication the reverse may be true, at least for a while. Many agencies had come to rely on cell phones (some had even scrapped their radios) only to find the cell net hopelessly jammed when everybody and their dog tried to use it at once. That's why officials are scrambling to change the system so they can cut off "non-essential users" (ie, us); but the telcos are saying "prohibitively expensive".

73 KA3DWW

3037. Re: Two repeaters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 14:25:29 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C6925D9.9EEACC9@crosslink.net>
Source record: 148725

n4dav wrote:
>
> I want to use two UHF repeaters on one antenna, spaced about 20 Mhz
> apart. I know i need isolators, cavities, etc, but dont know exactly
> what or how it's hooked up. Can anybody draw a picture or otherwise
> help?
>

The 'nut' is keeping the xmtrs from desensing the rcvrs. As you know most repeaters simultaniously xmit and rcv only 5MHz apart on the same antenna useing very sharp cavity-type band pass filters (duplexers). My old GE Mastr II has 2 "cans" in series keeping the xmit'd signal out of the rcvr plus a third on the xmtr to keep it in band. The output of the xmit 'can' and the input to the rcv cans are cabled to the antenna via a simple N-connector "T". I'd think you could add another repeater (xmt/rcv pair) so long as the freq's were far enough apart for the filters to handle. A directional coupler might help prevent rcvr desensing even more and I've heard of stacking seperate antennae vertically by putting the xmit antenna inside a non-metallic section of mast with the rcv antenna and radials atop it to farther improve xmit-to-rcv isolation but I've never tried it myself.
KA3DWW

3038. Re: CC&R's ....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 14:35:13 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C692821.4C2DD851@crosslink.net>
Source record: 148726

<http://www.sunsetterflagpole.com/factorydirect.html>

Enjoy,
KA3DWW

3039. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 15:34:19 UTC
From: Peter Buchhop <pbuchhop@sprynet.com>
Message-ID: <a4bco7hfd1@slb6.atl.mindspring.net>
Source record: 148728
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

I have to agree with you. I am a new ham, probably on the younger end of the curve, manage
an emerging technology and am heavily involved in new cutting edge technology. But, in
this area, I agree physical, hand-signed cards are superior to eQSLs; at least for me anyway.
Not being a fan of eQSL doesn't make one a Luddite.
73,
Pete

"Robert Lyons" <boblyons@umich.edu> wrote in message news:3C67CDF8.E65BD1EB@umich.edu...
> Charles Johnston wrote:
> >
> > DXCC qsl'ing is now -cheaper- and -faster- than ever....a huge and
> > bold step in the right direction.
>
>
> Yeah, I suppose it's inevitable, but I for one will not appreciate an
> electronic QSL as much as I do the old-style postcard kind. I like
> seeing the pictures chosen by the DX, I like it when I get a card with
> a hand-written message on it (yeah, that's pretty rare) and I like
> getting stamps from the DX country on their envelope.
>
> Sure, lots of people now just print out a stick-on label for their
> card. Lots of people just use those generic callsign-and-qso-info cards.
> Lots of cards don't come with exotic stamps, since they arrived via the
> manager, or were metered instead of stamped. Still, I come home every
> day and the first thing I do is check the mailbox for QSL cards. The
> electronic ones just won't have the same thrill.
>
> 73 de Bob, KI8AB

3040. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 15:35:29 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C693635.BF93EEFA@icok.net>
Source record: 148727

Crazy George,
Actually, I thought I did have enough information for
an intelligent reply. I did make the assumption that the
poster had the imagination, or common sense, to see the
possibility of making a VHF antenna part of the chimney's
spark arrester by way of a disguise. Perhaps I should
follow your example and not give credit for intelligence
to the posters in the future...
'Doc

3041. W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 15:55:02 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c693ad6$1@news.bnb-lp.com>
Source record: 148729
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

The Official W9INN Antennas Page is ONLINE at the web site listed below.
It features illustrations, measured field data, and ordering
information.
--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3042. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 16:27:26 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <q7gi6uotievis3bfop1dr3fou179h05oj3@4ax.com>
Source record: 148730
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Tue, 12 Feb 2002 08:55:02 -0700, "Charles Johnston"
<ctj92@cableone.net> wrote:

>The Official W9INN Antennas Page is ONLINE at the web site listed below.
>It features illustrations, measured field data, and ordering
>information.

_____

Great antennas, by the way. I have the 80/40/20/17/12 version and it
works just as advertised, at 1500 watts, with no problem. The perfect
companion to a triband beam. .

Bandwidth is reduced compared to a full size dipole of course, but
efficiency is very good. Took about an hour's tweaking to get the
resonance where I wanted it on all bands

The usual disclaimers apply - just a satisfied customer.

Bill, W7TI

3043. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 17:05:07 UTC
From: tucansam@whodis.org
Message-ID: <a4bi03$17g$1@news.panix.com>
Source record: 148731

: WHAT BANDS??????

Initially, only ATC bands. I live close enough to Oakland Center and SFO to pickup communications from aircraft at or above about 6000 ft AGL, but of course can get no tower communications at all. I can get these signals with my cheapo RatShack handheld scanner, and would like to do something in terms on an antenna so I could invest in a nicer base unit and pick up tower traffic from these airports as well.

Eventually I'd like to be able to work some of the more popular ham bands, but this would only be after tax time, assuming I can pick up a decent base station to replace my 2 meter handheld after refund time :)

: simply mounting the antenna hanging from the ceiling inside?"
: and the straightforward answer to that is most likely yes, unless that
: chimney is actually a metal smokepipe, which raises other possibilities for
: HF.

I believe that, indeed, the chimney is a metal smokepipe, simply encased in brick to make it look nice. I need to crawl in my fireplace with a flashlight to confirm. The place was built in 1983, and its fireplace has been used *once*, so there shouldn't be too much trouble affixing some mounts for antennas (dirt-wise, I mean).

3044. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 17:39:28 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <krca8.699$y57.545569@monger.newsread.com>
Source record: 148732

"Ace_On_Par3" <pwhelton@hal-pcNOSPAM.org> wrote in message
news:a3psaclcp1@news.hal-pc.org...
> It sure would be nice if some folks learned how to reply to a message in a
> newsgroup. It is very frustrating to page and page and page through a
> lengthy message that has been replied to 43 times and some ding dong has
> added his one word one liner response ..... grrrrr!!!!
>

Even worse are the ones who don't include enough of the first post to know
what theyare talking about, or to whom they are answering.

--
Roger (K8RI EN73)
WWW.RogerHalstead.com
N833R, World's Oldest Debonair? S#CD-2

>
>
>
>

3045. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 17:39:55 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <Lrca8.700$y57.545561@monger.newsread.com>
Source record: 148733

"VE3TMT" <ve3tmt@rac.ca> wrote in message
news:yN088.8654$5K1.2011872@news20.bellglobal.com...
>
> "Ace_On_Par3" <pwhelton@hal-pcNOSPAM.org> wrote in message
> news:a3psaclcp1@news.hal-pc.org...
> > It sure would be nice if some folks learned how to reply to a message in
a
> > newsgroup. It is very frustrating to page and page and page through a
> > lengthy message that has been replied to 43 times and some ding dong has
> > added his one word one liner response ..... grrrrr!!!!
>
>
> I have to agree...anyone else?
>

Yup!

Roger (K8RI EN73)
WWW.RogerHalstead.com
N833R, World's Oldest Debonair? S#CD-2

>

3046. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 17:40:28 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <gsca8.701$y57.545698@monger.newsread.com>
Source record: 148734

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a3q6ri$1a0je7$2@ID-124126.news.dfncis.de...
> Yes.

Yes what?

Roger (K8RI EN73)
WWW.RogerHalstead.com
N833R, World's Oldest Debonair? S#CD-2

>
>

3047. Re: Screwed Up Posters

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 17:44:26 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <_vca8.702$y57.545865@monger.newsread.com>
Source record: 148735

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:3c615194_4@news1.prserv.net...
> The real problem are those who try to reply to the original poster by
> clicking "reply to all" while looking at the last response instead of the
> originator. And many of these aren't newbies.

The latest version of OE doesn't have a <reply all> button, or at least mine
doesn't. Netscape OTOH has it right next to the reply and it's really easy
to hit the wrong button and not know it till you hit send.

This is a rather short thread and because of that I know to what you refer,
but I have no idea as to who your are answering...
>

--
Roger (K8RI EN73)
WWW.RogerHalstead.com
N833R, World's Oldest Debonair? S#CD-2

> --
> Crazy George
> Remove NO and SPAM from return address
>
>

3048. Re: varnish on wire antenna affect RF capabilities??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 17:57:37 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <a4bvc2$r6a@r02n01.cac.psu.edu>
Source record: 148743

Up wind neighbors that chew tobacco?

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"Bill Turner" <w7ti@dslextreme.com> wrote in message
news:lklf6ucslbtdc0o5gipfoqh3jrt3fhl6v7@4ax.com...
> On Mon, 11 Feb 2002 06:25:44 GMT, "Robert Fanfant" <fanfant1@attbi.com>
> wrote:
>
> >Possibly salt water environment?
> >
> >-rob N7QT
>
> --
>
> In Denver?
>
> 73, Bill W7TI

3049. Re: ATU problem, advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 18:39:56 UTC
From: googlyelmo@earthlink.net
Message-ID: <3C69618C.42FF50D5@earthlink.net>
Source record: 148736

Actually not, the balun fed the binding posts for "balanced" feedline. I have things working temporarily with a jumper soldered to ground with a clip to the coil. Inconvenient, but it works. I don't know how 35W iron, applied quickly, could have fried the switch, but it looks like that is what happened now. Maybe it was marginal to begin with. You know those outstanding MFJ parts! Thanks.

Will, KD7BFX

Richard Clark wrote:

>
>
> Hi Will,
>
> You say you removed the balun and yet use the wire antenna connection?
> Isn't that fed by the same balun you removed?
>
> 73's
> Richard Clark, KB7QHC

3050. Re: Can You Believe these CC&Rs?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 18:49:12 UTC
From: n2ey@aol.com
Message-ID: <9f4bfe89.0202121049.3956fdf4@posting.google.com>
Source record: 148737

Vito <vito@crosslink.net> wrote in message news:<3C67E3E6.915E5A3A@crosslink.net>...
> N2EY wrote:
> >
> > The racist parts were rendered null and void years ago by the civil rights and
> > equal housing laws. No court would uphold those parts of the CC&Rs.
> >
> > But ONLY those parts are rendered null and void. The rest are unaffected.
> >
> Depends on the judge. There was a case in Md 20+ years ago where a CBr
> was taken to court over his vertical. The judge cited an opinion in
> which racial CC&Rs had been invalidated which said that CC&Rs' only
> purpose was to protect property values and, since the HOA bringing that
> suit hadn't proven that the dude's antenna lowered their property
> values, they had no case. Obviously, YMMV from court to court but I'd
> think that defense has been strengthened by recent federal laws
> specifically exempting TV antennas.

Actually, it's gone the other way. 20+ years ago, CC&Rs were not so common. Neither was cable TV. TV and other antennas were considered normal appurtenances to a home back then.

Today most new tract construction has lots of CC&Rs and buried utilities, cable TV is all but universal and more people have Gladys Kravitz syndrome. Not to mention RF exposure.

The pizza dish TV folks had to go to the Supremes to get their exemption!

>Recommend getting a legal opinion
> from a local lawyer after researching
> <www.findlaw.com/11stategov/va/laws.html> (replace "va" with your
> state's abbreviation). No, I am not a lawyer either.

Excellent advice!

But make sure it's a real estate attorney, and that he/she knows exactly what you are talking about.

The long-term solution for ham radio is for all of us to get Congress to mandate an exemption. FCC isn't going to do a thing without a congressional mandate.

But I stand by my original point: Negating some CC&Rs does not negate all of them.

73 de Jim, N2EY

3051. Re: Loading Coils

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 18:53:27 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202121053.3c8a5121@posting.google.com>
Source record: 148738

"P@ul/GW?VQ" <gw0gvq@onetel.net.uk> wrote in message
news:<KW%88.7428$YA2.1338765@news11-gui.server.ntli.net>...
> I have just discarded a 1/2 size G5RV that I used in my other QTH. It had
> loading coils to allow it to be tuned up on 80mtrs. I now have moved QTH and
> am able to get a Full Size G5RV in . I have been told that I can use the
> coils to allow it to tune up on 160mtrs. I wonder if Anyone knows anything
> regarding this eg. how much more copper wire would I need to put on each leg
> after the coils have been attached and most importantly is it possible
> hi..... GW0GVQ

Would depend on if you want it to actually be resonant on 160m, and
how far out from center each coil is. The farther out from center the
coil, the better the current distribution, but the more coil turns
needed. And more coil loss also.
The increase in current distribution will usually outweigh the coil
loss up to a point. Anyway, if you want to get the most bang for the
coil, put them at the center of the antenna at the feedpoint. You
would just have to experiment to see how much wire it took to resonate
the antenna . If you are feeding with ladder line, it doesn't have to
be exactly resonant. Actually, to do what you are doing, which is try
to run all bands with one antenna, I'd use a ladder line fed 80m
dipole, 60 ft a side, 120 ft total. For 160m, I'd short the ladder
line together and run as a shack/tuner fed T vertical. I wouldn't use
any coils in the antenna. You would probably have better overall
performance on most of the bands. 80m should be a good bit better. 40m
will be ok as two half waves in phase. 20m would be an X pattern which
should still do ok. MK

3052. Re: ATU problem, advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 19:02:19 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <a9pi6u430imvllrvhn6q79t1gfjfrkk7ie@4ax.com>
Source record: 148739

On Tue, 12 Feb 2002 18:39:56 GMT, googlyelmo@earthlink.net wrote:

>Actually not, the balun fed the binding posts for "balanced" feedline. I
>have things working temporarily with a jumper soldered to ground with a clip
>to the coil. Inconvenient, but it works. I don't know how 35W iron, applied
>quickly, could have fried the switch, but it looks like that is what
>happened now. Maybe it was marginal to begin with. You know those
>outstanding MFJ parts! Thanks.
>
>Will, KD7BFX
>

Hi Will,

Then it may be due to the wire with the clip being too stiff and
levering the contact open (when you clip to the coil). Not unusual at
all for marginal switches. This would answer that particular switch
setting acting odd, but not the unit generally. DC continuity tests
for opens and closes should be fairly straightforward.

Another point may be that the flying lead you added wanders too close
to ground (without actually shorting - but enough - this is a long
shot however).

Richard Clark, KB7QHC

3053. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 19:32:55 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4canr$1df9gm$1@ID-124126.news.dfncis.de>
Source record: 148749

Just run a wire up the chimney, or along the outside wall of the house. and
it will very likely do reasonable well.

Just get the top end as high as possible above surrounding structures. If
you are allowed to have a TV antenna mounted on the chimney then load the
transmitter into the coax TV feedline. (Disconnect the TV while
transmitting).

The lower frequencies, 1.8 to 4 Mhz are much less likely to cause
interference to other equipment. Suck it and see. You won't do much harm.

Use the domestic plumbing system, hot, cold, central heating as a ground.
One or two big alligator clips are useful.

Nothing ventured, nothing gained !

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

<tucansam@whodis.org> wrote in message news:a4bi03$17g$1@news.panix.com...
> : WHAT BANDS??????
>
> Initially, only ATC bands. I live close enough to Oakland Center and SFO
> to pickup communications from aircraft at or above about 6000 ft AGL, but
> of course can get no tower communications at all. I can get these signals
> with my cheapo RatShack handheld scanner, and would like to do something
> in terms on an antenna so I could invest in a nicer base unit and pick up
> tower traffic from these airports as well.
>
> Eventually I'd like to be able to work some of the more popular ham bands,
> but this would only be after tax time, assuming I can pick up a decent
> base station to replace my 2 meter handheld after refund time :)
>
> : simply mounting the antenna hanging from the ceiling inside?"
> : and the straightforward answer to that is most likely yes, unless that
> : chimney is actually a metal smokepipe, which raises other possibilities
for
> : HF.
>
> I believe that, indeed, the chimney is a metal smokepipe, simply encased
> in brick to make it look nice. I need to crawl in my fireplace with a
> flashlight to confirm. The place was built in 1983, and its fireplace has
> been used *once*, so there shouldn't be too much trouble affixing some

> mounts for antennas (dirt-wise, I mean).

3054. Re: Antenna tuner observations.....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 19:45:12 UTC
From: jflanders2@home.com
Message-ID: <3c697053.325388291@NEWS>
Source record: 148740

Cecil's antenna works exactly as he says. I have built several configurations based on his idea and measured all with my MFJ259B. They all check out as promised in his description and as modelled by EZNEC. I worked over a thousand QSOs worldwide this past weekend in a RTTY contest with his antenna and no antenna tuner.

Save your antenna tuner money.

Jerry W4UK

On Sun, 10 Feb 2002 18:43:05 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

>Bill Russell wrote:
>>
>> Hi all,
>> Just a few thoughts on my search for the "perfect antenna tuner". As
>> some of u might remember from my last posts, I was looking for the
>> best antenna tuner I could use on my 130ft. dipole fed with 450 ohm
>> window line.
>
>That's exactly the antenna I use and I don't use an antenna tuner.
>See how on my web page.
>--
>cheers, CAM http://www.qsl.net/w5dxp

3055. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 19:46:57 UTC
From: jflanders2@home.com
Message-ID: <3c6970c8.325504776@NEWS>
Source record: 148741

Get a friend to help - measure your signal strength on his radio both
in the attic and inside the chimney. If your strength is down only a
bit, just use an amp to make up for it. Your received strength might
be down also, but may work out OK anyway.

Jerry W4UK

On 11 Feb 2002 16:54:56 GMT, tucansam@whodis.org wrote:

>Hi all,
>
>I live in an apartment with a "no external antennas" rule. We have a
>fireplace that we never use.
>
>Is it possible to mount an antenna *in* the chimnet, and get good results?
>
>The chimney is brick, with a metal mesh top. I know both of these facts
>will deminish its ability, but would it be better (being higher) than
>simply mounting the antenna hanging from the ceiling inside?
>
>Thanks.
>
>
>--
>569@72649.266

3056. MA5V mini review followup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 20:19:57 UTC
From: Javier Henderson <javier@KJSL.COM>
Message-ID: <86r8nqxxjm.fsf@grumman.kjsl.com>
Source record: 148742

I posted the MA5V mini review recently. This is a follow up after a few days of using it...

I'm in California's central coast. The baseline QRN seems to be about S3 on the average. I've been having no problems hearing stations from pretty much everywhere.

Transmitting, I see a VSWR of 2:1 or less across all the bands, with close to 1:1 towards to center of each band.

That is all.

73,

-jav w6vms

3057. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 20:55:29 UTC
From: richardharrison@webtv.net
Message-ID: <29110-3C698141-147@storefull-116.iap.bryant.webtv.net>
Source record: 148744

Tucan Sam wrote:
"Is it possible to mount an antenna in the chimney and get good results?"

Sam`s interest seems to now be in air traffic control radio reception between about 108 MHz and 140 MHz.

Lambda is about 2.8 meters at the low end of that frequency range. !/4-wave is about 0.7 meters. That`s about 2.3 feet. This should be shortened by about 5% for end effect to give about 26 inches.

Sam could make a coaxial antenna from coax and support it in a rigid plastic tube. RG-8 or almost any 50 or 75-ohm coax would do. Just skin back about 26 inches of the braid, keeping it intact, and fold it back over the vinyl sheath to create a dipole from the exposed insulated center conductor and the folded back outer conductor over the vinyl sheath.

Home Depot could supply the plastic pipe or conduit that would just accommodate the coax. These plastic pipes can be strung together to extend beyond Sam`s chimney so that at least the plastic pipe encased bared center conductor extends outside the chimney`s lid.

If the added height gives sam a line-of-sight path to a control tower, it may be worth the effort.

Glue a plastic cap on the plastic pipe to keep out moisture and use camouflage paint to hide the salient plastic to some extent.

Best regards, Richard Harrison, KB5WZI

3058. Re: ATU problem, advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 22:25:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4cant$1df9gm$2@ID-124126.news.dfncis.de>
Source record: 148750

Will, I just love your description "binding posts".

What better ?

Long may such phrases remain in the language of both hams and so-called professionals.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

3059. FS/FT Ham Rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 22:52:20 UTC
From: KC8SSG <kc8ssg@qsl.net>
Message-ID: <E0ha8.148$vG4.2591@news>
Source record: 148745
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have what I believe to be a Hygain Ham Rotor. Everyone tells me it is but
I don't know for sure. I can send pics if you like. I'm interested in either
a light duty rotor and controller, 2 meter or 6 meter equipment or just
about anything related to ham radio.Email for pic or to make an offer.
crandall@ee.net

thanks
Rob
--
KC8SSG

3060. Re: varnish on wire antenna affect RF capabilities??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 23:04:12 UTC
From: paul friedman <pfriedman8426@mediaone.net>
Message-ID: <Mbha8.10$Or3.3227@typhoon.mn.ipsvc.net>
Source record: 148746

Are there published figures on the relative effects of different tobacco
juices on radio frequency absorption?

Paul AB0SI

"John Passaneau" <jxp16@psu.edu> wrote in message
news:a4bvc2$r6a@r02n01.cac.psu.edu...
> Up wind neighbors that chew tobacco?
>
>
> --
> John Passaneau
> Penn State University, State College Pa.
> W3JXP
> w3jxp@arrl.net
>
>
> "Bill Turner" <w7ti@dslextreme.com> wrote in message
> news:lklf6ucslbtdc0o5gipfoqh3jrt3fhl6v7@4ax.com...
> > On Mon, 11 Feb 2002 06:25:44 GMT, "Robert Fanfant" <fanfant1@attbi.com>
> > wrote:
> >
> > >Possibly salt water environment?
> > >
> > >-rob N7QT
> >
> > ____
> >
> > In Denver?
> >
> > 73, Bill W7TI
>
>

3061. Re: J pole information-help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 23:24:47 UTC
From: Gary Nevala <ki8dj@chartermi.net>
Message-ID: <u6ja0n3l59q7c6@corp.supernews.com>
Source record: 148748

"Victor Andr&#65533; Moinhos" <raves@clix.pt> wrote in message
news:1013132286.934579@news.iol.pt...
> Hello,
> I am biulding a Jpole antenna but I have a few questions:
> My Jpole is according to next shematic, but I don&#65533;t know if it is correct,
> any one can help me.
> In the web shematics the 3/4 wave section is conected to 1/4 wave section
> with conductive material, is that correct?
> And the continuation of the 3/4 wave what is the function, in the
shematics
> is about 20inchs, is that section only the support or is it part of tha
> antenna?
> Can anyone give mee sites that explains all details in construction of
this
> antenna
> Best regards
>
> 3/4wave section (center coax)
> I (1/2" cooper pipe)
> I
> I
> I
> I 1/4 wave section
> I I (1/2" cooper pipe)
> I I
> I -- coax -- I
> I cable I
> IIIIIIIIIIIIIII -non conductive material
> I
> I
> I -non conductive material
> I
> I
>
>

3062. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-12 23:39:37 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u6j9sv4ce6e17d@corp.supernews.com>
Source record: 148747

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29110-3C698141-147@storefull-116.iap.bryant.webtv.net...
>
> Sam`s interest seems to now be in air traffic control radio reception
> between about 108 MHz and 140 MHz.

118 to 137. 108-118 are the nav frequencies.

>
> Lambda is about 2.8 meters at the low end of that frequency range.
> !/4-wave is about 0.7 meters. That`s about 2.3 feet. This should be
> shortened by about 5% for end effect to give about 26 inches.

22" in the geometric center of the band.

>
> Sam could make a coaxial antenna from coax and support it in a rigid
> plastic tube. RG-8 or almost any 50 or 75-ohm coax would do. Just skin
> back about 26 inches of the braid, keeping it intact, and fold it back
> over the vinyl sheath to create a dipole from the exposed insulated
> center conductor and the folded back outer conductor over the vinyl
> sheath.

He could do this if he didn't give a damn for bandwidth. This band is
almost 20% wide.

>
> Home Depot could supply the plastic pipe or conduit that would just
> accommodate the coax. These plastic pipes can be strung together to
> extend beyond Sam`s chimney so that at least the plastic pipe encased
> bared center conductor extends outside the chimney`s lid.

If you hadn't read his post that he thought the pipe up the middle was metal
and that the spark arrestor on the top was metal, this might work.

>
> If the added height gives sam a line-of-sight path to a control tower,
> it may be worth the effort.

Perhaps, but certainly not with this method.

Jim

3063. Re: ARES (was Re: PROOF THAT ILLEGAL ...)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 00:40:49 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <lCia8.14061$NP4.1860311@news20.bellglobal.com>
Source record: 148751

> > Well sad to say, Ham radio even for emergencies
> > is becoming a thing of the past. Newer technologies
> > are here....

Well, maybe...

One government / military program ("newer technology") is called JTRS (Joint Tactical Radio System - 'jitters') **.

S'posed to be able to replace almost all other government / military radios by "simply" being able to download the "waveform" (<eyes rolling skyward...>) into the software radio and popping up on almost any band, and in any mode, with any encryption and/or protocol. S'posed to cover from sub-HF to XX GHz - where 'XX' is getting more and more ambitious (if the trend continues, by next year it will cover DC to daylight). S'posed to ensure interoperability since ya can just download the "waveform". Not quite sure how much power this puppy is s'posed to emit... Not sure if it will be full duplex or not... Not sure if it will fit...

Obviously (to anyone that can spell the plural of "antenna") they are 'writing cheques' that antenna technology (now, or in the foreseeable future) 'can't cash'.

Obviously, interoperability is going to be extremely limited by the installed antennas on any particular air / land / sea vehicle.

WTB: multiport antenna covering 2 MHz to 2 GHz (or even much higher), continuous coverage over all government (all levels), military and civilian frequency bands. Must provide decent gain and complete hemisphere coverage. Prefer switchable linear and RHC polarization as well as multiple null steering. Other requirements available upon request.

What we need here is a "Joint Tactical ANTENNA System" to match the capabilities and imaginations of the JTRS spec. writers. Perhaps someone will develop some sort of fractal, super-conducting, cross-field, miracle antenna that simply plugs into any regular outlet.

Oh well, I wonder if there is actually a small but rational program hidden behind the marketing mush (there could be...). Perhaps the glory is in the details. But I really wonder why they want to replace radio developers with software developers...

All the above is very much just My Humble Opinion.

J. Harvey
Ottawa
VE1BLL@rac.ca /VE3

** Public Information URLs:
http://www.fas.org/man/dod-101/sys/land/jtrs.htm
http://www.google.ca/search?q=JTRS (fill yer boots)

3064. Re: Two repeaters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 01:04:24 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <sYia8.81$St3.25003@news2.east.cox.net>
Source record: 148752

Why don't you just contact Sinclair or another manufacturer, specify the repeater
pairs, and see what they reccomend? If you are going to use a commercial and
ham repeater on the same antenna, with 20 MHz seperation, you will have to
do some serious research on finding an antenna with the required bandwidth.
It won't be cheap.

Pete

<n4dav> wrote in message news:nhvg6uso0ld93c4c592l7tuvejv04kgha8@4ax.com...
> I want to use two UHF repeaters on one antenna, spaced about 20 Mhz
> apart. I know i need isolators, cavities, etc, but dont know exactly
> what or how it's hooked up. Can anybody draw a picture or otherwise
> help?
>
> thanks
> n4dav
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3065. Re: ARES (was Re: PROOF THAT ILLEGAL ...)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 01:26:14 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <uafj6uk0gdrvmvnftcsfpout854qbf4qp2@4ax.com>
Source record: 148753

Someday we will probably all communicate by mental telepathy and won't need any other equipment. In the meantime, when the power and phone lines are down, and the fire sweeping up the mountain takes out all the repeaters, it is still the hams today who provide the emergency communication when the going get tough.

I had to do a talk on amateur radio to a men's club recently, and one of the things I focused on was emergency communications. When I started researching everything we (amateur's) have done in that area over the past 75 years or so I was really amazed. The fire in Los Alamos in May 2000 is a prime example where the hams provided essentially all of the communications for days. And that was a government installation.

Yes, the day will come when communications have advanced to the point where we won't be as necessary as we are now. For the time being, join your local ARES/RACES and be ready to do your part.

73, Dick - W6CCD

On Tue, 12 Feb 2002 19:40:49 -0500, "J. Harvey"
<JM001.Harvey@sympatico.ca> wrote:

>> > Well sad to say, Ham radio even for emergencies
>> > is becoming a thing of the past. Newer technologies
>> > are here....
>
>Well, maybe...
>
>One government / military program ("newer technology") is called JTRS (Joint
>Tactical Radio System - 'jitters') **.
>
>S'posed to be able to replace almost all other government / military radios
>by "simply" being able to download the "waveform" (<eyes rolling
>skyward...>) into the software radio and popping up on almost any band, and
>in any mode, with any encryption and/or protocol.

3066. Re: Antenna tuner observations.....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 01:30:02 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C69C19A.3B8C3894@IEEE.org>
Source record: 148754

Jerry Flanders wrote:
> Cecil's antenna works exactly as he says. I have built several
> configurations based on his idea and measured all with my MFJ259B.
> They all check out as promised in his description and as modelled by
> EZNEC. I worked over a thousand QSOs worldwide this past weekend in a
> RTTY contest with his antenna and no antenna tuner.

Thanks, Jerry. The only fly in the ointment is when the 450 ohm SWR is less than 4.5:1. I'm going to build a transformer circuit that will step 120 ohms (for instance) down to 60 ohms.

Question for the gurus: For an RF transformer, would an open air coil be better than a ferrite transformer or a powdered iron transformer?
--
cheers, CAM http://www.qsl.net/w5dxp

3067. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 01:39:04 UTC
From: richardharrison@webtv.net
Message-ID: <29110-3C69C3B8-162@storefull-116.iap.bryant.webtv.net>
Source record: 148755

Jim Weir wrote:
"118 to 137."

My Panasonic monitor receiver tunes 108 MHz to 140 MHz. Sam didn`t tell us the limits of the band he would like to receive. My arbitrary choice might be as cood as Jim`s.

Jim Weir wrote:
"22 inches is the geometric center of the band."

My experience with receiving antennas is good when they are slightly too long. Standing waves and inefficiency are usually of little concern with receiving antennas such as this.

Jim Weir wrote:
"If you hadn`t read his post that he thought the pipe up the middle was metal and that the arrestor on the top was metal, this might work."

Sam may find an angled route between the chimney and its cap for extension of his antenna. There would be an escape path for smoke. The antenna would not operate so well within a metal pipe or so well in all directions alongside a metal pipe.

The plastic pipe is a suggested support of a coaxial antenna to place it in a hopefully clear position to receive signals. The chimney may give lateral mechanical support to an otherwise flimsy plastic pipe so that its strength in compression may be used to hold the antenna up.

A coaxial antenna can be a good performer. I`ve used them several times with good results.

Best regards, Richard Harrison, KB5WZI

3068. Re: ARES (was Re: PROOF THAT ILLEGAL ...)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 02:15:42 UTC
From: arcweb@bnnorth.net
Message-ID: <3c69cb1b.610792@news.bright.net>
Source record: 148756
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

On Tue, 12 Feb 2002 08:56:08 -0500, Vito <vito@crosslink.net> wrote:

>iron3@charter.net wrote:
>>
>> Well sad to say, Ham radio even for emergencies is becoming a thing of the
>> past. Newer technologies are here....
>
>Don't scrap your ARES nets just yet. If 9-11 is any indication the
>reverse may be true, at least for a while. Many agencies had come to
>rely on cell phones (some had even scrapped their radios) only to find
>the cell net hopelessly jammed when everybody and their dog tried to use
>it at once. That's why officials are scrambling to change the system so
>they can cut off "non-essential users" (ie, us); but the telcos are
>saying "prohibitively expensive".
>
>73 KA3DWW

No kidding, I spent a month in WV last summer during the disaster
relief effort after the flooding they had. Using the VHF radios the
Red Cross has in their Emergency Response Vehicles was a challenge, we
definately could have used some more hams to facilitate better
communication.

And I ran into that again in NYC, I spent the majority of 3 months
there with the Red Cross, the cell phone they issued me was pi$$ing me
off. Too many people in this line of work are relying too much on cell
phones, this is why I took my amateur test last saturday (and passed),
and am now working on getting the code down for my general ticket.

Keith Hosman

Vice President: REACT of Hebry County
Executive Board Member: Henry County Chapter - American Red Cross
American Red Cross Disaster Services Logistics Specialist

3069. Re: J pole information-help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 02:18:13 UTC
From: richardharrison@webtv.net
Message-ID: <20470-3C69CCE5-88@storefull-118.iap.bryant.webtv.net>
Source record: 148757

Victor wrote:
"I am building a Jpole antenna---."

The "J" antenna is a 1/2-wave vertical radiator resting on a 1/4-wave short-circuited stub used as a matching section. The feedpoint may be slid up or down on the 1/4-wave matching section to find a match. A wide variety of feedlines can be accommodated.

The shorted bottom of the "J" can be directly grounded for lightning protection. Coax is often directly used with the "J" antenna.

Victor shows a nonconductive support for his "J" antenna, but insulation at this point is not required as the bottom can be grounded.

My recent experience with a "J" antenna was the 2-meter version made of twinlead supplied by MFJ. It was light, inexpensive, and worked well.

Best regards, Richard Harrison, KB5WZI

3070. Re: varnish on wire antenna affect RF capabilities??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 02:52:55 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <p7lj6usqmdsc1aeu80oi6gev0cb8iq8id9@4ax.com>
Source record: 148758

On Tue, 12 Feb 2002 12:57:37 -0500, "John Passaneau" <jxp16@psu.edu>
wrote:

>Up wind neighbors that chew tobacco?

In Denver? <g>

73, Bill W7TI

3071. Re: Part number needed for discontinued Hustler antenna mount

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 03:13:25 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c69e0aa_2@news1.prserv.net>
Source record: 148760

Universal Cowl Mount model MM-1.
It also looks like the MM-3 Universal Mount may have the same guts mounted
in a collar for surface mount. Their catalog is not very informative on
details.

--
Crazy George
Remove NO and SPAM from return address
John <John_Breland@Yahoo.Com> wrote in message
news:d2e1c59f.0202072200.34ca559@posting.google.com...
> Hi all.
>
> A few years back I had a mobile antenna mount that was made by
> Hustler. It used a hole in the fender like a factory AM/FM antenna
> would use. The mount had a uhf connector on the feeline side and a
> 3/8" female hole on the antenna side. This was just an antenna mount,
> no electronics involved.
>
> I totaled the van, and did not take the time to remove the antenna
> mount. I thought I could find another one easily, but it's been 5
> years years now and I haven't seen one since! Can any of you recall
> (or look up in an old catalog) the part number of that device? Then I
> would at least know exctly what I was looking for. It would be
> greatly appreciated.
>
> Thanks,
> John Breland
> KD4EXS
> Birmingham, Alabama

3072. Re: Two repeaters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 03:18:34 UTC
From: n4dav <>
Message-ID: <9mmj6ucvsa41eedp9207euospb2lem69s4@4ax.com>
Source record: 148759

I already have a wideband antenna that seems to have low SWR at both
ends (DB-406) . I cannot put two antennas on the tower, only the one,
so i have to do this with one feedline..

thanks

On Wed, 13 Feb 2002 01:04:24 GMT, " Uncle Peter"
<radioconnectionNO@cox.netSPAM> wrote:

>Why don't you just contact Sinclair or another manufacturer, specify the
>repeater
>pairs, and see what they reccomend? If you are going to use a commercial
>and
>ham repeater on the same antenna, with 20 MHz seperation, you will have to
>do some serious research on finding an antenna with the required bandwidth.
>It won't be cheap.
>
>Pete
>
><n4dav> wrote in message news:nhvg6uso0ld93c4c592l7tuvejv04kgha8@4ax.com...
>> I want to use two UHF repeaters on one antenna, spaced about 20 Mhz
>> apart. I know i need isolators, cavities, etc, but dont know exactly
>> what or how it's hooked up. Can anybody draw a picture or otherwise
>> help?
>>
>> thanks
>> n4dav
>>
>>
>> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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------== Over 80,000 Newsgroups - 16 Different Servers! =-----

3073. IC-706 tuning control

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 03:33:55 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C69DEA3.DA5B5451@IEEE.org>
Source record: 148761

I just got through breadboarding what I consider to be a really slick
way to use the IC-706 tuning control with a screwdriver. Here's the
schematic:

```
Wires to the screwdriver motor +------+
-------------+---------------------------------------->|motor |
-------------|--------+------------------------------->| |
| | +------+
anode anode
1N4001 1N4001 +12---(10k)---------+ Tstr
cathode cathode |
| | C|---+ Tkey
+--------+------------------(10k)--+--|B 2N2222
| E|--+
(10k) |
| |
Gnd Gnd
```

When the tune switch supplies power to the screwdriver motor, the
2N222 turns on grounding Tkey and Tstr. As long as the screwdriver
tune switch is engaged, the IC-706 outputs 10 watts in CW mode.
When tuning has been completed and the tune switch disengaged,
the IC-706 returns to SSB mode (or the previous mode if not SSB).
I haven't seen this described anywhere and I like it best.
Two diodes, three resistors, and one 2N222 transistor.
--
cheers, CAM http://www.qsl.net/w5dxp

3074. """""" Looking for Software""""""""

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 03:53:49 UTC
From: bbradio <drbadboy@hoymail.com>
Message-ID: <MPG.16d3a048e7ab1e2198968f@news.easynews.com>
Source record: 148762

Plez Help
Im looking for a program that I can use to design my own type of antennas from directional to omidirectional for different Frequency ranges of my CB,TV & Scanner that would give the length of the Boom ,Elements & Spacing type of Coax for each,best material to use (which I have some Alum. to use) and whatever else a person needs to know to build their own super homemade antennas. Also below is a list of manufacture spec. of 11meter cb antennas & rotors that I have and would scan [A Beem or Rotor Info] and e-mail for trade for the info I request above. TIA

(BIG DADDY) 5 ELEMENT BEAM 4 PAGE ASSY. INST. AND PARTS LIST

(M106C) 6 ELEMENT BEAM 10 PAGE ASSY. INST. AND PARTS LIST

(LIGHTING 6) 6 ELEMENT BEAM 11 PAGE ASSY. INST. AND PARTS LIST

(COMET) BY MACO 6 ELEMENT 10 PAGE ASSY. INST. AND PARTS LIST

(SUPER DUO-BEAM) BY HY-GAIN MODEL SDB-6 6 ELEMENT 12 PAGE ASSY. INST. WITH PARTS LIST

(GOLDEN SUPER PENETATOR) BY HY-GAIN OMNIDIRECTIONAL 6 PAGES WITH PARTS LIST

(HY-GAIN) 5ELE. BEAM (DON'T KNOW NAME ASSY. INST. MANUAL HAS ORDER # 410) 9 PAGES WITH PARTS LIST

(116DB) TWIN DRIVEN BY HY-GAIN INST. MANUAL # 542 6 ELE. BEAM 8 PAGES & PARTS LIST

(MOONRAKER 4) MODEL AV-140 BY AVANTI 19 PAGE ASSY. INST. & PARTS LIST

(MOONRAKER 4) MODEL AV-140 BY ANTENNA SPECIALISTS 16 PAGE ASSY. INST. & PARTS LIST

(MOONRAKER 6) MODEL AV-146 BY AVANTI 12 PAGE ASSY. INST. PARTS LIST

(ASTRO-BEAM) MODEL AV-150 BY AVANTI 20 PAGE ASSY. INST. & PARTS LIST

(SHOOTING STAR) 10 PAGE ASSY. INST. & PARTS LIST

(MOSLEY A-311-S) 3 ELEMENT BEAM 3 PAGE ASSY. INST. & PARTS LIST

(MOSLEY ASK-345) ASSY. INST. FOR MOSLEY UNIVERSAL STACKING KIT 9 PAGES

(MOSLEY A-311-S, A-311, A-411-S) STACKING INST. FOR THESE 3 MOSLEY ANTENNAS 8 PAGES PLUS PARTS LIST

(MOSLEY A-511-S) ASSY. INST. & PARTS LIST FOR THIS 5 ELEMENT BEAM

(PDL-II) BY ANTENNA SPECIALIISTS 18 PAGES INCLUDING PARTS LIST

(PDL-II) BY AVANTI 20 PAGES INCLUDING PARTS LIST

(SUPER LASER 500) BY WILSON 16 ELE. BEAM 10 PAGES INCLUDING PARTS LIST

(LAZER 400) BY WILSON 12 ELEMENT BEAM 10 PAGES INCLUDING PARTS LIST

(SUPER SCANNER) MODEL MS119 BY ANTENNA SPECIALISTS OMNI OR DIRECTIONAL 16 PAGES INCLUDING CONTROL BOX SCHEMATIC

(A-99) BY SOLARCON GROUND PLANE INST. MANUAL 13 PAGES

(STINGER 302) BY FINCO GROUND PLANE WITH INSTRUCTION MANUAL & PARTS LIST

(STARDUSTER) GROUND PLANE PACKAGE LIST & ASSEMBLY INST

(CD-44) ROTOR SYSTEM (OWNERS MANUAL) BY CORNELL-DUBILIER 8 PAGES WITH PARTS LIST FOR CONTROL UNIT & ROTOR AND ELECTRIAL DIA.

(HAM II) ROTOR SYSTEM (OWNERS MANUAL) BY CORNELL-DUBILIER 12 PAGES WITH PARTS LIST FOR CONTROL UNIT & ROTOR AND DIA.

(MODEL SA-22L) ROTOR SYSTEM (OWNERS MANUAL) 4 PAGES WITH PARTS LIST

3075. Re: "Dogbone" insulators-Where can I find them?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 04:12:33 UTC
From: Tom Nelson <nelsonca@stormnet.com>
Message-ID: <3C69E7B1.47BE48D1@stormnet.com>
Source record: 148765

In fact, we have two horses and a very quiet electric fence! I have a pile of the little black "egg" insulators but need the classic porcelain dogbone for a high power dipole.

I have used the hybrid yellow and black aluminum and polypro' 'hotwire' as a receiving antenna and it works great. I think it would work for QRP too but would quickly fry under more than 50 Watss.

The feedstore has also been a supplier for fiberglass rods used as temporary hotwire fenceposts!

The local large farm supply store went under last year. Now I need to drive to Red Bluff for the real exotic ham supplies.

TNX
Tom

Vito wrote:

> Tom Nelson wrote:
> >
> > I've been looking for some "dogbone" style center insulators for
> > dipoles. Who has these things that won't cost an arm and leg + a few
> > other extremities for shipping handling?
> >
>
> Check in the electric fence section of your local farm supply store next
> time you got to town to buy feed ... ;o)
> 73 KA3DWW

3076. Re: ATU problem, advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 04:17:20 UTC
From: googlyelmo@earthlink.net
Message-ID: <3C69E8D6.E44289C0@earthlink.net>
Source record: 148763

Richard,

That is a good question, since it seems that *all* the switch positions read short to ground. I am concerned that I may not be using the proper technique to measure R, in this case. First, a quick sketch of this circuit. It is a T-network, of course, with the coax center of the input feeding the stator of the first cap, the rotors of the two caps connected in series, with a shunt connection between the two caps to the top of the coil. From that connection there are 12 taps on the coil to corresponding switch positions, and the case of the switch itself is grounded. I had thought that only the active lug/position should read close to 0 ohms, but now they all do. The caveat is that I never previously measured them, only once the problem arose. What I am saying is that I am too much of an electronic dummy to know if they *should all* normally read this way, or whether I am using my DMM correctly. Thanks, and thanks again if you can offer anymore insight.

(I do have the tuner working using a jumper to ground, bypassing the switch; works until I can find a suitable replacement switch or otherwise fix the circuit, but it is more than a little inconvenient to have to lift the cover off the tuner case and move the tap, replace the cover, apply power, dip the caps, and repeat as necessary, three times per band change or >100 KHz excursion sometimes!)

Will, KD7BFX

Richard Clark wrote:

>
>
> Hi Will,
>
> Then it may be due to the wire with the clip being too stiff and
> levering the contact open (when you clip to the coil). Not unusual at
> all for marginal switches. This would answer that particular switch
> setting acting odd, but not the unit generally. DC continuity tests
> for opens and closes should be fairly straightforward.
>
> Another point may be that the flying lead you added wanders too close
> to ground (without actually shorting - but enough - this is a long
> shot however).
>
> Richard Clark, KB7QHC

3077. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 04:32:14 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c69ec4c$1@news.bnb-lp.com>
Source record: 148764
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Ian,
if you really do think that "real cards beat electronic cards any day of the week" then you really should stick with what you call "real cards". No one is forcing anybody to go with eQSL's

However I find the eQSL method to be much faster, much simpler, much cheaper, and a lot more fun. I have dealt with many "real cards" in my awards pursuits and in many instances had to spend "real money" in a losing effort that never yielded a card at all. I couldn't even get a qsl card from Mexico after 3 attempts each time with $$$ enclosed and SAE's. Finally the op there I was trying to get a card from emailed me and admitted the postal system was "wise" to the "real card" qsl game and was stealing from Hams all the time. With eQSL's I can "just say no" to unethical foreign postal workers once and for all.

I never liked the fact that to get a qso "confirmed" for an award had more to do with things completely out of my control (like postal workers stealing, and bad postal deliveries around the world, and DX ops that are in it for $$$ only) then it had to do with my station's performance level and / or my skill as an operator.

Furthermore I can get a DXCC credited qsl card (via eQSL) in a couple days for any - and - all qso's I make..even to the rarest-of-the-rare DXCC entities. This is the "new way" and the "much improved and long over-due better way". I am 100% on-board with eQSL and have been for months...it is fun and easy and it guarantees I get a card for my efforts and I don't have to depend on outside sources in foreign countries to cooperate so that I get the confirmation I am entitled to.

Those are my feelings.....maybe catch you on the bands one-of-these-days....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3078. Re: ARES (was Re: PROOF THAT ILLEGAL ...)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 05:44:00 UTC
From: iron3@charter.net
Message-ID: <u6k0bmfo0bcq19@corp.supernews.com>
Source record: 148767
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.swap

I agree Vito,
We need more people involved in ARES. We get perhaps one or two stations signing on in my area. I agree that ham radio would be good in an emergency. Cell phones in alot of areas are hit and miss, as in mine. In alot of the Western states such as mine, radio would be, in any manmade or natural disaster, the only way to communicate. And, we have the gear and can set up in a house or the field if needed should local emergency communications are knocked out.
What disturbs me is lack of participation in areas should an emergency occur. In alot of areas we're simply not ready. 73's Jim

"Vito" <vito@crosslink.net> wrote in message
news:3C691EF8.DF261C98@crosslink.net...
> iron3@charter.net wrote:
> >
> > Well sad to say, Ham radio even for emergencies is becoming a thing of
the
> > past. Newer technologies are here....
>
> Don't scrap your ARES nets just yet. If 9-11 is any indication the
> reverse may be true, at least for a while. Many agencies had come to
> rely on cell phones (some had even scrapped their radios) only to find
> the cell net hopelessly jammed when everybody and their dog tried to use
> it at once. That's why officials are scrambling to change the system so
> they can cut off "non-essential users" (ie, us); but the telcos are
> saying "prohibitively expensive".
>
> 73 KA3DWW

3079. Re: ATU problem, advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 05:50:48 UTC
From: googlyelmo@earthlink.net
Message-ID: <3C69FEC6.1EDCAE09@earthlink.net>
Source record: 148766

Reg,

Is that not the common term in the UK? Come to think of it, it would be interesting to see a list of ham terms for the same things side by side, US and UK (e.g., "hamfest" v. "rally"). Yes, radio jargon is among the most colorful, interesting, and dare I say truly descriptive, i.e. accuracy and clarity as opposed to the vagueness and obfuscation of some other fields ("sales engineer," "sanitation technician.").

Will, KD7BFX

Reg Edwards wrote:

> Will, I just love your description "binding posts".
>
> What better ?
>
> Long may such phrases remain in the language of both hams and so-called
> professionals.
> ---
> **********
> Regards, Reg G4FGQ
> Free Radio Modelling Software
> Http://www.g4fgq.com
> **********

3080. Re: Loading Coils

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 07:24:31 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0202122324.5bc2fce@posting.google.com>
Source record: 148768

Hi all,
theoretically, a whip is capacitive, if it is shorter than a quarter of wavelength. A resonant quarter-wavelength whip is purely resistive (low impedance at the feedpoint). A longer whip up to half of wavelength is inductive. A resonant half-wavelength whip is again purely resistive (high impedance at the feedpoint). And so on ... So a loading coil takes place at a whip shorter than 1/4 of wavelength or at whip 1/2 wavelength < length < 3/4 wavelenth, which is the case of the 5/8 wavelength one. The loading coil may be anywhere with the exception of the whip end. If it is right at the feedpoint, it has the smallest value, but the antenna has the least efficiency. Moving the coil towards the end increases both the efficiency and the necessary inductance, provided that you keep the coil losses on the same level (thicker wire etc.).
If you put two whips horizontally, feedpoints close each to the other and pointing in opposite directions, you get a dipole. The impedance characteristics of both halves still apply.
I recommend you to download the VE3ERP's HamCalc. It provides calculations both for whip matching and for a center-loaded and off-center loaded dipole (and many more useful thigs).

BR from Ivan

3081. WTB: DBX DAV-600G Route Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 07:27:29 UTC
From: Daniel Simpson <dzan@qwest.net>
Message-ID: <130220020127296205%dzan@qwest.net>
Source record: 148519
Cross-posted to: alt.ham-radio.marketplace,alt.home-theater.marketplace,rec.radio.amateur.antenna,rec.video.marketplace

WTB: DBX DAV-600G Route Selector

please email me at

dzan@qwest.net

3082. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 08:05:57 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u6k7ie44ii2s88@corp.supernews.com>
Source record: 148520

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29110-3C69C3B8-162@storefull-116.iap.bryant.webtv.net...
> Jim Weir wrote:
> "118 to 137."
>
> My Panasonic monitor receiver tunes 108 MHz to 140 MHz. Sam didn`t tell
> us the limits of the band he would like to receive. My arbitrary choice
> might be as cood as Jim`s.

I have no idea what a cood is. I have been specializing in aviation electronics for forty years, with a small minor in aviation antennas in concealed locations. I could give a rat's hiney what your monitor receiver tunes. The aviation com band, where ATC transmits, is 118-137 MHz..

>
> Jim Weir wrote:
> "22 inches is the geometric center of the band."
>
> My experience with receiving antennas is good when they are slightly too
> long. Standing waves and inefficiency are usually of little concern with
> receiving antennas such as this.

Then you really should not answer questions regarding antennas. You are clueless.

>
> Jim Weir wrote:
> "If you hadn`t read his post that he thought the pipe up the middle was
> metal and that the arrestor on the top was metal, this might work."
>
> Sam may find an angled route between the chimney and its cap for
> extension of his antenna. There would be an escape path for smoke. The
> antenna would not operate so well within a metal pipe or so well in all
> directions alongside a metal pipe.

Oh, bullpuckey. If you had the foggiest idea how a chimney was constructed you wouldn't make an ignorant statement like this.

>
> A coaxial antenna can be a good performer. I`ve used them several times
> with good results.

Please, by all means, use them yourself. Don't recommend them to somebody else for a wideband antenna until you know what you are talking about.

Jim

3083. Antenna MADE for AO-40!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 08:36:43 UTC
From: Glenn Rollins <n3iyr@mywebsite.com>
Message-ID: <ic9k6u8bif7tv1ngvb9k8864hft6kuo191@4ax.com>
Source record: 148521

I have a website for the antenna I have developed for AO-40. This is NOT a BBQ grill dish, this is the real thing! Watertight HELICAL feed, NO aperture blockage,2' dish is 20.5 dBi gain, 3' dish is 25 dBi gain. 2" crossboom mount.A true performer. Signals from AO-40 at unbelievable squint angles. You should hear what you have missed! I have also posted tips you may find interesting. AMSAT has expressed intrest in my antenna to be sold at Dayton, but I have a limited supply. Drop by my site and just tell me what you think if you like.

http://www.n3iyr.com

3084. Antenna 468 MHz ???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 11:12:39 UTC
From: Peter Hunt <news@peterhunt.zoetermeernet.nl>
Message-ID: <a4dhjd$m7q$1@news1.xs4all.nl>
Source record: 148522
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Hi!

For better reception of a trunking-system on 468 MHz I'm looking for a beam/yagi which is especially tuned for this frequency.

WIMO in Germany has lots of beams and in their catalogue you can see some machines which are computer-controlled and can make antennas for any possible frequency, but now they don't seem to be able (or don't want) to make such an antenna for 468 MHz.

Does anybody know other firms that are able to make this???

73, Peter Hunt PE1RFR.

3085. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 11:59:09 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <A62BF12E93D9DBF0.342E0EC96E4F5364.02FC362A2E623F0E@lp.airnews.net>
Source record: 148523

On Wed, 13 Feb 2002 00:05:57 -0800, "Jim Weir" <jim@rst-engr.com>
wrote:

>I have no idea what a cood is. I have been specializing in aviation
>electronics for forty years, with a small minor in aviation antennas in
>concealed locations. I could give a rat's hiney what your monitor receiver
>tunes. The aviation com band, where ATC transmits, is 118-137 MHz..

Well, maybe he wants to make sure his house isn't moving around.

OTOH, maybe he's really wanting the NDBs way down there in the noisy
bands, so he can practice code :)

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

3086. Re: Antenna 468 MHz ???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 13:34:50 UTC
From: oldtimeradio
Message-ID: <gpqk6ugf10tnv46ol093vooes8coqtq5i6@4ax.com>
Source record: 148524

KMA Antennas will build custom designs for any frequency.
www.kmaantennas.com

73
otr

On Wed, 13 Feb 2002 12:12:39 +0100, "Peter Hunt"
<news@peterhunt.zoetermeernet.nl> wrote:

>Hi!
>
>For better reception of a trunking-system on 468 MHz I'm looking for
>a beam/yagi which is especially tuned for this frequency.
>
>WIMO in Germany has lots of beams and in their catalogue you can
>see some machines which are computer-controlled and can make
>antennas for any possible frequency, but now they don't seem to be
>able (or don't want) to make such an antenna for 468 MHz.
>
>Does anybody know other firms that are able to make this???
>
>73, Peter Hunt PE1RFR.
>
>

3087. Re: "Dogbone" insulators-Where can I find them?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 13:59:35 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <02xqPOPjtT2apJ=vpQVb4jZ3eFpl@4ax.com>
Source record: 148525

Tom Nelson <nelsonca@stormnet.com> wrote:

>In fact, we have two horses and a very quiet electric fence! I have a pile
>of the little black "egg" insulators but need the classic porcelain dogbone
>for a high power dipole.

You might try Surplus Sales of Nebraska or Fair Radio for the old timey
procelains...

Or for other more modern composite, and just as appropos center-type insulators,
try...

http://radioworks.com/cinsul.html

Bob
k5qwg

>
>I have used the hybrid yellow and black aluminum and polypro' 'hotwire' as a
>receiving antenna and it works great. I think it would work for QRP too but
>would quickly fry under more than 50 Watss.
>
>The feedstore has also been a supplier for fiberglass rods used as temporary
>hotwire fenceposts!
>
>The local large farm supply store went under last year. Now I need to drive
>to Red Bluff for the real exotic ham supplies.
>
>TNX
>Tom
>
>Vito wrote:
>
>> Tom Nelson wrote:
>> >
>> > I've been looking for some "dogbone" style center insulators for
>> > dipoles. Who has these things that won't cost an arm and leg + a few
>> > other extremities for shipping handling?
>> >
>>
>> Check in the electric fence section of your local farm supply store next
>> time you got to town to buy feed ... ;o)
>> 73 KA3DWW

3088. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 15:11:09 UTC
From: richardharrison@webtv.net
Message-ID: <25236-3C6A820D-17@storefull-112.iap.bryant.webtv.net>
Source record: 148526

Jim Weir wrote:
"Then you really should not answer questions regarding antennas. You are clueless."

I`m in good company. Jim`s response above was to my statement:
"My experience with receiving antennas is good when they are slightly too long."

I suggested a vertical antenna, with an ungrounded element of 1/4-wavelength at about 108 MHz for use at higher frequencies.

A 5/8-wavelength vertical antennsa is used by some broadcasters to get more signal strength perpendicular to the antenna along the horizontal and thus increase their primary service area.

Remember that in antennas reciprocity rules. That is, a good transmitting antenna makes a good receiving antenna for a given wavelength.

A 5/8-wavelength antenna is 2.5X the length of a 1/4-wavelength antenna. 108MHzX2.5=270MHz

As frequency increases above 1/4-wave resonance of 108 MHz, the vertical antenna performs better toward the horizon at least up to 270 MHz in its directional response.

Many 5/8-wave mobile antennas are sold to replace 1/4-wave VHF/UHF antennas and exploit this drectional gain of the longer antenna. I assumed that the loss in gain at higher elevation angles would be compensated by the usual case of an aircraft`s proximity when its elevation angle is high with respect to the receiving antenna`s position. When the aircraft is near, its signal may be stronger.

As I said in my previous posting, matching the transission line is not such a serious requirement for a receiving anenna as for a transmitting antenna. Mismatch causes increased loss. Mismatch may upset your transmitter but it won`t shut down your receiver. The additional mismatch loss also is imposed on external noise on and around the received signal so that deterioration of the signal to noise ratio is not severe.

There you have my reasons for saying:
"My experience with receiving antennas is good when they are slightly too long."

3089. Re: Antenna 468 MHz ???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 15:36:54 UTC
From: KB9TMP <NoMoreSpam4Me@antisocial.com>
Message-ID: <a4e16d$f9e$1@dagobah.blueriver.net>
Source record: 148527
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

"Peter Hunt" <news@peterhunt.zoetermeernet.nl> wrote in message
news:a4dhjd$m7q$1@news1.xs4all.nl...
> Hi!
>
> For better reception of a trunking-system on 468 MHz I'm looking for
> a beam/yagi which is especially tuned for this frequency.
>
> WIMO in Germany has lots of beams and in their catalogue you can
> see some machines which are computer-controlled and can make
> antennas for any possible frequency, but now they don't seem to be
> able (or don't want) to make such an antenna for 468 MHz.
>
> Does anybody know other firms that are able to make this???
>
> 73, Peter Hunt PE1RFR.
>
>
>
Peter
Give Arrow Antennas a try at http://www.arrowantennas.com/ .

They will make to any frequency from 120MHz to 500MHz.
--
"73"
KB9TMP

The secret of life is honesty and fair dealing..
if you can fake that, you've got it made.
-Groucho Marx

3090. Re: Antenna 468 MHz ???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 16:17:38 UTC
From: randy_NO_SPAM_PLEASE_@frs-usa.com
Message-ID: <b03b87e2.0202130817.58f05219@posting.google.com>
Source record: 148528
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Arrow Antennas will custom make a yagi beam for most any frequency.
Here is the link:

http://www.arrowantennas.com

"Peter Hunt" <news@peterhunt.zoetermeernet.nl> wrote in message
news:<a4dhjd$m7q$1@news1.xs4all.nl>...
> Hi!
>
> For better reception of a trunking-system on 468 MHz I'm looking for
> a beam/yagi which is especially tuned for this frequency.
>
> WIMO in Germany has lots of beams and in their catalogue you can
> see some machines which are computer-controlled and can make
> antennas for any possible frequency, but now they don't seem to be
> able (or don't want) to make such an antenna for 468 MHz.
>
> Does anybody know other firms that are able to make this???
>
> 73, Peter Hunt PE1RFR.

3091. Re: Antenna 468 MHz ???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 16:19:13 UTC
From: randy_NO_SPAM_PLEASE_@frs-usa.com
Message-ID: <b03b87e2.0202130819.7a290c3b@posting.google.com>
Source record: 148529
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Arrow Antennas will make you a 3 element beam for $35! Here is the link:

http://www.arrowantennas.com/arrowii.html

"Peter Hunt" <news@peterhunt.zoetermeernet.nl> wrote in message
news:<a4dhjd$m7q$1@news1.xs4all.nl>...
> Hi!
>
> For better reception of a trunking-system on 468 MHz I'm looking for
> a beam/yagi which is especially tuned for this frequency.
>
> WIMO in Germany has lots of beams and in their catalogue you can
> see some machines which are computer-controlled and can make
> antennas for any possible frequency, but now they don't seem to be
> able (or don't want) to make such an antenna for 468 MHz.
>
> Does anybody know other firms that are able to make this???
>
> 73, Peter Hunt PE1RFR.

3092. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 16:33:30 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <uzwa8.2138$Nv5.199181@bgtnsc05-news.ops.worldnet.att.net>
Source record: 148530

"Jim Weir" <jim@rst-engr.com> wrote in message
news:u6k7ie44ii2s88@corp.supernews.com...
>
> "Richard Harrison" <richardharrison@webtv.net> wrote in message
> news:29110-3C69C3B8-162@storefull-116.iap.bryant.webtv.net...

> >
> > My experience with receiving antennas is good when they are slightly too
> > long. Standing waves and inefficiency are usually of little concern with
> > receiving antennas such as this.
>
> Then you really should not answer questions regarding antennas. You are
> clueless.
>

What's inherently wrong with Richard's statement? SWR and antenna efficiency are not as significant in the receive mode as they are in the transmit mode. In receive mode, the most important issue is whether or not the intended receive signal is above the ambient noise level. The second issue to be concerned about is the receiver sensitivity and receiver noise. Many short receive antennas work just fine with low efficiency and high SWR. The AM antenna on your car being a good example.

Steve VE9SRB

3093. Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 16:48:30 UTC
From: Richard Myers <rkmyers@mediaone.net>
Message-ID: <yNwa8.819$TU4.523958@typhoon.ne.ipsvc.net>
Source record: 148538

Hi All,

The local cell provider has just proposed putting a 150' cell tower behind my house. This would put the tower base at about 75 yards from my house. What are the MPE limits for cell frequencies? I know that at Microwave frequencies possible damage to eyesight is possible if MPE limits are exceeded, so I am hoping the cell provider is as concerned about RF safety as I am. I have been very careful with my own station to safeguard the health of my family and neighbors by staying well below the MPE guidelines.

Also, I operate primarily on HF using a multiband vertical and G5RV. What are the chances that a cell tower that close to my station will cause harmful interference?

Thanks for any insights.

73 de KB1FLR, Rick

3094. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 16:52:25 UTC
From: "R.U. Amused?" <n6ttd@spamsuxarrl.net>
Message-ID: <dRwa8.3535$kt5.2603@rwcrnsc52.ops.asp.att.net>
Source record: 148531

I guess you missed the point Bill; I wouldn't sell a car to ANYONE without a license, nor would I sell a radio to anyone who was unlicensed. But thanks for nitpicking anyway.

JT

"Bill Turner" <w7ti@dslextreme.com> wrote in message news:g1be6usvvlq7nmd6lhjtsn51gqn497nmip@4ax.com...
> On Sun, 10 Feb 2002 21:17:58 GMT, "R.U. Amused?" <n6ttd@spamsuxarrl.net>
> wrote:
>
> >I wouldn't sell a car to some kid who didn't have a
> >license.
>
> ----------
>
> "Kids" aren't allowed to drive. Would you sell a car to an adult who
> didn't have a license? Owning a car or owning a ham radio can be done
> by anyone (of legal age), not just ones with a license to use it.
>
> No, no, I'm not in favor of unlicensed folks on the air. Just pointing
> out what should be obvious.
>
> Bill, W7TI

3095. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 17:23:45 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u6l883gvlv0u01@corp.supernews.com>
Source record: 148532

Make up your mind.

Jim

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:25236-3C6A820D-17@storefull-112.iap.bryant.webtv.net...

> Remember that in antennas reciprocity rules. That is, a good
> transmitting antenna makes a good receiving antenna for a given
> wavelength.
>
>
> As I said in my previous posting, matching the transission line is not
> such a serious requirement for a receiving anenna as for a transmitting
> antenna. Mismatch causes increased loss.

3096. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 18:04:12 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <galqPD5DqOKTeS2uiWnMZZQFguMn@4ax.com>
Source record: 148533

"VE9SRB" <srbest@att.net> wrote:

>Many short receive antennas work just fine with low efficiency and high SWR.

Dumb question -- can a receive antenna have an SWR? I thought standing waves
were created by a transmitter hooked to the antenna.

Bob
k5qwg

>The AM antenna on your car being a good example.
>
>Steve VE9SRB
>
>

3097. Re: Antenna tuner observations.....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 18:35:57 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202131035.7da54dc7@posting.google.com>
Source record: 148534

CAM <Cecil.A.Moore@IEEE.org> wrote in message
>
>For an RF transformer, would an open air coil
> be better than a ferrite transformer or a powdered iron transformer?

Don't get me to lying, but offhand, I'd think the air coil would be
less likely to saturate, but also less tolerant of frequency changes
than the ferrite balun.
But I'm no balun guru.... MK

3098. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 18:45:19 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u6ld125k9br7ce@corp.supernews.com>
Source record: 148535

There are no dumb questions, Bob, but this ng seems replete with dumb answers.

Yes, a receive antenna can have a SWR. It is identical to the SWR you would measure if you hooked a transmitter to the antenna and measured it that way -- the guts of the reciprocity theorem.

If you care to think of it this way, you certainly may...you measure the VSWR by the transmitter method in volts and by the receive method in microvolts. Just because you change six orders of magnitude in the voltage doesn't make the RATIO (vswR) any different.

Jim

>
> Dumb question -- can a receive antenna have an SWR? I thought standing waves
> were created by a transmitter hooked to the antenna.
>
> Bob
> k5qwg

3099. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 19:10:33 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <JSya8.2252$Nv5.215337@bgtnsc05-news.ops.worldnet.att.net>
Source record: 148536

"Bob Miller" <bamiller@texas.net> wrote in message
news:galqPD5DqOKTeS2uiWnMZZQFguMn@4ax.com...
> "VE9SRB" <srbest@att.net> wrote:
>
>
> >Many short receive antennas work just fine with low efficiency and high
SWR.
>
> Dumb question -- can a receive antenna have an SWR? I thought standing
waves
> were created by a transmitter hooked to the antenna.
>
> Bob
> k5qwg

Hi Bob:

The SWR is simply an indication of much the antenna feedpoint impedance
differs from the characteristic impedance of the transmission line.
Transmit or receive mode does not matter for the antenna SWR relative to the
feedline impedance.

Steve

3100. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 19:26:47 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <X5za8.3568$Nf3.227492@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148537

"Jim Weir" <jim@rst-engr.com> wrote in message
news:u6ld125k9br7ce@corp.supernews.com...

> There are no dumb questions, Bob, but this ng seems replete with dumb
> answers.
>

really ......

> If you care to think of it this way, you certainly may...you measure the
> VSWR by the transmitter method in volts and by the receive method in
> microvolts. Just because you change six orders of magnitude in the
voltage
> doesn't make the RATIO (vswR) any different.
>
> Jim

How do you differentiate "measuring" SWR by the transmitter method versus the receive method? How is the receive method set up different than the transmitter method set up? When you use millivolts rather than volts or microvolts, what method is that?

Steve

3101. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 19:42:27 UTC
From: richardharrison@webtv.net
Message-ID: <8665-3C6AC1A3-35@storefull-113.iap.bryant.webtv.net>
Source record: 148540

Jim Weir wrote:

"Make up your mind!"

This was Jim`s response to "reciprocity rules".
"That is, a good transmitting antenna means a good receiving antenna."

All true. No contradiction.

Jim also repeated my statement:
"As I said in my previous posting, matching the transmission line is not such a serious requirement for a receiving antenna as for a transmitting antenna. Mismatch causes increased loss."

All true. No contradiction.

The antenna is the same. How this affects transmission and reception depends on the transmitter and the receiver.

The antenna has the same gain, radiation pattern, antenna drivepoint impedance, efficiency, if transmitting or receiving.

Jim did not repeat what I said about the difference these characteristics make on the process of reception and transmission.

I remember saying a mismatched transmitting antenna might shut-down your transmitter, but the same antenna weouldn`t shut-down your receiver. I remember saying that the loss produced by the mismatched antenna might limit the reach of your transmitter, but wasn`t as bad for your receiver because some of the external noise a receiver sifts through for a signal is rejected and dissipated right along with the desired signal. Thus, the signal to noise ratio isn`t hurt as much as the signal is attenuated.

All true. It isn`t the antenna which changes, it is the device using the antenna. A transmitter is different from a receiver in exactly what it needs from an antenna for satisfactory operation. An extreme example to make the point:
The receiving antenna needs to be located in an area quite free of electrical noise for satisfactory operation. The transmitting antenna needs to be located in an area free of live explosive detonators. It could be the same antenna.

Thank you for your support Steve Best!
The Canadian skating couple beat the Russian couple in the Olympics. The proof is on videotape for the world to see! We appreciate your support.

Best regards, Richard Harrison, KB5WZI

3102. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 20:04:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C6AC6DE.B308B3D9@eznec.com>
Source record: 148539

Unfortunately, this answer isn't correct. Bob is right -- an antenna
can't have an SWR, only a transmission line can have an SWR. As Reg
often points out, we have "SWR" meters that we can connect to an antenna
and get a reading. But the reading doesn't really indicate anything
about standing waves. What it's really measuring is the antenna's
impedance, then mathematically converting that into the SWR a 50 ohm
transmission line would have if that impedance were to be connected to
the line as a load.

The antenna impedance is the same when transmitting and receiving, per
the reciprocity theorem.

The feedline between the rig and the antenna does have an SWR, and its
value will be different when transmitting and receiving, unless the
receiver and antenna both have the same impedance or reflection
coefficient. This is because the SWR is determined solely by the
impedance of the load seen by the transmission line and not by the
source impedance. For example, suppose the input impedance to the
receiver is 50 + j0 ohms, the antenna impedance is 25 + j0 ohms, and the
line characteristic impedance is 50 ohms. When transmitting, the line
SWR is 2:1, because the load it sees is 25 + j0. When receiving it's
1:1, because the load it sees is 50 + j0.

Roy Lewallen, W7EL

Jim Weir wrote:
>
> There are no dumb questions, Bob, but this ng seems replete with dumb
> answers.
>
> Yes, a receive antenna can have a SWR. It is identical to the SWR you would
> measure if you hooked a transmitter to the antenna and measured it that
> way -- the guts of the reciprocity theorem.
>
> If you care to think of it this way, you certainly may...you measure the
> VSWR by the transmitter method in volts and by the receive method in
> microvolts. Just because you change six orders of magnitude in the voltage
> doesn't make the RATIO (vswR) any different.
>
> Jim
>
> >
> > Dumb question -- can a receive antenna have an SWR? I thought standing
> waves
> > were created by a transmitter hooked to the antenna.

> >
> > Bob
> > k5qwg

3103. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 20:19:14 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u6lih6bqjp3t6c@corp.supernews.com>
Source record: 148541

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C6AC6DE.B308B3D9@eznec.com...

> Unfortunately, this answer isn't correct. Bob is right -- an antenna
> can't have an SWR, only a transmission line can have an SWR.

Yes, that is so. My simplification error. I didn't see the question as
that technically specific, but more of a general "howzit work" question.

>
> The antenna impedance is the same when transmitting and receiving, per
> the reciprocity theorem.

That is so.

>
> The feedline between the rig and the antenna does have an SWR, and its
> value will be different when transmitting and receiving, unless the
> receiver and antenna both have the same impedance or reflection
> coefficient. This is because the SWR is determined solely by the
> impedance of the load seen by the transmission line and not by the
> source impedance. For example, suppose the input impedance to the
> receiver is 50 + j0 ohms, the antenna impedance is 25 + j0 ohms, and the
> line characteristic impedance is 50 ohms. When transmitting, the line
> SWR is 2:1, because the load it sees is 25 + j0. When receiving it's
> 1:1, because the load it sees is 50 + j0.

Yes, that is also so, from the receiver/transmitter's point of view. But
now we have a generator called an antenna that is creating an EMF in a 25
ohm system and trying to drive a 50 ohm system. To the ANTENNA and to the
universe as a whole, we still have a 2:1 mismatch between antenna and
transmission line. The mathematics is the same. In this case, if you were
trying to measure the VSWR of the system from the antenna's point of view,
you would need a VSWR meter calibrated for use in a 25 ohm system.

Jim

3104. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 20:20:32 UTC
From: Walt Davidson <walt99@tiscali.co.uk>
Message-ID: <9m6l6u814dkml7n7mo5brfi37lsmsei82n@4ax.com>
Source record: 148542
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Sun, 10 Feb 2002 11:55:33 +1000, "Adam MAURER"
<vk4cp@bigpond.comNOSPAM> wrote:

>Yeah, and watch this "convenience" see the demise of DXpeditions!
>DXpeditions rely heavily on income & donations that is included with the
>request for a good ol QSL card.

Well, I'm glad to see, at long last, an open admission that it's a way
of funding a free vacation for "the deserving"!

;-)
73 de G3NYY

--
Walt Davidson Email: g3nyy @freeuk.com

3105. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 20:23:02 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C6ACB26.8E84961C@crosslink.net>
Source record: 148543

"R.U. Amused?" wrote:
>
> I guess you missed the point Bill; I wouldn't sell a car to ANYONE without a
> license, nor would I sell a radio to anyone who was unlicensed. But thanks
> for nitpicking anyway.
>

That's silly. A friend who lost his ability to drive (and his license)
to a stroke bought a new car for others to haul him around in. I bought
my first HF rig and 2-meter rig in anticipation of becoming licensed
because I was due to move to an area with few dealers but high prices.
Neither is illegal; nor do I see any morality in refusing either sale.
YMMV.
KA3DWW

3106. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 20:25:46 UTC
From: Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna6liur.t80.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 148544

On Tue, 12 Feb 2002 08:38:44 -0500, Jake Brodsky <frussle@erols.com> wrote:
><JM001.Harvey@sympatico.ca> wrote:
>>Excuse me, gotta ask. Potato Gun ?
>
> Uhh, yes. It's highly entertaining --if you have the sense of humor
> of a twelve year old. I find vegetable ballistics to be quite
> amusing, especially when they reach altitudes of 500' in the air.

And then when grown up, pumpkin cannon is the name of the game...

(I'll let you look it up on google, pumpkin is key, try in combo
with cannon, chunkin [sic] and launch or launching. Record is over
5000ft distance now, about a mile, IIRC)

sdb
--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

3107. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 20:45:56 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3c6ad027$0$39533$1dc6e903@news.corecomm.net>
Source record: 148545

Gentlemen:
When using an antenna for receiving remember that in order to get as
much of the intercepted radio wave energy as possible to the rf amp
stage of a receiver you must have the most efficient antenna as
possible.
This means that if you have a good match for transmitting you will have
a good match for receiving. A low SWR and an efficient transmission
line are required to achieve this situation.

Dave WD9BDZ

VE9SRB wrote:
>
> "Jim Weir" <jim@rst-engr.com> wrote in message
> news:u6k7ie44ii2s88@corp.supernews.com...
> >
> > "Richard Harrison" <richardharrison@webtv.net> wrote in message
> > news:29110-3C69C3B8-162@storefull-116.iap.bryant.webtv.net...
>
> > >
> > > My experience with receiving antennas is good when they are slightly too
> > > long. Standing waves and inefficiency are usually of little concern with
> > > receiving antennas such as this.
> >
> > Then you really should not answer questions regarding antennas. You are
> > clueless.
> >
>
> What's inherently wrong with Richard's statement? SWR and antenna
> efficiency are not as significant in the receive mode as they are in the
> transmit mode. In receive mode, the most important issue is whether or not
> the intended receive signal is above the ambient noise level. The second
> issue to be concerned about is the receiver sensitivity and receiver noise.
> Many short receive antennas work just fine with low efficiency and high SWR.
> The AM antenna on your car being a good example.
>
> Steve VE9SRB

3108. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 20:47:51 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4ejdn$4oh$2@quark.scn.rain.com>
Source record: 148546

Richard Myers <rkmyers@mediaone.net> wrote:

> The local cell provider has just proposed putting a 150' cell tower behind
> my house. This would put the tower base at about 75 yards from my house.
> What are the MPE limits for cell frequencies? I know that at Microwave
> frequencies possible damage to eyesight is possible if MPE limits are
> exceeded, so I am hoping the cell provider is as concerned about RF safety
> as I am. I have been very careful with my own station to safeguard the
> health of my family and neighbors by staying well below the MPE guidelines.

The power output of cell sites is quite low. This is different than paging
systems - which often have very high output signal levels.

> Also, I operate primarily on HF using a multiband vertical and G5RV. What
> are the chances that a cell tower that close to my station will cause
> harmful interference?

The cell site is not going to cause any interference with your station.
But you might interfere with the cellular site.

--
Bill Nelson (billn@peak.org)

3109. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 20:48:29 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3c6ad0bf$0$39533$1dc6e903@news.corecomm.net>
Source record: 148547

Standing waves are created whenever you have an alternating current
flowing in a wire. The radio waves intercepted by an antenna generate
these alternating currents. Thus in a tuned antenna standing waves of
1:1 are present.

Dave WD9BDZ

Bob Miller wrote:
>
> "VE9SRB" <srbest@att.net> wrote:
>
> >Many short receive antennas work just fine with low efficiency and high SWR.
>
> Dumb question -- can a receive antenna have an SWR? I thought standing waves
> were created by a transmitter hooked to the antenna.
>
> Bob
> k5qwg
>
> >The AM antenna on your car being a good example.
> >
> >Steve VE9SRB
> >
> >

3110. Re: ARES (was Re: PROOF THAT ILLEGAL ...)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 20:52:52 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3c6ad1c6$0$39533$1dc6e903@news.corecomm.net>
Source record: 148548

The antenna is called a "Log Periodic". Just how you mount one on a
hummer is another question.

Dave WD9BDZ

"J. Harvey" wrote:
>
> > > Well sad to say, Ham radio even for emergencies
> > > is becoming a thing of the past. Newer technologies
> > > are here....
>
> Well, maybe...
>
> One government / military program ("newer technology") is called JTRS (Joint
> Tactical Radio System - 'jitters') **.
>
> S'posed to be able to replace almost all other government / military radios
> by "simply" being able to download the "waveform" (<eyes rolling
> skyward...>) into the software radio and popping up on almost any band, and
> in any mode, with any encryption and/or protocol. S'posed to cover from
> sub-HF to XX GHz - where 'XX' is getting more and more ambitious (if the
> trend continues, by next year it will cover DC to daylight). S'posed to
> ensure interoperability since ya can just download the "waveform". Not quite
> sure how much power this puppy is s'posed to emit... Not sure if it will be
> full duplex or not... Not sure if it will fit...
>
> Obviously (to anyone that can spell the plural of "antenna") they are
> 'writing cheques' that antenna technology (now, or in the foreseeable
> future) 'can't cash'.
>
> Obviously, interoperability is going to be extremely limited by the
> installed antennas on any particular air / land / sea vehicle.
>
> WTB: multiport antenna covering 2 MHz to 2 GHz (or even much higher),
> continuous coverage over all government (all levels), military and civilian
> frequency bands. Must provide decent gain and complete hemisphere coverage.
> Prefer switchable linear and RHC polarization as well as multiple null
> steering. Other requirements available upon request.
>
> What we need here is a "Joint Tactical ANTENNA System" to match the
> capabilities and imaginations of the JTRS spec. writers. Perhaps someone
> will develop some sort of fractal, super-conducting, cross-field, miracle
> antenna that simply plugs into any regular outlet.
>
> Oh well, I wonder if there is actually a small but rational program hidden

> behind the marketing mush (there could be...). Perhaps the glory is in the
> details. But I really wonder why they want to replace radio developers with
> software developers...
>
> All the above is very much just My Humble Opinion.
>
> J. Harvey
> Ottawa
> VE1BLL@rac.ca /VE3
>
> ** Public Information URLs:
> http://www.fas.org/man/dod-101/sys/land/jtrs.htm
> http://www.google.ca/search?q=JTRS (fill yer boots)

3111. Helical Antenna Sidelobes - Pls Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 21:04:53 UTC
From: Gollywog <_eng@ilos.net>
Message-ID: <VxAa8.842$8i2.26274@news2.mts.net>
Source record: 148549
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Hi all,

I've found what appears to be a cheap and easy homebrew helical suitable for use in a current project. If possible I'd like to reduce the side lobes that appear in the horizontal plane radiation pattern. Anybody here doing Phase 3D (AO 40) satellite stuff, etc could give me some pointers? What if I just bent a 1 foot wide piece of aluminum to make a 320 degree (or so) cylindrical shield. The antenna indicated would then be mounted inside and be pointed out the vertical slit. Would this "shear off" the side lobes?

2.4GHz Homebrew Helical by Jason Hecker is at :

http://users.bigpond.net.au/jhecker/

This is a single page site. The radiation patterns mentioned above appear at the very bottom of the page.

Thanks,

Mike Whitfield (VA4MGW)

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********** \ -- -- / **********
********** (\@ @/) **********
*** --oOOOo---(_)---oOOOo-- ***

3112. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 21:05:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4el9o$1emkb2$1@ID-124126.news.dfncis.de>
Source record: 148550

> Yes, a receive antenna can have a SWR. It is identical to the SWR you
would
> measure if you hooked a transmitter to the antenna and measured it that
> way -- the guts of the reciprocity theorem.
==========
I can't stand it any longer !

Yes, antennas DO have standing waves on them. There's a beautiful standing wave on a half wave dipole. And an even better one on an unterminated Beverage. They even have Zo's.

But here we are concerned with SWRs on feedlines. But it has nothing to do with the 'reciprocity' theorem.

There is an SWR on the line between the antenna and radio receiver. The signal generator is the receiving antenna. The testing signal is the received signal. Or just antenna noise. The load is the receiver input impedance.

Reflections occur due to the receiver input impedance not matching the line impedance.

And so the receive SWR on the line can be, and very often is, quite different from the transmit SWR on the same line.

Peculiarly enough, in a practical situation, the SWR on receive is usually considerably better than on transmit. No prizes for explaining why this should be so.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

3113. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 21:27:36 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <a4elo5$1bpo@r02n01.cac.psu.edu>
Source record: 148551
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Hi all:

After reading this thread for awhile, I went to the ARRL web site, and did a search on "eqsl", "e-qsl" etc. and I found a few mentions of e-qsl, but nothing that mentions that the ARRL is doing anything but thinking about accepting e-qsl's. So is this really true or is someone reading more into ARRL thinking about it than has happened yet.

--
John Passaneau, W3JXP
Physics Dept. Electronics Shop
Penn State University
104 Davey Lab, University Park , Pa. 16802
814.863.4297, jxp16@psu.edu

"Walt Davidson" <walt99@tiscali.co.uk> wrote in message
news:9m6l6u814dkml7n7mo5brfi37lsmsei82n@4ax.com...
> On Sun, 10 Feb 2002 11:55:33 +1000, "Adam MAURER"
> <vk4cp@bigpond.comNOSPAM> wrote:
>
> >Yeah, and watch this "convenience" see the demise of DXpeditions!
> >DXpeditions rely heavily on income & donations that is included with the
> >request for a good ol QSL card.
>
> Well, I'm glad to see, at long last, an open admission that it's a way
> of funding a free vacation for "the deserving"!
>
> ;-)
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @freeuk.com

3114. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 21:31:08 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4emsb$1bjsjv$1@ID-124126.news.dfncis.de>
Source record: 148552

```
> Thus in a tuned antenna standing waves of
> 1:1 are present.
==========================

More like 8 or 10 to 1.

---
****************************
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****************************
```

3115. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 22:05:26 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6ae327@news.bnb-lp.com>
Source record: 148553
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Hello John,
The real-low-down-skinny is that eQSL confirmations are now accepted
at the ARRL - DXCC desk provided the eQSL web site "mail-a-card" service
is used. Basically this way eQSL becomes a sort of qsl manager by
verifying logs from both parties of a qso and then mailing out the card.
This has never before been done and thus it is a '" news-item " for
all DXers that prefer the economy, speed, ease, and fun of electronic
qsl'ing. Statements to this affect are plastered all over the eQSL
website including a copy of the email from Bill Moore at the DXCCC desk
verifying that eQSL cards handled in this manner would be valid for
DXCC.
It can be seen by some that this is a new approval, and a change in
policy, by the ARRL since no electronic qsl cards of any type have ever
been "accepted" before for anyone under any conditions. But..also
since the ARRL is only accepting eQSL cards that have been mailed others
can say there is no ARRL policy change as they are "still accepting"
mailed cards. It can go either way.... Personally since nothing like
this (electronically derived qsl cards) has ever been "approved" for
DXCC before I see it as a "change in policy" by the ARRL.
Others disagree....be that as it may there is no argument that this is
a real shot-in-the-arm for eQSL users and will very likely spin-off as
more participation in the DXCC awards program to the benefit of the ARRL
since only it's members are eligible for their own brand of awards. I
see it as a win-win situation.....and..it most definitely is "something
new" IMHO....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3116. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 22:05:58 UTC
From: richardharrison@webtv.net
Message-ID: <17638-3C6AE346-73@storefull-115.iap.bryant.webtv.net>
Source record: 148554

Dave, WD9BDZ wrote:
"Standing waves are created whenever you have an alternating current flowing in a wire."

Nothing is prerfect, so there is always some reflection at the end of the line. But for practical purposes, standing waves are not always created when you have a-c in a wire. It takes a bounce at the end of the line (or somewhere along the line) to cause some of the energy to reverse direction. This reflection results from an impedance bump caused by some degree of mismatch. It is the interference patterns caused by the combination of the incident and reflected (forward and backward) waves that produce the ratio of maximum to minimum voltage or current on a line that we call SWR.

Dave also wrote:
"The radio waves intercepted by an antenna generate these alternating currents."

Fair enough. If the feedline doesn`t present a matched load to the antenna at its feedpoint, the feedpoint rejects some of the energy available in the antenna. This energy reverses direction because it has been rejected. It is reflected. It reverses its direction of flow in the antenna and is re-radiated.

Dave also wrote:
"Thus in a tuned antenna standing waves of 1:1 are present."

A tuned antenna is terminated in an open or short circuit. This invariably causes reflection and SWR on the antenna itself.

A traveling wave antenna, on the other hand, is terminated in its characteristic resistance, has no reflection, and the SWR on the antenna is very nearly 1:1.

Best regards, Richard Harrison, KB5WZI

3117. Re: Helical Antenna Sidelobes - Pls Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 22:32:58 UTC
From: Charles Schuler <Charles.Schuler@worldnet.att.net>
Message-ID: <3C6AE99D.9FB7C9F7@worldnet.att.net>
Source record: 148555
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

For homebrew, dishes are easier to work with than helicals. Just my experience.

Gollywog wrote:

> Hi all,
>
> I've found what appears to be a cheap and easy homebrew helical suitable for
> use in a current project. If possible I'd like to reduce the side lobes that
> appear in the horizontal plane radiation pattern. Anybody here doing Phase
> 3D (AO 40) satellite stuff, etc could give me some pointers? What if I just
> bent a 1 foot wide piece of aluminum to make a 320 degree (or so)
> cylindrical shield. The antenna indicated would then be mounted inside and
> be pointed out the vertical slit. Would this "shear off" the side lobes?
>
> 2.4GHz Homebrew Helical by Jason Hecker is at :
>
> http://users.bigpond.net.au/jhecker/
>
> This is a single page site. The radiation patterns mentioned above appear
> at the very bottom of the page.
>
> Thanks,
>
> Mike Whitfield (VA4MGW)
>
> ********* \\\\lll//// *********
> ********** \ -- -- / **********
> ********** (\@ @/) **********
> *** --oOOOo---(_)---oOOOo-- ***

3118. Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 23:47:48 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6afb23$1@news.bnb-lp.com>
Source record: 148556
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Chalk-up another acceptance for eQSL's......

Confirmation was received today from the president-elect of the
3905 Century Club that their awards program will accept hard copies
of eQSL's as confirmation. The hard copy can be printed by the
recipient on his home computer if desired, or you can use eQSL's service
to have them printed and mailed to you.

Either is OK for Century Club awards.
---
info retrieved from eQSL Discussion email list as posted there by
David, KC0JB

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3119. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 23:49:01 UTC
From: Gary Danaher <gdanaher@attbi.com>
Message-ID: <3C6AFB90.41624261@attbi.com>
Source record: 148558
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

The folks at eQSL solved two problems. Firstly they found a way to make their record keeping system of some value to some people. Without the document being submitable for credit, few people wanted them. They're too easy to counterfeit on the computer. Secondly, they found a way to make some money. By charging a dollar and then sending the card out at the postal card rate of 22? cents, finally they are in the black. Amateurs have been creating and mailing out electronically created cards for years. There is nothing new at all there except the process perhaps of 'ordering' the card on-line.

John Passaneau wrote:

> Hi all:
>
> After reading this thread for awhile, I went to the ARRL web site, and did a
> search on "eqsl", "e-qsl" etc. and I found a few mentions of e-qsl, but
> nothing that mentions that the ARRL is doing anything but thinking about
> accepting e-qsl's. So is this really true or is someone reading more into
> ARRL thinking about it than has happened yet.
>
> --
> John Passaneau, W3JXP
> Physics Dept. Electronics Shop
> Penn State University
> 104 Davey Lab, University Park , Pa. 16802
> 814.863.4297, jxp16@psu.edu
>
> "Walt Davidson" <walt99@tiscali.co.uk> wrote in message
> news:9m6l6u814dkml7n7mo5brfi37lsmsei82n@4ax.com...
> > On Sun, 10 Feb 2002 11:55:33 +1000, "Adam MAURER"
> > <vk4cp@bigpond.comNOSPAM> wrote:
> >
> > >Yeah, and watch this "convenience" see the demise of DXpeditions!
> > >DXpeditions rely heavily on income & donations that is included with the
> > >request for a good ol QSL card.
> >
> > Well, I'm glad to see, at long last, an open admission that it's a way
> > of funding a free vacation for "the deserving"!
> >
> > ;-)
> > 73 de G3NYY
> >
> > --
> > Walt Davidson Email: g3nyy @freeuk.com

3120. FS: D104 ugly duckling

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 23:49:29 UTC
From: Neil <DontDoIt@ImNotHere.com>
Message-ID: <knul6ug6m37k0cmt7gkvb70a21q72kp505@4ax.com>
Source record: 148557
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.swap

Hi folks. I've got a D104 that's not perfect looking by any stretch,
but it seems to work fine. It's missing the sliding PTT lock ring ,
has a couple of holes in the base, and the base has been repainted
badly. No connector on the wire. The head actually looks decent, no
visible damage.

You get the picture.

The good news is that it's yours for $15, you ship.

Neil Rosenberg
(603) 465-2788
or
(800) 962-2949

Thanks and regards;
Neil

Email to NeilR@innermedia.com

3121. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-13 23:50:30 UTC
From: k1bqt@aol.com
Message-ID: <20020213185030.08706.00000333@mb-fq.aol.com>
Source record: 148559

It's easy enough to receive signals from enroute aircraft, but picking up low-power ground signals over a point-to-point path can pose a hefty challenge--especially if there are lumps in the way (sub-microvolt vs. millvolts). I use a 8-element wideband yagi with a GaAsFET preamp strapped to the boom to get that job done around here. At minimum, I'd recommend an outside omni-directional antenna with a low-loss feedline, or better yet, a small yagi pointed dead-on at the airport. With a decent antenna, you'll hear not only the tower, but also traffic on the ground. Anything less, and you're likely to miss a good portion of the show.

Good luck with your installation. With a possible grumpy exception or two, most pilots roaming the freindly skies are more than glad to help anyone who likes airplanes!

Rick K1BQT

3122. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 00:40:32 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4f1da$1el2vh$1@ID-124126.news.dfncis.de>
Source record: 148560

Standing wave ratio is defined as the ratio of the maximum voltage along a line to the minimum voltage which occurs at another place along the line. The distance along any line between maximum and minimum volts is always 1/4-wavelength.

Take a 1/4-wave vertical. Although it has only one conductor undoubtedly it is a transmission line. A typical value of Zo is 400 ohms. Its bottom-end input resistance measured against ground is the well known figure of 37 ohms.

Because it is 1/4-wavelengths long it behaves, just like any other line, as a 1/4-wave transmission line transformer. And so the 37 ohms is transformed, looking into the top end, to a resistance of 400*400 / 37 = 4324 ohms. (See ARRL books on 1/4-wave line transformers if you don't believe me).

Now feed 100 watts into the bottom end.

The voltage at the bottom end will be Sqrt(100*37) = 60.8 volts.

Now feed the same 100 watts into the top end with the bottom end grounded.

So the voltage applied to the top will be Sqrt(100*4324) = 657 volts.

The antenna is quite indifferent to where it is fed. It will radiate 100 watts regardless.

Let's look at the ratio of the two voltages, max and min, at top and bottom which are spaced apart by 1/4-wave of transmission line.

SWR on the antenna = 657 / 60.8 = 10.8

Incidentally, considering the antenna as a tuned circuit, it turns out that SWR is also equal to the resonant Q. And so the operating bandwidth is MHz / SWR = MHz / Q.

There are other ways of arriving at the same conclusions.

Fascinating, isn't it ? And all so simple.

If anybody should complain about about how to apply 657 volts to the top then apply 152 milliamps from a constant current generator. It's easier on the brain cells !

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com

```
****************************

--
****************************
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****************************
Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:a4emsb$1bjsjv$1@ID-124126.news.dfncis.de...
>
> > Thus in a tuned antenna standing waves of
> > 1:1 are present.
> ==========================
>
> More like 8 or 10 to 1.
>
> ---
> ****************************
> Regards, Reg G4FGQ
> Free Radio Modelling Software
> Http://www.g4fgq.com
> ****************************
>
>
```

3123. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 01:27:55 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <CRFrPBnw1k3WrzDaCvtRW0LoajNv@4ax.com>
Source record: 148561

richardharrison@webtv.net (Richard Harrison) wrote:

>Dave, WD9BDZ wrote:
>"Standing waves are created whenever you have an alternating current
>flowing in a wire."
>
>Nothing is prerfect, so there is always some reflection at the end of
>the line. But for practical purposes, standing waves are not always
>created when you have a-c in a wire. It takes a bounce at the end of the
>line (or somewhere along the line) to cause some of the energy to
>reverse direction. This reflection results from an impedance bump caused
>by some degree of mismatch.

In regard to the reflection, does it matter whether it is originating from the transmitter, as in a transmitting antenna, or whether it is originating from the antenna, as in a receiving antenna? Same swr, either way?

Bob
k5qwg

> It is the interference patterns caused by
>the combination of the incident and reflected (forward and backward)
>waves that produce the ratio of maximum to minimum voltage or current on
>a line that we call SWR.
>
>Dave also wrote:
>"The radio waves intercepted by an antenna generate these alternating
>currents."
>
>Fair enough. If the feedline doesn`t present a matched load to the
>antenna at its feedpoint, the feedpoint rejects some of the energy
>available in the antenna. This energy reverses direction because it has
>been rejected. It is reflected. It reverses its direction of flow in the
>antenna and is re-radiated.
>
>Dave also wrote:
>"Thus in a tuned antenna standing waves of 1:1 are present."
>
>A tuned antenna is terminated in an open or short circuit. This
>invariably causes reflection and SWR on the antenna itself.
>
>A traveling wave antenna, on the other hand, is terminated in its
>characteristic resistance, has no reflection, and the SWR on the antenna
>is very nearly 1:1.
>

>Best regards, Richard Harrison, KB5WZI

3124. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 01:31:02 UTC
From: k1bqt@aol.com
Message-ID: <20020213203102.25648.00000988@mb-mc.aol.com>
Source record: 148562

>Fascinating, isn't it ? <

Sure is, Reg! But it's awfully dark in here, and I still can't hear the tower!
:)

Rick K1BQT

3125. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 01:49:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4f5sk$1evgb8$2@ID-124126.news.dfncis.de>
Source record: 148563

Reg said -
> If anybody should complain about about how to apply 657 volts to the top
> then apply 152 milliamps from a constant current generator. It's easier
on
> the brain cells !
==========

I could have added that by far the easiest way of applying 657 volts to the top of the 1/4-wave vertical would be to apply 60.8 volts to the bottom end and let the resonant rise in voltage due to Q = 10.8 do everything all by its lonesome self.

But that would have been TOO simple. ;o)

Why am I reminded of Stanley and Oliver and a lonesome pine ?

Reg G4FGQ.

3126. Re: IC-706 tuning control

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 02:14:59 UTC
From: Leland Cox <lcox107@comcast.net>
Message-ID: <3C6B1E74.F31D5C94@comcast.net>
Source record: 148564

That is really neat!

I can remember when I had the time and inclination to build things and
figure out how to make things like this work. I am sure you will get
many comments on this. Keep up the great work!

Les, AA4F

CAM wrote:
>
> I just got through breadboarding what I consider to be a really slick
> way to use the IC-706 tuning control with a screwdriver. Here's the
> schematic:
>
> Wires to the screwdriver motor +------+
> -------------+--->|motor |
> -------------|--------+------------------------------->| |
> | | +------+
> anode anode
> 1N4001 1N4001 +12---(10k)---------+ Tstr
> cathode cathode |
> | | C|---+ Tkey
> +--------+------------------(10k)--+--|B 2N2222
> | E|--+
> (10k) |
> | |
> Gnd Gnd
>
> When the tune switch supplies power to the screwdriver motor, the
> 2N222 turns on grounding Tkey and Tstr. As long as the screwdriver
> tune switch is engaged, the IC-706 outputs 10 watts in CW mode.
> When tuning has been completed and the tune switch disengaged,
> the IC-706 returns to SSB mode (or the previous mode if not SSB).
> I haven't seen this described anywhere and I like it best.
> Two diodes, three resistors, and one 2N222 transistor.
> --
> cheers, CAM http://www.qsl.net/w5dxp

3127. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 02:20:22 UTC
From: Leland Cox <lcox107@comcast.net>
Message-ID: <3C6B1FB7.D992688@comcast.net>
Source record: 148565

The cell site antennas will be transmitting over your head and should
radiate little RF down toward you. I wouldn't want a tower that close
to me for any reason. Cell may not be the only thing going on the
tower.
Les, AA4F

Richard Myers wrote:
>
> Hi All,
>
> The local cell provider has just proposed putting a 150' cell tower behind
> my house. This would put the tower base at about 75 yards from my house.
> What are the MPE limits for cell frequencies? I know that at Microwave
> frequencies possible damage to eyesight is possible if MPE limits are
> exceeded, so I am hoping the cell provider is as concerned about RF safety
> as I am. I have been very careful with my own station to safeguard the
> health of my family and neighbors by staying well below the MPE guidelines.
>
> Also, I operate primarily on HF using a multiband vertical and G5RV. What
> are the chances that a cell tower that close to my station will cause
> harmful interference?
>
> Thanks for any insights.
>
> 73 de KB1FLR, Rick

3128. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 02:22:46 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <XbFa8.18807$JZ.2061455@news20.bellglobal.com>
Source record: 148566

"Sylvan Butler"
> And then when grown up, pumpkin cannon is the name of the game...

Those British lunatics with the medieval trebuchet ('car catapult') are leading the field in silliness - bless their little hearts. There are videos floating around on the 'net - I don't know where. Sorry - we're drifting...

3129. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 02:40:41 UTC
From: Anthony Duffy <a.duffy@sympatico.ca>
Message-ID: <3C6B23A9.4030403@sympatico.ca>
Source record: 148567

god my head hurts.....

here's a couple of ideas.....

1) get a pair of rabbit ears, hook them to the receiver and adjust for
best reception (including length)
2) failing that, if you have trees around the property that are visible
over the roof line (might not even have to worry about it) then get a 20
to 22" scanner antenna or just a whip antenna of the same length, paint
it a light gray with flat paint, go up on the roof pretending to clean
the chimney and mount it on the cap and drop the coax down the pipe.
3) try winding a few turns of wire around either the cable or phone
lines entering you place and see what you can get.
4) see if the rain gutter or down spout are metal and attach a wire.
5) try attaching a wire to the chimney pipe
6) dangle some #22 or #24 wire out the top floor window or throw it on
the roof, along a fence, cloths line etc.
7) get a VHF preamp
8) copper wire in a loop or dipole stuck to a window, you can even use
copper tape for alarms if you like.

Frankly when it comes to receiver antenna I wouldn't get too worried
about it. If your going to transmit then it's another story. The KISS
rule applies in most cases. Keep your feed wire as short as possible,
and a tuner will help out for the HF range down the road. There's got to
be hundreds of receiver antenna plans on the net including tunable ones
you can try.

73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits"

Rick Littlefield wrote:

>>Fascinating, isn't it ? <
>>
>
> Sure is, Reg! But it's awfully dark in here, and I still can't hear the tower!
> :)
>
> Rick K1BQT
>
>
>
>

>

3130. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 02:42:35 UTC
From: John Passaneau <w3jxp@adelphia.net>
Message-ID: <vuFa8.246$xs1.46435@news1.news.adelphia.net>
Source record: 148568
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Hi :

But my point is I see nothing from the ARRL that this is true.

so what gives?

--
John Passaneau W3JXP
State College, Pa
w3jxp@adelphia.net

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c6ae327@news.bnb-lp.com...
> Hello John,
> The real-low-down-skinny is that eQSL confirmations are now accepted
> at the ARRL - DXCC desk provided the eQSL web site "mail-a-card" service
> is used. Basically this way eQSL becomes a sort of qsl manager by
> verifying logs from both parties of a qso and then mailing out the card.
> This has never before been done and thus it is a '" news-item " for
> all DXers that prefer the economy, speed, ease, and fun of electronic
> qsl'ing. Statements to this affect are plastered all over the eQSL
> website including a copy of the email from Bill Moore at the DXCCC desk
> verifying that eQSL cards handled in this manner would be valid for
> DXCC.
> It can be seen by some that this is a new approval, and a change in
> policy, by the ARRL since no electronic qsl cards of any type have ever
> been "accepted" before for anyone under any conditions. But..also
> since the ARRL is only accepting eQSL cards that have been mailed others
> can say there is no ARRL policy change as they are "still accepting"
> mailed cards. It can go either way.... Personally since nothing like
> this (electronically derived qsl cards) has ever been "approved" for
> DXCC before I see it as a "change in policy" by the ARRL.
> Others disagree....be that as it may there is no argument that this is
> a real shot-in-the-arm for eQSL users and will very likely spin-off as
> more participation in the DXCC awards program to the benefit of the ARRL
> since only it's members are eligible for their own brand of awards. I
> see it as a win-win situation.....and..it most definitely is "something
> new" IMHO....
>
> --
>
> 73 / DX
>
> Charles T Johnston

> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

3131. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 02:50:16 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <ba7m6ucb3oag6esin7vvt431ccashjc2eq@4ax.com>
Source record: 148669

On Wed, 13 Feb 2002 12:04:46 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>an antenna
>can't have an SWR, only a transmission line can have an SWR. As Reg
>often points out, we have "SWR" meters that we can connect to an antenna
>and get a reading. But the reading doesn't really indicate anything
>about standing waves.

Hi Roy,

Almost every common example of antenna discussed on this board is of
the class called Standing Wave as opposed to Traveling Wave antenna.
The distinction between antenna and transmission line is only one of
application, there is no engineering demarcation where the Physics
shifts to follow the intended use; the difference of operation lies in
the change of boundary conditions - still employing the same math to
solve either situation. Further, because every common example of
antenna is a NON-LINEAR example of transmission line, appeals to
constant SWR and other characteristics confined to simple transmission
lines does not faithfully translate in discussion.

And as for that Old Wife's mumbled tale about the impossibility of SWR
meter operation is simply nonsense. A manufactured argument for the
sake of argument whose wheezing through pointless postings adds
nothing to the discussion. I find it tiring to read this creationist
quality academic argument where punchinello demonstrates no particular
skill, much less care, with the techniques of this measurement beyond
the incessant denial. His tainted argument goes to include how
useless certain instruments are because they do not reveal phase (as
if it were the be-all of our concern).

This last Old Wife's tap dance reveals a prostituted faith in
instrumentation only to condemn it. This is called the straw man
argument and is invested with cynicism rather than education.

The measure of SWR has always been one of technique - there are many.
I have measured the actual standing waves in situ, I have measured
them by inference, I have measured them by altering the system. The
differences of measure are strictly one of economy or practicality.
Rarely do the measures differ, and only as a product of the added
reflections offered by the measurement (direct measure of the actual
standing waves also shifts them and thus introducing error).

Having flattened innumerable standing waves (through yet other
techniques such as double stub tuners), I find there is no particular

magic involved (more a matter of skill), nor is there any requirement of faith outside of common sense. I can well imagine a first year music student with a valved horn (or flute for that matter) could cope easily with the discussion of the mechanics.

73's
Richard Clark, KB7QHC

3132. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 02:51:09 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C6B261D.7BE4F31B@IEEE.org>
Source record: 148670

Jim Weir wrote:
> Yes, a receive antenna can have a SWR. It is identical to the SWR you would
> measure if you hooked a transmitter to the antenna and measured it that
> way -- the guts of the reciprocity theorem.

That doesn't sound right. With a receiving antenna, the antenna is the source
and the receiver is the load. The SWR depends on the load inside the receiver
which is probably not the same value as the antenna load during transmitting.
--
cheers, CAM http://www.qsl.net/w5dxp

3133. Re: Antenna 468 MHz ???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 03:01:38 UTC
From: Matt <doormattNOSPAM@bigpond.com>
Message-ID: <IGFa8.1722$wG3.13255@newsfeeds.bigpond.com>
Source record: 148671
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

How about making your own - it is very easy to do, and will likely be a lot cheaper and give you much more satisfaction. I have made several yagis (between 10-20 elements) for 477MHz (Australian UHF CB) that have worked as well as if not better than commercial made antennas. There are heaps of sites and software packages around that will make it easy to do - I haven't made one for about ten years now, but it was quite easy to do when I was playing around with them. OK the first couple needed some major reworking, but after a while, I had it sorted out, and made some pretty decent quality antennas that are still working today.

Matt

Peter Hunt <news@peterhunt.zoetermeernet.nl> wrote in message news:a4dhjd$m7q$1@news1.xs4all.nl...
> Hi!
>
> For better reception of a trunking-system on 468 MHz I'm looking for
> a beam/yagi which is especially tuned for this frequency.
>
> WIMO in Germany has lots of beams and in their catalogue you can
> see some machines which are computer-controlled and can make
> antennas for any possible frequency, but now they don't seem to be
> able (or don't want) to make such an antenna for 468 MHz.
>
> Does anybody know other firms that are able to make this???
>
> 73, Peter Hunt PE1RFR.
>
>
>

3134. Re: IC-706 tuning control

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 03:03:55 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C6B291B.1FA159F5@IEEE.org>
Source record: 148672

Leland Cox wrote:
>
> That is really neat!
>
> I can remember when I had the time and inclination to build things and
> figure out how to make things like this work. I am sure you will get
> many comments on this. Keep up the great work!

Well, I have to admit it has an RFI problem on 10m. The diodes are
rectifying the RF and activating the circuit. Here's my latest
thought which I will try tomorrow. One relay, that's all.

```
Wires to the screwdriver motor
----------------+----------------------------------------> Motor
----------------|--------+--------------------------------->
| 12v |
+-Relay--+

GND------||---------+---TSTR
NO |
+---TKEY
```

--
cheers, CAM http://www.qsl.net/w5dxp

3135. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 03:13:20 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <v8am6usp5iokc3sehevlbm42hhdghe9o0t@4ax.com>
Source record: 148673

On Wed, 13 Feb 2002 16:52:25 GMT, "R.U. Amused?" <n6ttd@spamsuxarrl.net>
wrote:

>I guess you missed the point Bill; I wouldn't sell a car to ANYONE without a
>license

I didn't miss the point. You said "kid" in your original post, now
you're changing it to "anyone". Frankly, I don't care who you sell
stuff to, I just think it's silly to miss a sale because someone doesn't
have a license to use whatever it is.

My next door neighbor is an auto mechanic who traded some repair work
for a two meter rig. Since he has no license and plans to sell or trade
it away, has he committed some kind of transgression?

No need to reply. This thread has become a big yawn already.

Bill, W7TI

3136. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 03:14:46 UTC
From: kh2d@my-deja.com
Message-ID: <3c6b2b65.243053973@basic.bs.webusenet.com>
Source record: 148674
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Wed, 13 Feb 2002 16:47:48 -0700, "Charles Johnston"
<ctj92@cableone.net> wrote:

>Chalk-up another acceptance for eQSL's......

Get a life Charlie. The only 'victory' eQSL cares about is the victory
of getting your $ out of the mailman's pocket and into theirs.....

73, Jim KH2D

3137. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 03:19:17 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6b2cb2$1@news.bnb-lp.com>
Source record: 148675
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Hello John,
Did you visit the eQSL web site and read the email from Bill Moore of the DXCC Desk? I cannot speak for why the ARRL webmaster does or does not place what many believe to be important "news" on that site. You might consider emailing them. I would like to see their reply posted here.

My personal opinion is that they are reluctant to possibly steer anyone over to eQSL services since they (the ARRL) are going to launch the Electronic Logbook of the World ....one of these days.
It will supposedly provide for a 100% all-electronic qsl confirmation system that would feed directly into their own awards programs that would not require any paper-based qsl cards at all. However it looks like eQSL has done the end-around now by obtaining the "go-ahead" from Bill Moore himself that basically "allows" electronic eQSL's to be "accepted" for DXCC awards.

The eQSL system has many advantages over the yet-to-be-released Logbook of the World. With the LBOTW, once released and in operation, past qso's are not accepted. Not so with eQSL Furthermore....there will need to be digital signatures acquired and approved , as well as new additional ARRL fees (according to ARRL), and special ARRL- LBOTW software will need to be purchased or existing logging software will need to be upgraded (at a cost) to interface with the LBOTW system. There will need to spend $$$ spent and numerous hoops jumped through just to get only your recent qso's accredited. And of course don't forget you'll need to pay ARRL dues too....

None of this nonsense is required with eQSL.....they really have a better way and it shows already with the upsurge of acceptance (or call it usability) by various Ham Radio awards organizations. I don't chase awards anymore except for my own satisfaction and for ego-motivated "bragging rights" but I have to say I really get a kick out of the easy and automated way eQSL allows me to provide confirmations for any station I qso with...and now they are DXCC accepted too.....where is the down-side? I don't see it......

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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3138. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 03:26:00 UTC
From: k1bqt@aol.com
Message-ID: <20020213222600.10918.00001351@mb-fs.aol.com>
Source record: 148676

>That doesn't sound right. With a receiving antenna, the antenna is the source and the receiver is the load. The SWR depends on the load inside the receiver which is probably not the same value as the antenna load during transmitting.<

And, if you measure the return loss presented by some receiver front-ends, it's not always a pretty sight.

Rick K1BQT

3139. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 03:48:26 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6b3388$1@news.bnb-lp.com>
Source record: 148677
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hi there Jimbo....
I wondered where you had gone....well as usual you are not looking at the silver-lining Jim. The eQSL "mail-a-card" service (which has recently been OK'd for DXCC) still puts $$$ in the mailman's pocket when eQSL sends out the cards through (that's right) the USPS.

And so now your point would be what exactly?

I'm going to break it you easy as I can sunshine......eQSL is getting stronger, more widely accepted, certainly more widely used every day. Moreover eQSL is saving Ham's $$$, time, frustration, and $$$ pilfering by unethical foreign postal workers - and - no-good DX op's that collect $$$ for 1000's of cards but send out only a couple dozen confirmations a year....just enough to keep the "believers" sending in that money....you know that Jim.....

Now..is that the way you prefer?
Thanks for posting....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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www.ab7sl.com

3140. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 03:48:37 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <psGa8.20061$Hv5.2783637@news20.bellglobal.com>
Source record: 148678

"Rick Littlefield"
> And, if you measure the return loss presented by some
> receiver front-ends, it's not always a pretty sight.

Obviously, all receivers should have 10dB attenuators fitted as standard equipment. One can't be too careful when it comes to SWR... ;-)

3141. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 04:07:53 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6b3817$1@news.bnb-lp.com>
Source record: 148679
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Jim,
Man...you really don't know what the hell you're talking about (on most topics) but especially on eQSL. What would prevent p50dx@yahoo.com from "uploading his logs" and then having eQSL start "passing them out for a buck a piece" is the eQSL Authenticity Guarantee mechanism at eQSL. It requires a scanned image of the Ham's license be submitted beforehand.

Now before you start with how any system can be "tricked" or cards and licenses could be "faked" also recognize that most honest-hearted Ham's have no interest in ill-gotten "awards". Honesty and integrity cannot be legislated or enforced on anyone. Doing the right thing will always be optional.

Furthermore the odds of a convincing license forgery are miniscule at best. Most government authorities have selected a paper stock that would be very difficult to duplicate by amateurs. Take a look at - your - ticket Jim....are you going to be able to duplicate that exactly?

Still nothing is perfect.....I am sure that literally thousands of bogus and forged "real qsl cards" have been used for awards for a long time. In addition it is just a hobby award Jim....we are not dealing with the CIA or the Ft. Knox Federal Reserve.

Lastly if a few butt-holes do manage some way to "cheat" they are only cheating themselves. It would take nothing at all away from any awards you are I or anyone else legitimately obtained.

Maybe see you on-the-bands one of these days....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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www.ab7sl.com

3142. Re: "Dogbone" insulators-Where can I find them?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 04:18:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c6b3dee_4@news1.prserv.net>
Source record: 148680

Just how much power do you intend to run? If the center of the dipole is 75 ohms, and you feed a full kilowatt to it, the voltage across the insulator will be a gigantic 273 volts, just measurably higher than the 240 volts difference between the red and black wires in your electric power connection. Of course, if you are lucky enough to have one of those 100 kW Collins 308U modules I have been looking for, then use a big insulator.

--
Crazy George
Remove NO and SPAM from return address
Tom Nelson <nelsonca@stormnet.com> wrote in message news:3C69E7B1.47BE48D1@stormnet.com...
> In fact, we have two horses and a very quiet electric fence! I have a pile
> of the little black "egg" insulators but need the classic porcelain dogbone
> for a high power dipole.
>
> I have used the hybrid yellow and black aluminum and polypro' 'hotwire' as a
> receiving antenna and it works great. I think it would work for QRP too but
> would quickly fry under more than 50 Watss.
>
> The feedstore has also been a supplier for fiberglass rods used as temporary
> hotwire fenceposts!
>
> The local large farm supply store went under last year. Now I need to drive
> to Red Bluff for the real exotic ham supplies.
>
> TNX
> Tom
>

3143. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 04:20:19 UTC
From: richardharrison@webtv.net
Message-ID: <16790-3C6B3B03-24@storefull-116.iap.bryant.webtv.net>
Source record: 148681

Bob, K5QWG wrote:
"In regard to the reflection, does it matter whether it is originating from the transmitter, as in a transmitting antenna, or whether it is originating from the antenna, as in a receiving antenna? Same swr, either way?"

Yes, it can make a difference which SWR is being considered. There can be two different SWRs. It is not necessarily the same SWR in either direction of transmission because the loads can be different at opposite ends of the transmission line.

In a transmit situation, the transmitter is the energy source, but the reflection is caused by reflection from an antenna which is not matched to the transmission line.

The transmission line, if it is long enough to allow significant phase shift, compels energy traveling the line to conform to a voltage to current ratio called the "characteristic impedance" of the line.

If the line`s load impedance is too low (less than the characteristc impdance of the line), the line can`t supply enough current to the load at the available line voltage. There is too little current traveling in the wave and the voltage across the load is low.

If the line`s load impedance is too high, the line isn`t supplying enough voltage to put all the current traveling the line into the high load resistance and the current through the load is low.

It`s the maximum power transfer thing. Without a match at the load there is reflected power to produce SWR.

In a receiving situation, the antenna is the energy source. It has a radiation resistance. In the case of an antenna fed at its maximum current point, the radiation resistance and feedpoint resistance are the same.

The resonant antenna with a maximum current feedpoint can be represented by a Thevenin equivalent circuit. It consists of a voltage source equal to the received voltage in series with the radiation resistance of the antenna.

If the feedline connected to the antenna presents an impedance to the antenna equal to the radiation resistance, maximum power transfer occurs. That means 1/2 the antenna power is delivered to the transmission line and 1/2 the antenna power is consumed by the radiation resistance (It is re-radiated).

Until the energy transferred from the receiving antenna reaches the receiver there is no chance to establish an SWR. The apparent SWR is 1:1. If the energy traveling to the load encounters a match at the end of its journey, there is no reflection, and the SWR continues to be 1:1. If there is a mismatch at the receiver, there will be a reflection and an SWR greater than 1:1.

It is always the match at the far end of the transmission line which determines the SWR.

Best regards, Richard Harrison, KB5WZI

3144. NMO mounts, what's the difference?!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 05:01:00 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020214000100.00406.00001146@mb-ms.aol.com>
Source record: 148683

Hello all. I am having a problem. I recently bought a dualband antenna that was listed as requring a 'Motorola NMO style' mount. I bought a Larsen 'NMO-MM' mag mount, listed on their website as a 'Motorola style mag mount'. The antenna and the mag mount are not compatable. The antenna requires that the mount have a female recepticle to screw into. The mag mount that I received has a sort of nipple like bump in the middle of the part that the antenna screws into, making the two non-comptable. Does anyone have any idea what type of mount I am supposed to use for the antenna I bought?

In the mean time I have bought a Hustler dualband NMO mount whip/coil, which I plan on putting in place of my 2m Hustler - just unscrew the 2m from the Hustler magmount base and screw on the dualband version of it, but I'd still like to get the proper mount for the other antenna I bought.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

3145. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 05:04:45 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C6B456D.347F661A@coqui.net>
Source record: 148682
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Charles Johnston wrote:
>
and - no-good DX op's that collect
> $$$ for 1000's of cards but send out only a couple dozen confirmations a
> year....just enough to keep the "believers" sending in that money..

How will this be changed?

-WX4A

3146. Re: NMO mounts, what's the difference?! (DISREGARD!)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 05:40:33 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020214004033.00410.00001070@mb-ms.aol.com>
Source record: 148684

Disregard my previous message. I've talked to the person I bought the antenna
from and found that the center pin that I thought required a female recepticle
is actually spring loaded and works with a standard NMO mount after all!
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

3147. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 05:59:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C6B523A.E69C364E@eznec.com>
Source record: 148685

What's really important is understanding what's going on. I've found a great deal of misunderstanding about SWR, impedance, and transmission lines everywhere I go -- in technical talks I give, in questions I'm asked by EZNEC users, and in this newsgroup. Certainly there are standing waves on an antenna (except traveling wave antennas). But calculating a "standing wave ratio" is meaningless. Pick a Yagi, log periodic, or phased vertical array of your choice, and tell me what its "SWR" is, what it means, and what it's good for. Telling people that antennas have an SWR is, I feel, misleading and a cause of confusion.

And surely, Richard, with your exemplary education in the fine arts, you don't have to stoop to plagarizing Reg's "Old Wives" tale (singular or plural) invective as the best way to make a point. That's something you should only need to use when you can't produce any rational evidence that someone else's point of view is incorrect.

From an electromagnetic field standpoint there's no difference but boundary conditions that divide a transmission line, antenna, the ether (or aether if you prefer), and the circuit at the other end of the line. Yet as an engineer I find it very convenient to establish boundaries between the various components and apply different analysis techniques to each. (And I'm not alone in this.) Although all these analyses have Maxwell's equations at their roots, each is simplified in a different way to make the problem easier to solve and, to my mind, easier to understand.

I'd appreciate a single reference in any textbook or professional paper in which the SWR of an antenna is calculated and used for anything meaningful.

Roy Lewallen, W7EL

Richard Clark wrote:
>
> On Wed, 13 Feb 2002 12:04:46 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >an antenna
> >can't have an SWR, only a transmission line can have an SWR. As Reg
> >often points out, we have "SWR" meters that we can connect to an antenna
> >and get a reading. But the reading doesn't really indicate anything
> >about standing waves.
>
> Hi Roy,
>
> Almost every common example of antenna discussed on this board is of

> the class called Standing Wave as opposed to Traveling Wave antenna.
> The distinction between antenna and transmission line is only one of
> application, there is no engineering demarcation where the Physics
> shifts to follow the intended use; the difference of operation lies in
> the change of boundary conditions - still employing the same math to
> solve either situation. Further, because every common example of
> antenna is a NON-LINEAR example of transmission line, appeals to
> constant SWR and other characteristics confined to simple transmission
> lines does not faithfully translate in discussion.
>
> And as for that Old Wife's mumbled tale about the impossibility of SWR
> meter operation is simply nonsense. A manufactured argument for the
> sake of argument whose wheezing through pointless postings adds
> nothing to the discussion. I find it tiring to read this creationist
> quality academic argument where punchinello demonstrates no particular
> skill, much less care, with the techniques of this measurement beyond
> the incessant denial. His tainted argument goes to include how
> useless certain instruments are because they do not reveal phase (as
> if it were the be-all of our concern).
>
> This last Old Wife's tap dance reveals a prostituted faith in
> instrumentation only to condemn it. This is called the straw man
> argument and is invested with cynicism rather than education.
>
> The measure of SWR has always been one of technique - there are many.
> I have measured the actual standing waves in situ, I have measured
> them by inference, I have measured them by altering the system. The
> differences of measure are strictly one of economy or practicality.
> Rarely do the measures differ, and only as a product of the added
> reflections offered by the measurement (direct measure of the actual
> standing waves also shifts them and thus introducing error).
>
> Having flattened innumerable standing waves (through yet other
> techniques such as double stub tuners), I find there is no particular
> magic involved (more a matter of skill), nor is there any requirement
> of faith outside of common sense. I can well imagine a first year
> music student with a valved horn (or flute for that matter) could cope
> easily with the discussion of the mechanics.
>
> 73's
> Richard Clark, KB7QHC

3148. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 07:23:06 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <uBJa8.1774$sq3.3041451@paloalto-snr2.gtei.net>
Source record: 148686

"Bill Turner" <w7ti@dslextreme.com> wrote in message
news:v8am6usp5iokc3sehevlbm42hhdghe9o0t@4ax.com...
> On Wed, 13 Feb 2002 16:52:25 GMT, "R.U. Amused?" <n6ttd@spamsuxarrl.net>
> wrote:
>
> >I guess you missed the point Bill; I wouldn't sell a car to ANYONE
without a
> >license
>
> ----------
>
> I didn't miss the point. You said "kid" in your original post, now
> you're changing it to "anyone". Frankly, I don't care who you sell
> stuff to, I just think it's silly to miss a sale because someone doesn't
> have a license to use whatever it is.
>

I'm sure that Bin Laden and Saddam would agree with that philosophy... :>)

73 de W6DKN

3149. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 08:51:27 UTC
From: Adam MAURER <vk4cp@bigpond.comNOSPAM>
Message-ID: <bQKa8.1863$wG3.14929@newsfeeds.bigpond.com>
Source record: 148687
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Vacation?

Get real Walt, take the up and coming Mellish Reef DXpedition (which I am involved in) for instance.

Do you honestly think a rough 3 day sail each way (real puke material) then 10 days of flat out operating to try and work as many "deserving" as possible under extremely harsh conditions, battling tick infestation and sleep depravation because of the incredible bird noise is a vacation???

...while you operate in the comfort of your shack.

--
Adam, VK4CP

Website: http://www.qsl.net/vk4cp/

Walt Davidson <walt99@tiscali.co.uk> wrote in message news:9m6l6u814dkml7n7mo5brfi37lsmsei82n@4ax.com...
> On Sun, 10 Feb 2002 11:55:33 +1000, "Adam MAURER"
> <vk4cp@bigpond.comNOSPAM> wrote:
>
> >Yeah, and watch this "convenience" see the demise of DXpeditions!
> >DXpeditions rely heavily on income & donations that is included with the
> >request for a good ol QSL card.
>
> Well, I'm glad to see, at long last, an open admission that it's a way
> of funding a free vacation for "the deserving"!
>
> ;-)
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @freeuk.com

3150. Re: How do they get the stuff?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 08:55:18 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <BAC3027E52854171.57ACB15F23D4F0D7.F71B5776BB811A87@lp.airnews.net>
Source record: 148688

On Sun, 10 Feb 2002 15:44:20 -0400, " .Your Friend Bill"
<none@coqui.net> wrote:

>...and
>dumpster diving. I'm sure we've all heard the story about the SX-88
>found sitting beside a dumpster.

I just had to stop a couple days ago and grab the two nice black cases at one dumpster; they turned out to be a partly stripped 386 (burned up BIOS chip, a few usable components and a pretty case) and a mostly stripped (MB CPU FDD and an old vid card still in there) K6/233. (no power supply, though, or it'd be my Linux box already) Also grabbed a practically new vaccuum cleaner that only needs a belt, and a BJC-250 printer minus the power supply.

I like it when people move and decide they don't want to carry the bulky stuff, since around here, they just set the still-good-but-unwanted stuff beside the dumpster so anybody who wants it can rescue it easily. Still waiting for a broken VCR or two, though, and I've been meaning to ask the Salvation Army store if I can dive their dumpsters. (I don't actually check inside the residential ones; just get useful stuff that's sitting beside them, but SA's probably don't have nearly as many dirty diapers and rotten TV dinners in them, but they probably toss a fair amount of stuff that could flesh out my junkbox quite nicely.)

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

3151. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 09:44:31 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C6B86E5.89339625@icok.net>
Source record: 148689

Richard,
No idea what the MPE is, but wouldn't worry too
much about it. As to will the tower/cell site cause
any problems on HF, your chances are about even. Yes,
they certainly can cause HF interference, but it may
not in your case. Have to wait and see...
'Doc

3152. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 09:50:01 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4g188rec2@quark.scn.rain.com>
Source record: 148690

David G. Nagel <nagel@core.com> wrote:
> Standing waves are created whenever you have an alternating current
> flowing in a wire. The radio waves intercepted by an antenna generate
> these alternating currents. Thus in a tuned antenna standing waves of
> 1:1 are present.

And Hams make fun of the misinformation believed by CBers. Maybe they
should come here for a while - to stock up on a bit more.

--
Bill Nelson (billn@peak.org)

3153. Re: FS: D104 ugly duckling

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 11:12:37 UTC
From: Neil <DontDoIt@ImNotHere.com>
Message-ID: <007n6ug9ih7rej2hku6c6o9uc8orjvrb83@4ax.com>
Source record: 148691
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.swap

The D104 has been spoken for, thanks to all who replied.

Neil

On Wed, 13 Feb 2002 23:49:29 GMT, Neil <DontDoIt@ImNotHere.com> wrote:

>Hi folks. I've got a D104 that's not perfect looking by any stretch,
>but it seems to work fine. It's missing the sliding PTT lock ring ,
>has a couple of holes in the base, and the base has been repainted
>badly. No connector on the wire. The head actually looks decent, no
>visible damage.
>
>You get the picture.
>
>The good news is that it's yours for $15, you ship.
>
>Neil Rosenberg
>(603) 465-2788
>or
>(800) 962-2949
>
>Thanks and regards;
>Neil
>
>Email to NeilR@innermedia.com
>
>
>

3154. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 12:29:51 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c6bab53_2@corp.newsgroups.com>
Source record: 148693
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c6afb23$1@news.bnb-lp.com...
> Chalk-up another acceptance for eQSL's......
>
> ------------
> Confirmation was received today from the president-elect of the
> 3905 Century Club that their awards program will accept hard copies
> of eQSL's as confirmation. The hard copy can be printed by the
> recipient on his home computer if desired, or you can use eQSL's service
> to have them printed and mailed to you.
>
> Either is OK for Century Club awards.
> ----------
> info retrieved from eQSL Discussion email list as posted there by
> David, KC0JB
>
>
> --
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>

As usual the skeptics are out in force.. but they'll come around oneday--
10.3 million qsl on line can't me Eqsl is doing poorly.. they don't require
any donation if you don't want to give one.. so it's not a money earning
scheme like some on here have suggested.. I for one think it is a breath of
freash are in Qsl my Qsl ratio to qsos with dx stations has gone up 100
percent using eqsl. And I don't have to wait two or maybe three years for
the buro! Also if you don't for whatever reason want to join the Arrl , try
sending your cards via their outgoing Buro..

The Time for Eqsl has arrive. and it's working very well. Trust in the
future more and more award committees see it as a viable way to exchange
confirmations for awards.

Just my two cents worth now will get off my soap box..

(I'm in no way conected with eqsl other than a happy user of their system.)
73 Dave KC1DI // always qrp// qrp Dxcc 125 all 30 Meters.
happy haming

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.323 / Virus Database: 180 - Release Date: 2/8/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

3155. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 12:37:47 UTC
From: Walt Davidson <walt99@tiscali.co.uk>
Message-ID: <9dbn6u4160msj671ptks1ggc5667ms72q4@4ax.com>
Source record: 148694
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Thu, 14 Feb 2002 18:51:27 +1000, "Adam MAURER"
<vk4cp@bigpond.comNOSPAM> wrote:

>Vacation?
>
>Get real Walt, take the up and coming Mellish Reef DXpedition (which I am
>involved in) for instance.
>
>Do you honestly think a rough 3 day sail each way (real puke material) then
>10 days of flat out operating to try and work as many "deserving" as
>possible under extremely harsh conditions, battling tick infestation and
>sleep depravation because of the incredible bird noise is a vacation???

ROTFLMAO!!!!

It's an adventure holiday.

73 de G3NYY

P.S. "depravation"? That too? Tee hee!"

--
Walt Davidson Email: g3nyy @freeuk.com

3156. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 12:37:48 UTC
From: Walt Davidson <walt99@tiscali.co.uk>
Message-ID: <ijbn6ucaf6383jnihnkobvif9eiepojd48@4ax.com>
Source record: 148695
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Wed, 13 Feb 2002 16:47:48 -0700, "Charles Johnston"
<ctj92@cableone.net> wrote:

>Confirmation was received today from the president-elect of the
>3905 Century Club that their awards program will accept hard copies
>of eQSL's as confirmation.

What on earth is the 3905 Century Club?

As it only has a 'president-elect', maybe it doesn't even exist yet!
Or maybe it has been set up by 'e-qsl' themselves? Allegedly.

73 de G3NYY

--
Walt Davidson Email: g3nyy @freeuk.com

3157. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 13:02:03 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <fzOa8.5941$Nf3.348669@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148696

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C6B523A.E69C364E@eznec.com...

> I'd appreciate a single reference in any textbook or professional paper
> in which the SWR of an antenna is calculated and used for anything
> meaningful.
>

Hi Roy,

You are correct in stating that the actual standing wave (re: antenna SWR) exists in the transmission line itself. It is common practice to define antenna SWR or characterize an antenna in terms of its SWR with respect to some common feedline characteristic impedance. In doing so, it is clearly understood that the standing wave to which we refer exists in the feedline. The meaning of antenna SWR is also clearly understood in that it provides an indication of how closely the antenna's feedpoint impedance matches the characteristic impedance of the feedline to which it is connected.

Specifically discussing antenna SWR, it is also understood that antenna SWR (its mismatch with respect to the feedline impedance) does not change from a transmit mode to a receive mode. As you correctly state, the SWR on the feedline may differ between transmit and receive mode depending on the differ in antenna impedance and receiver impedance.

Steve

3158. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 13:17:51 UTC
From: paul friedman <pfriedman8426@attbi.com>
Message-ID: <3OOa8.639$Or3.125369@typhoon.mn.ipsvc.net>
Source record: 148697
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

3905 Century Club is an United States based net with session on 160, 80 and 40 meters SSB, 80 and 40 meter CW and several digital modes on 80, 40 and 20 meters. They offer awards to participants and, more importantly to this discussion, is a 25 year old organization. The FCC thinks they are for real as several 1x1 special event calls have been issued to them in honor (honour) of this anniversary. The president elect happens to be a ethical ham.

I'm not sure why you think it necessary to cast aspersions on this organization. (No, I am not a member; yes, I have participated in their nets on occasion).

73 de AB0SI

"Walt Davidson" <walt99@tiscali.co.uk> wrote in message news:ijbn6ucaf6383jnihnkobvif9eiepojd48@4ax.com...
> On Wed, 13 Feb 2002 16:47:48 -0700, "Charles Johnston"
> <ctj92@cableone.net> wrote:
>
> >Confirmation was received today from the president-elect of the
> >3905 Century Club that their awards program will accept hard copies
> >of eQSL's as confirmation.
>
> What on earth is the 3905 Century Club?
>
> As it only has a 'president-elect', maybe it doesn't even exist yet!
> Or maybe it has been set up by 'e-qsl' themselves? Allegedly.
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @freeuk.com

3159. Re: ARES (was Re: PROOF THAT ILLEGAL ...)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 13:32:21 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C6BBC65.9A1226CC@crosslink.net>
Source record: 148699

Somebody wrote:
> > One government/military program ("newer technology") is called JTRS (Joint
> > Tactical Radio System - 'jitters') **.
> >
> > S'posed to be able to replace almost all other government/military radios...

Yes, but not all of us have, or even want new technology. For example,
our Navy has had radar/computer systems capable of automatically landing
planes on pitching decks for more than 20 years, but the FAA still has
to shut down airports for fog. It follows that DOD's Joint Warfare folks
will have the "jitters" decades before local emergency management and
police and even then some hams will still be sending Morse ;o).
73 KA3DWW

3160. My R7 blew down....HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 13:34:54 UTC
From: daniel wright <dw73454@navix.net>
Message-ID: <2qen6ug9qkv0o4o8ans84c79q1mm5o4vfp@4ax.com>
Source record: 148698

Greetings.....!

I have an early version of the Cushcraft R7. After many years of waving in the breeze (un guyed)(in Nebraska), the base insulator gave up the ghost and broke, causing the antenna which is mounted on a ten foot mast tied to my back fence, to become a "sloper"....(8-<....

I contacted Cushcraft via the website and received a prompt reply that this antenna is no longer supported (I wonder if they realized the pun?) and there are no spare parts available.

Anyone have experience with replacing the base insulator on one of these antennas? Some of the top of the antenna is also bent up pretty well, but I have not been able to get to the antenna to check closely becaue of snow and mud and I'm a wuss....

Any help appreciated...thanks es

73 de Dan -- WAï¿½JRD ..
Lincoln, Nebraska

3161. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 13:52:56 UTC
From: w9wi@linux1.localdomain
Message-ID: <slrna6nia6.rld.w9wi@linux1.localdomain>
Source record: 148701
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Wed, 13 Feb 2002 16:27:36 -0500, John Passaneau <jxp16@psu.edu> wrote:
>Hi all:
>
>After reading this thread for awhile, I went to the ARRL web site, and did a
>search on "eqsl", "e-qsl" etc. and I found a few mentions of e-qsl, but
>nothing that mentions that the ARRL is doing anything but thinking about
>accepting e-qsl's. So is this really true or is someone reading more into
>ARRL thinking about it than has happened yet.

They're working on something called "Logbook of the World". I've not seen
any details yet. It looks like a similar plan to eQSL's, but different.
You might find it mentioned as "LOTW" on search engines.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

3162. Re: Two repeaters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 13:56:24 UTC
From: richardharrison@webtv.net
Message-ID: <22015-3C6BC208-12@storefull-116.iap.bryant.webtv.net>
Source record: 148704

Adam Cately wrote:
"What`s wrong with using a combiner?__ other than expense?"

What`s wrong with a circulator?

N4DAV wrote:
"Can anybody draw a picture or otherwise help?"

Doing a search on "combiner" or "circulator" would likely give 1000s of responses, but the questioner wants instruction on how to configure multiple repeater T/Rs to compatibly share a single antenna. He`s heard of "isolators, cavities, etc, but don`t know exactly how."

The title of an available how-to book containing a reliable detailed example of what he`s asked for might be helpful.

Best regards, Richard Harrison, KB5WZI

3163. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 14:01:04 UTC
From: kh2d@my-deja.com
Message-ID: <3c6bc2b9.8988955@basic.bs.webusenet.com>
Source record: 148700
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Thu, 14 Feb 2002 18:51:27 +1000, "Adam MAURER"
<vk4cp@bigpond.comNOSPAM> wrote:

>Do you honestly think a rough 3 day sail each way (real puke material) then
>10 days of flat out operating to try and work as many "deserving" as
>possible under extremely harsh conditions, battling tick infestation and
>sleep depravation because of the incredible bird noise is a vacation???

The 'deserving'. Dead give away..... Paid Vacation with big ego rush
workin' the pileups and being Da Man for a week........

If it's so friggin' puckin' awful terrible, then why in the HELL are
you going ?

73, Jim KH2D

3164. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 14:06:48 UTC
From: kh2d@my-deja.com
Message-ID: <3c6bc3ee.9297729@basic.bs.webusenet.com>
Source record: 148702
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Thu, 14 Feb 2002 13:52:56 GMT, w9wi@linux1.localdomain (Doug Smith
) wrote:

>They're working on something called "Logbook of the World". I've not seen
>any details yet. It looks like a similar plan to eQSL's, but different.

It is different. The eQSL plan is for the guy who runs the web site to
get your money instead of the mailman. The Logbook of the World plan
is for the ARRL to get your money instead of the mailman......

Both good plans. Especially with so many bored hams just waiting to
sign up......

73, Jim KH2D

3165. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 14:12:06 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202140612.7749d3ec@posting.google.com>
Source record: 148703

"Richard Myers" <rkmyers@mediaone.net> wrote in message
news:<yNwa8.819$TU4.523958@typhoon.ne.ipsvc.net>...
> Hi All,
>
> The local cell provider has just proposed putting a 150' cell tower behind
> my house. This would put the tower base at about 75 yards from my house.
> What are the MPE limits for cell frequencies? I know that at Microwave
> frequencies possible damage to eyesight is possible if MPE limits are
> exceeded, so I am hoping the cell provider is as concerned about RF safety
> as I am. I have been very careful with my own station to safeguard the
> health of my family and neighbors by staying well below the MPE guidelines.
>
> Also, I operate primarily on HF using a multiband vertical and G5RV. What
> are the chances that a cell tower that close to my station will cause
> harmful interference?
>
> Thanks for any insights.
>
> 73 de KB1FLR, Rick

My last job was as an RF engineer for a major cell phone company (on
800 MHz).

One of the last things I did before I left for greener pastures was to
do a survey of all of their roof top sites. This included taking
pictures and measuring RF levels. This was back when the FCC/EPA were
cracking down on exposure levels.

What I found was that 1) the cell site would have to be running over
100 watts, which is rare nowdays, and 2) you would have to be
physically touching the antenna. I was more worried about the FM
broadcast station co-located with one of our sites in Cleveland---you
had to climb up a ladder within 2 feet of the FM antenna to get to
ours, and they were running a couple of kW. FM broadcast is in the
region where human beings are close to resonant wavelengths.

A microwave link would be of more concern, but again you would have to
be a few feet directly in front of the thing.

You missed your opportunity, Rick. I remember reading about one ham
who got a deal for the cell phone company to build him a new tower,
with new ham antennas, if they could put their antennas on it!

By the way, is the cell tower going to be a monopole or a lattice
tower? If a monopole, chances are there will be nothing else sharing
it. Most sharing I've seen has been on lattice towers.

Jim
N8EE

3166. Re: Two repeaters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 14:18:18 UTC
From: "Adam T. Cately" <atcately@bright.net>
Message-ID: <3C6BC72A.46E23417@bright.net>
Source record: 148692

What's wrong with using a combiner?.. other than expense?

n4dav wrote:
>
> I want to use two UHF repeaters on one antenna, spaced about 20 Mhz
> apart. I know i need isolators, cavities, etc, but dont know exactly
> what or how it's hooked up. Can anybody draw a picture or otherwise
> help?
>
> thanks
> n4dav
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 80,000 Newsgroups - 16 Different Servers! =-----

--

- Adam -

3167. Re: Two repeaters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 14:21:55 UTC
From: richardharrison@webtv.net
Message-ID: <22014-3C6BC803-23@storefull-116.iap.bryant.webtv.net>
Source record: 148705

Adam Cately werote:
"What`s wrong with using a combiner?

For grins, I tried a search on "circulator". There were responses on dance groups, medical devices, and No. 5__: Di Tom Microwave!

Di Tom___"Extensive experience in designing and manufacturing Ferrite Isolators and Circulators since 1987. A standard line of Isolators and Circulators is offered in the selected frequency range from 100 MHz to 40.0 GHz to satisfy specific system requirements."

Love that precision! 40.0 GHz.

All N4DAV needs to do is contact Di Tom with his requirements for a quote.

Best regards, Richard Harrison, KB5WZI

3168. Dual band single coax 2m/70cm base antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 15:18:27 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C6BD543.DE2CC4E0@yahoo.com>
Source record: 148707

Not quite sure if the Copper Cactus J would work (Besides I dont like copper cactus looks). IS there a small beam design that is a single coax feed dual band 3 or 4 elem. I cant find my antenna hand book anywhere (Weve been doing a lot of moving stuff around lately) and I just did a net search off of AC6V's site and cannot seem to find one. The commercial ones are "Expensive" as all get out.

Ideas ?

Thanks in advance

3169. Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 15:19:50 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C6BD596.8D9DF11E@yahoo.com>
Source record: 148706

Besides PVC. Ive seen phonelic (SP) on some designes and plastic on some others. Friend of mine is going to cut the coil form for me and he thinks PVC wouldnt be a good choice so he is requesting somthing more rigid.

Ideas.

Thanks in advance

Rick KF7QZ

3170. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 15:33:33 UTC
From: richardharrison@webtv.net
Message-ID: <22014-3C6BD8CD-32@storefull-116.iap.bryant.webtv.net>
Source record: 148710

Jim, N8EE wrote:
"A microwave link would be of more concern, but again you would have to be a few feet directly in front of the thing."

I built a microwave system between Texas and New York. Hit a snag when one determined Ohio woman wasn`t going to have a repeater in her neighborhood. The FCC, her senators, and congressman, all contacted me demanding r-f exposure data. This was almost 20 years ago. Of course, I supplied the data.

Agitators were confusing ionizing radiation with non-ionizing radiation, and filling gullible heads with nonsense. Some people thought the r-f exposure might make them glow in the dark. The public doesn`t understand that they are not in the microwave beam except at a distance so far removed that the strength is of no consequence. They are terrorized with misinformation.

Oh, we prevailed with the repeater in the Ohio woman`s neighborhood. I hope she`s happy and healthy. The microwave works well.

Best regards, Richard Harrison, KB5WZI

3171. RFI from AC line

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 15:42:37 UTC
From: Stan Huntting <ng@huntting.com>
Message-ID: <NVQa8.7096$qt6.626299@newsread2.prod.itd.earthlink.net>
Source record: 148708
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

I'm building a new home and trying very hard to make it a low RFI environment. I'm high in the mountains with few neighbors. I'm the electrician.

I have dual 200 amp AC services, all the way from the pole: one for "dirty" loads (mostly things with electric motors and other inductive loads) and one for "clean" (the radios) loads. I am filling up the "dirty" load panel faster than the "clean" load panel and I am looking for loads that I might move to the clean load panel.

Two possible candidates are the electric hot water heater (conventional Rheem 50 gallon with dual 4500 watt elements) and the electric range (GE Profile, smoothtop, conventional oven - NO convection). How noisy are these?
--
Stan, KW7KW
ng@huntting.com

3172. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 15:48:43 UTC
From: n5kzw@arrl.net
Message-ID: <3c6bdb13.62038550@news.ev1.net>
Source record: 148709

Unless you are in a rural setting, the cell phone xmitters are running
a pretty low power to avoid interfering with other, non-adjacent,
cells.

You may, however, experience difficulties when the cell tower takes a
lightning hit. My nephew lives across the street from a 400' radio
tower and he frequently loses his ISDN router when the tower takes a
hit. (Yes, he has a whole-house surge suppressor and point-of-use
surge suppressors.)

73,
Ed

On Wed, 13 Feb 2002 16:48:30 GMT, "Richard Myers"
<rkmyers@mediaone.net> wrote:

>Hi All,
>
>The local cell provider has just proposed putting a 150' cell tower behind
>my house. This would put the tower base at about 75 yards from my house.
>What are the MPE limits for cell frequencies? I know that at Microwave
>frequencies possible damage to eyesight is possible if MPE limits are
>exceeded, so I am hoping the cell provider is as concerned about RF safety
>as I am. I have been very careful with my own station to safeguard the
>health of my family and neighbors by staying well below the MPE guidelines.
>
>Also, I operate primarily on HF using a multiband vertical and G5RV. What
>are the chances that a cell tower that close to my station will cause
>harmful interference?
>
>Thanks for any insights.
>
>73 de KB1FLR, Rick
>
>

3173. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 15:58:47 UTC
From: Glenn <ggrrhh@hotmail.com>
Message-ID: <Z8Ra8.157$Qo6.136220@newsfeed.slurp.net>
Source record: 148711
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In article <3OOa8.639$Or3.125369@typhoon.mn.ipsvc.net>,
pfriedman8426@attbi.com says...

> I'm not sure why you think it necessary to cast aspersions on this
> organization. (No, I am not a member; yes, I have participated in their nets
> on occasion).

Not sure. Read their past posts. These are the spawn of the no-code/dx
clusters are the death of Ham Radio group. It is fun to watch them
whine and cry at every advancement or change in the hobby.

Glenn

3174. CC&R's - If the South had won The War ....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 16:05:50 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C6BE05E.1419F46E@crosslink.net>
Source record: 148713

<http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+15.2-2293.1>

Virginia code ï¿½ 15.2-2293.1. Placement of amateur radio antennas.

Any ordinance involving the placement, screening or height of antennas shall reasonably accommodate amateur radio antennas and shall impose the minimum regulation necessary to accomplish the locality's legitimate purpose. In localities having a population density of 120 persons or less per square mile according to the 1990 United States census, no local ordinance shall
(i) restrict amateur radio antenna height to less than 200 feet above ground level as permitted by the Federal Communications Commission or
(ii) restrict the number of support structures. In localities having a population density of more than 120 persons per square mile according to the 1990 United States census, no local ordinance shall (i) restrict amateur radio antenna height to less than 75 feet above ground level or
(ii) restrict the number of support structures. Reasonable and customary engineering practices shall be followed in the erection of amateur radio antennas. This section shall not preclude any locality, by ordinance, from regulating amateur radio antennas with regard to reasonable requirements relating to the use of screening, setback, placement, and health and safety requirements.

3175. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 16:07:19 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C6BE0AC.12544B47@icok.net>
Source record: 148712

Rick,
The problem with PVC isn't it's rigidity, but it's
suceptibility to distortion from heat. If you try to
run more power than your antenna can handle, it's usually
converted to heat which tends to do 'bad' things to PVC.
The hot wire windings melt into the PVC causing the windings
to loosen, maybe start slip/slidding on the coil form and
nothing good comes of that. In real drastic situation, the
coil turns into an inverted "L"...
'Doc
PS - No fair counting spelling.

3176. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 16:44:51 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C6BE983.4EF27205@yahoo.com>
Source record: 148714

'Doc wrote:
>
> Rick,
> The problem with PVC isn't it's rigidity, but it's
> suceptibility to distortion from heat. If you try to
> run more power than your antenna can handle, it's usually
> converted to heat which tends to do 'bad' things to PVC.
> The hot wire windings melt into the PVC causing the windings
> to loosen, maybe start slip/slidding on the coil form and
> nothing good comes of that. In real drastic situation, the
> coil turns into an inverted "L"...
> 'Doc
> PS - No fair counting spelling.

Thanks Doc,
Well Im only going to run Barefoot 100W max so I guess that will be ok
for PVC. Im not sure what is best, but PVC is good for us Common Folk.

3177. Re: RFI from AC line

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 17:05:08 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c6bf1c3_1@news1.prserv.net>
Source record: 148715
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

The only things that are noisy are devices with semiconductor power controls; UPS, SCR controlled light switches and the like. Since most RFI is radiated and picked up by an antenna, your approach is costly but ineffective, unless you bury it all including the primary out to where it is no longer within line of sight of the tallest antenna you plan to install. Just out of curiosity, what, besides your radio do you consider quiet?

Induction motors are one of the quietest loads found as far as RFI is concerned unless it is equipped with an adjustable speed drive (ASD) whereupon it becomes among the noisiest and hardest to cure. The water heater and range are silent, UNLESS they use semiconductor power control. Even universal motors are getting quieter these days, and can be easily quieted with a couple of capacitors on the brushes. What else?

--
Crazy George
Remove NO and SPAM from return address
Stan Huntting <ng@huntting.com> wrote in message
news:NVQa8.7096$qt6.626299@newsread2.prod.itd.earthlink.net...
> I'm building a new home and trying very hard to make it a low RFI
> environment. I'm high in the mountains with few neighbors. I'm the
> electrician.
>
> I have dual 200 amp AC services, all the way from the pole: one for
"dirty"
> loads (mostly things with electric motors and other inductive loads) and
one
> for "clean" (the radios) loads. I am filling up the "dirty" load panel
> faster than the "clean" load panel and I am looking for loads that I might
> move to the clean load panel.
>
> Two possible candidates are the electric hot water heater (conventional
> Rheem 50 gallon with dual 4500 watt elements) and the electric range (GE
> Profile, smoothtop, conventional oven - NO convection). How noisy are
these?
> --
> Stan, KW7KW
> ng@huntting.com
>
>

3178. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 17:18:24 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C6BF160.3F1E2A79@crosslink.net>
Source record: 148718
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Glenn wrote:
>
> In article <3OOa8.639$Or3.125369@typhoon.mn.ipsvc.net>,
> pfriedman8426@attbi.com says...
>
> > I'm not sure why you think it necessary to cast aspersions on this
> > organization. .....
>
> Not sure. Read their past posts. These are the spawn of the no-code/dx
> clusters are the death of Ham Radio group. It is fun to watch them
> whine and cry at every advancement or change in the hobby.
>
> Glenn

.... and never attribute to malice that which can be explained by
ignorance :o)
73 KA3DWW

3179. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 17:20:12 UTC
From: Bill Aycock <baycock@hiwaay.net>
Message-ID: <3C6BF1CC.8B9F1D07@hiwaay.net>
Source record: 148717
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Walt- Thank you!! I missed that gem on the first reading, and I can
usually spot a bad spelling a mile off. May I roll with you?
Bill-W4BSG

Walt Davidson wrote:

>
> ROTFLMAO!!!!
>
> It's an adventure holiday.
>
> 73 de G3NYY
>
> P.S. "depravation"? That too? Tee hee!"
>
> Walt Davidson Email: g3nyy @freeuk.com

3180. Re: Dual band single coax 2m/70cm base antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 17:27:09 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C6BF36D.DB93FA77@crosslink.net>
Source record: 148621

"R. Scott" wrote:
>

> ... IS there a small beam design that is a single coax
> feed dual band 3 or 4 elem.

I have one in my garage .... Cushcraft as I recall. It's basically two yagis sharing the boom with a printed-circuit directing each band to the appropriate radiator. There otta be a better way ...
73 KA3DWW

3181. Re: Kenwood Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 17:28:46 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6bf3ce$1@news.bnb-lp.com>
Source record: 148619
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Murray,
Here is a URL that lists - low - average - and high - winning bids off
eBAY for TS-530s
http://www.aade.com/hampedia/prices2.htm

Low Avg High
TS-530S $250.00 $334.38 $480.00

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3182. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 17:30:22 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <OuSa8.6237$Nf3.374165@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148620

"Richard Myers" <rkmyers@mediaone.net> wrote in message
news:yNwa8.819$TU4.523958@typhoon.ne.ipsvc.net...
> Hi All,
>
> The local cell provider has just proposed putting a 150' cell tower behind
> my house. This would put the tower base at about 75 yards from my house.
> What are the MPE limits for cell frequencies? I know that at Microwave
> frequencies possible damage to eyesight is possible if MPE limits are
> exceeded, so I am hoping the cell provider is as concerned about RF safety
> as I am. I have been very careful with my own station to safeguard the
> health of my family and neighbors by staying well below the MPE
guidelines.
>

The MPE limit for frequencies of 30 - 1500 MHz is f/1500 mW/cm^2. This is based on the ANSI/IEEE C95.1-1992 standard - General Public Exposure. For AMPS band cellular, this translates into an MPE limit of about 0.6 mW/cm^2. This translates to 6 W/m^2.

To really answer your concerns on power level emissions from the cell site, you need to find out how much power is being transmitted and what the antenna gain is.

The maximum transmit power used in a cell system is about 500 W. However, it is very unlikely that the tower near your house transmits at this power level. The actual transmit power level will vary depending on whether the cell service is in the 824-896 MHz band (AMPS) or the 1850-1990 MHz band (PCS). The transmit power level will also vary depending on whether it is an analog system or a digital system. It will also vary depending on the range they intend to cover.

The antennas used in cell sites may have a gain up to 15+ dBi. At a maximum power of 500 W, a 15 dBi antenna will increase the effective radiated power to about 16 KW. Cell sites would not likely use a maximum gain antenna at maximum transmit power. 16 KW effective radiated power is an extreme unlikely estimate. I think an environmental evaluation is required by the FCC is the ERP exceeds 1 KW.

At your distance of 75 yards, 500 W power into an isotropic antenna with 0 dB gain results in a power density of approximately 8.5 mW/m^2 (AMPS band). With the 15 dBi gain antenna this will increase to about 0.3 W/m^2. Well below the 6 W/m^2 limit.

The other factor to consider is that the main beam of the transmit antenna will be pointing well beyond your house. The signal at your house might be down about 20 dB from that of the main beam. This will reduce the power

density down to about 2.8 mW/m^2. It will decrease from here with lower antenna gain and less total transmit power.

Steve

3183. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 17:30:41 UTC
From: Glenn <ggrrhh@hotmail.com>
Message-ID: <avSa8.27$MF6.17435@newsfeed.slurp.net>
Source record: 148622
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In article <3C6BF160.3F1E2A79@crosslink.net>, vito@crosslink.net
says...
> Glenn wrote:
> >
> > In article <3OOa8.639$Or3.125369@typhoon.mn.ipsvc.net>,
> > pfriedman8426@attbi.com says...
> >
> > > I'm not sure why you think it necessary to cast aspersions on this
> > > organization. .....
> >
> > Not sure. Read their past posts. These are the spawn of the no-code/dx
> > clusters are the death of Ham Radio group. It is fun to watch them
> > whine and cry at every advancement or change in the hobby.
> >
> > Glenn
>
> .... and never attribute to malice that which can be explained by
> ignorance :o)
> 73 KA3DWW
>

Thanks for the correction!

Glenn KB7PKC

3184. Re: 3905 club

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 17:47:57 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6bf84d$1@news.bnb-lp.com>
Source record: 148623
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Walt,
You'll have to excuse Derek - AA5BT..he thinks he's a comedian....

Here is the website URL for the 3905 Century Club...
http://www.3905ccn.com/

This should be a good starting point to find out more about
them.....maybe see you on the bands one of these days.....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3185. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 17:51:46 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u6nu8i2ok5lp59@corp.supernews.com>
Source record: 148624

> And Hams make fun of the misinformation believed by CBers. Maybe they
> should come here for a while - to stock up on a bit more.
>

Ain't that the truth. And all the poor bastard wanted to know was how to
ram an antenna up the stovepipe {;-)

Jim

3186. Re: antenna *in* chimney?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 18:13:06 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <07qn6u0v76he9iigs63r0g0qkf68it3980@4ax.com>
Source record: 148625

On Wed, 13 Feb 2002 21:59:22 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>What's really important is understanding what's going on. I've found a
>great deal of misunderstanding about SWR, impedance, and transmission
>lines everywhere I go -- in technical talks I give, in questions I'm
>asked by EZNEC users, and in this newsgroup. Certainly there are
>standing waves on an antenna (except traveling wave antennas). But
>calculating a "standing wave ratio" is meaningless. Pick a Yagi, log
>periodic, or phased vertical array of your choice, and tell me what its
>"SWR" is, what it means, and what it's good for. Telling people that
>antennas have an SWR is, I feel, misleading and a cause of confusion.
>
>And surely, Richard, with your exemplary education in the fine arts, you
>don't have to stoop to plagarizing Reg's "Old Wives" tale (singular or
>plural) invective as the best way to make a point. That's something you
>should only need to use when you can't produce any rational evidence
>that someone else's point of view is incorrect.

As others have noted (in fan e-mail), my invective is not the one note
song of Punchinello's invention - hence plagiarism is hardly
applicable.
;-)

At worst it could be called boring through repetition, and in that
manner it is very plagiaristic - if it didn't have some entertainment
value (again, missing from the original).

In fact it is a very common device of irony, so common that, again,
plagiarism is not a factor (and has been upheld as an accepted
practice by the courts).

I may take your comments to mean that I should invent a new attack?
Nothing succeeds like holding up a mirror. As a practiced writer I
choose styles that are consistent (meaning the revelation of clowning
needs to be done with clowning - however this has to be done without
falling into the classic trap of the "fallacy of imitative form"
something no one has challenged me with). The way to bell the cat of
fractal antennas was to overwhelm the ersatz science with real
science. When push came to shove, the arguments of the ersatz science
collapsed in their reflection.

>
>From an electromagnetic field standpoint there's no difference but
>boundary conditions that divide a transmission line, antenna, the ether
>(or aether if you prefer), and the circuit at the other end of the line.

>Yet as an engineer I find it very convenient to establish boundaries
>between the various components and apply different analysis techniques
>to each. (And I'm not alone in this.) Although all these analyses have
>Maxwell's equations at their roots, each is simplified in a different
>way to make the problem easier to solve and, to my mind, easier to
>understand.
>
>I'd appreciate a single reference in any textbook or professional paper
>in which the SWR of an antenna is calculated and used for anything
>meaningful.
>
>Roy Lewallen, W7EL
>

Hi Roy,

A single reference? I would say that EVERY reference makes use of the SWR in illustration, so much so that asking amounts to being blind to the forest because of the trees.

Is it meaningful? How is it that it is meaningful on one side of a connector, but not the other? The simple answer is there is more metal mass on one side than the other. That is the difference between a long 20 gauge feed wire(s) compared to short, quarter inch thick fed elements. This is not a technical rebuttal so much as an accident of design.

Appealing to
>antennas have an SWR is, I feel, misleading and a cause of confusion.
is a matter called projection. To faithfully avoid any discussion in anticipation of other's confusion would silence the newsgroups in a microsecond. One such example of confusion is the contradiction of statements that follow from the attempt to dumb down the topic.

Compare earlier
>Bob is right -- an antenna can't have an SWR
with that above
>Certainly there are standing waves on an antenna
now brings into confusion: what is a standing wave?
The simple answer: it is what is was and always has been.

I can understand your hesitancy to discuss the mechanics of the antenna as transmission line, you have complained of this about me in the past. I am not confused on this topic. Wrong perhaps, and by your choice this would be an error that would not go resolved through discussion for fear of the possibility of confusion? I fail to see what "confusion" has to do with it - except for the respondent.

This is trivial perhaps, I would allow that as a criticism (and I think that is the gist of your response). However, to dismiss this also dismisses other discussion that relates, and is in fact another of Punchinello's favorite gadflies: that the antenna radiates from the

entirety of its structure. I agree.

The common discussion here is that it only occurs at Current Maxima. That serves much discussion, certainly, but it hides the important fact that all such analysis is ultimately derived from ray-tracing from the entire structure, and is not the simplistic one-note song of nodes. Given this bias of thought, it becomes even more confusing (another irony) when the discussion of how elements of a beam contribute to the construction of the radiation lobe (one of the least discussed issues here). To ignore the components of the standing wave in the radiating structure is one thing, to expect they not be considered out of fear of confusion is another. Ignoring such considerations serves a lot of answers faithfully. Expecting a moratorium of discussion snaps the rug from under that faith.

73's
Richard Clark, KB7QHC

3187. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 18:30:41 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <jnTa8.552$t8.387505@paloalto-snr1.gtei.net>
Source record: 148626

What Doc sez is true - about a month ago I ruined a screwdriver that had a PVC coil form while
running at the 500 watt level on 40 meters. 100 watts will undoubtedly present less heat, but if you
are going to use that type of material, use the grey stuff with a thic a wall thickness as you can
find - it's commonly use for electrical conduit, and is lots more resistant to heat distortion...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"R. Scott" <kf7qz@yahoo.com> wrote in message news:3C6BE983.4EF27205@yahoo.com...
> 'Doc wrote:
> >
> > Rick,
> > The problem with PVC isn't it's rigidity, but it's
> > suceptibility to distortion from heat. If you try to
> > run more power than your antenna can handle, it's usually
> > converted to heat which tends to do 'bad' things to PVC.
> > The hot wire windings melt into the PVC causing the windings
> > to loosen, maybe start slip/slidding on the coil form and
> > nothing good comes of that. In real drastic situation, the
> > coil turns into an inverted "L"...
> > 'Doc
> > PS - No fair counting spelling.
>
> Thanks Doc,
> Well Im only going to run Barefoot 100W max so I guess that will be ok
> for PVC. Im not sure what is best, but PVC is good for us Common Folk.

3188. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 18:37:07 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <r30o6us5qfu794od6oukl4473s01plns8h@4ax.com>
Source record: 148627
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Wed, 13 Feb 2002 21:07:53 -0700, "Charles Johnston"
<ctj92@cableone.net> wrote:

>
> Now before you start with how any system can be "tricked" or cards and
>licenses could be "faked" also recognize that most honest-hearted Ham's
>have no interest in ill-gotten "awards". Honesty and integrity cannot
>be legislated or enforced on anyone. Doing the right thing will always
>be optional.
>

Hi Charles,

I find this a curious form of touting advances in e-anything only to
reveal the ignorance of e-security. In other words, if it is such a
good idea, why wasn't it fully thought through?

The issue of faking anything is resolved through electronic
signatures, not photocopies of licenses. Honesty and integrity need
not be tested when solutions are available to answer that now.

The ARRL is hardly the bastion of new concepts. It is obvious that if
they were, they would be the repository for Digital Certificates in
this matter and others. Instead of being ahead of the curve, they
fall far behind the electronic signature bill signed by Clinton (this
serves to illustrate the severe time lag - nigh on to two years).
Unfortunately this also illustrates the gerontocracy that seems to
have ossified the organization.

73's
Richard Clark, KB7QHC

3189. Re: ARES (was Re: PROOF THAT ILLEGAL ...)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 18:46:47 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <ib1o6ucprnj4sut224phlokltt9ehtv1k0@4ax.com>
Source record: 148628

On Thu, 14 Feb 2002 08:32:21 -0500, Vito <vito@crosslink.net> wrote:

>Somebody wrote:
>> > One government/military program ("newer technology") is called JTRS (Joint
>> > Tactical Radio System - 'jitters') **.
>> >
>> > S'posed to be able to replace almost all other government/military radios...
>
>Yes, but not all of us have, or even want new technology. For example,
>our Navy has had radar/computer systems capable of automatically landing
>planes on pitching decks for more than 20 years, but the FAA still has
>to shut down airports for fog. It follows that DOD's Joint Warfare folks
>will have the "jitters" decades before local emergency management and
>police and even then some hams will still be sending Morse ;o).
>73 KA3DWW

Hi OM,

Obviously you have not flown into fog drenched SeaTac (Seattle-Tacoma)
on United. SeaTac IS shut down to other airlines who haven't ponied
up the money for new equipment.

The services are there. Expect to enjoy them once the lagging
airlines find a way to call for welfare relief over this "security
issue."

73's
Richard Clark, KB7QHC

3190. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 18:47:06 UTC
From: Walt Davidson <walt99@tiscali.co.uk>
Message-ID: <8lvn6ugrajs2re9ftqg04dfql5fdbmpdnc@4ax.com>
Source record: 148629
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Thu, 14 Feb 2002 13:17:51 GMT, "paul friedman"
<pfriedman8426@attbi.com> wrote:

>I'm not sure why you think it necessary to cast aspersions on this
>organization.

I believe the answer to that question is contained in the preceding
message.

73 de G3NYY

--
Walt Davidson Email: g3nyy @freeuk.com

3191. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 18:47:08 UTC
From: Walt Davidson <walt99@tiscali.co.uk>
Message-ID: <d10o6u8ta6s0d68dks2m5dfc9tf09u856d@4ax.com>
Source record: 148630
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Thu, 14 Feb 2002 14:01:04 GMT, kh2d@my-deja.com (Jim Kehler) wrote:

>The 'deserving'. Dead give away..... Paid Vacation with big ego rush
>workin' the pileups and being Da Man for a week........
>
>If it's so friggin' puckin' awful terrible, then why in the HELL are
>you going ?
>
>73, Jim KH2D

This is getting pretty serious, Jim .... you and I seem to be in total agreement about something - yet again! :-)))

73 de W6/G3NYY (San Diego)

--
Walt Davidson Email: g3nyy @freeuk.com

3192. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 18:47:59 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6c0660$1@news.bnb-lp.com>
Source record: 148631
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Richard,
How much "security" is really needed for a "hobby awards" program anyway? The eQSL Authenticity Guarantee is quite adequate security for the job of administering "hobby awards"

After all what would - your - damages be if someone cheated their way to DXCC Honor Roll? It sure wouldn't affect my DX credentials..how about yours?

Any and all security measures of any kind can and usually do get reverse-engineered or circumvented in some way. Just look at the software industries decades-long battle with piracy. No more than do they have a new protection scheme than 2 days later the "crack" for it is posted world-wide on the internet.

eQSL security is just right for "hobby awards" and believe me folks...Ham Radio Awards - and - DX are just hobbies....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3193. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:02:37 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <xRTa8.49264$TI5.2626779@e3500-atl2.usenetserver.com>
Source record: 148632

See below.
Gary - KJ6Q <davison7@gte.net> wrote in message
news:jnTa8.552$t8.387505@paloalto-snr1.gtei.net...
> What Doc sez is true - about a month ago I ruined a screwdriver that had a
PVC coil form while
> running at the 500 watt level on 40 meters. 100 watts will undoubtedly
present less heat, but if you
> are going to use that type of material, use the grey stuff with a thic a
wall thickness as you can
> find - it's commonly use for electrical conduit, and is lots more
resistant to heat distortion...

BUT! It's composition is different and, I understand, contains some
metallic properties that does wierd stuff to a loading coil! I was made to
understand that this stuff is a no-no.
>
> --
> Gary - KJ6Q
> **********
> Two things we'll never see:
> 1. Perpetual motion...
> 2. A liberal Democrat complaining
> about "Too much government"
> "R. Scott" <kf7qz@yahoo.com> wrote in message
news:3C6BE983.4EF27205@yahoo.com...
> > 'Doc wrote:
> > >
> > > Rick,
> > > The problem with PVC isn't it's rigidity, but it's
> > > suceptibility to distortion from heat. If you try to
> > > run more power than your antenna can handle, it's usually
> > > converted to heat which tends to do 'bad' things to PVC.
> > > The hot wire windings melt into the PVC causing the windings
> > > to loosen, maybe start slip/slidding on the coil form and
> > > nothing good comes of that. In real drastic situation, the
> > > coil turns into an inverted "L"...
> > > 'Doc
> > > PS - No fair counting spelling.
> >
> > Thanks Doc,
> > Well Im only going to run Barefoot 100W max so I guess that will be ok
> > for PVC. Im not sure what is best, but PVC is good for us Common Folk.
>

3194. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:04:15 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <2TTa8.49284$TI5.2627343@e3500-atl2.usenetserver.com>
Source record: 148633

Try black Nylon (Nylok). It is extremely rigid, resistant to UV rays, and
RF neutral.

Jerry

www.qsl.net/k4kwh

R. Scott <kf7qz@yahoo.com> wrote in message
news:3C6BD596.8D9DF11E@yahoo.com...
> Besides PVC. Ive seen phonelic (SP) on some designes and plastic on
> some others. Friend of mine is going to cut the coil form for me and he
> thinks PVC wouldnt be a good choice so he is requesting somthing more
> rigid.
>
> Ideas.
>
> Thanks in advance
>
> Rick KF7QZ

3195. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:07:35 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <b42o6u8lldrpl5i4t5fcebo1q1ak7taq2g@4ax.com>
Source record: 148634

On Thu, 14 Feb 2002 17:30:22 GMT, "VE9SRB" <srbest@att.net> wrote:

>
>At your distance of 75 yards, 500 W power into an isotropic antenna with 0
>dB gain results in a power density of approximately 8.5 mW/m^2 (AMPS band).
>With the 15 dBi gain antenna this will increase to about 0.3 W/m^2. Well
>below the 6 W/m^2 limit.
>

Hi Steve,

It would serve all to consider another form of well specified
radiation.

The noon day sun, at the equator, on the equinox, illuminates a square
meter with roughly 1KW of radiation. Your numbers reveal exposure
nearly 5 orders of magnitude below what would be acceptable to any
Caribbean vacationer. A one week cruise (with only one hour's
exposure each day) would equate to roughly 100 years of constant cell
phone transmission exposure. There won't even be tan lines to worry
about, much less a sarcoma.

73's
Richard Clark, KB7QHC

3196. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:09:30 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <tAhsPCgsdovmYEtdrh+PGokNVaBI@4ax.com>
Source record: 148635

"Richard Myers" <rkmyers@mediaone.net> wrote:

>Hi All,
>
>The local cell provider has just proposed putting a 150' cell tower behind
>my house. This would put the tower base at about 75 yards from my house.
>What are the MPE limits for cell frequencies? I know that at Microwave
>frequencies possible damage to eyesight is possible if MPE limits are
>exceeded, so I am hoping the cell provider is as concerned about RF safety
>as I am. I have been very careful with my own station to safeguard the
>health of my family and neighbors by staying well below the MPE guidelines.
>
>Also, I operate primarily on HF using a multiband vertical and G5RV. What
>are the chances that a cell tower that close to my station will cause
>harmful interference?

There was an article in the Houston paper a couple of years ago about a family
that was terrified of the cell tower that had been placed in their neighborhood.
According to the phone company, the transmitter was at the 25 watt level. Don't
know if all cell towers transmit at that level, but you probably have more to
fear from your vertical and g5rv.

Bob
k5qwg

>
>Thanks for any insights.
>
>73 de KB1FLR, Rick
>

3197. Re: Another eQSL acceptance victory....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:14:24 UTC
From: Glenn <ggrrhh@hotmail.com>
Message-ID: <u0Ua8.79$MF6.53475@newsfeed.slurp.net>
Source record: 148636
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In article <8lvn6ugrajs2re9ftqg04dfql5fdbmpdnc@4ax.com>,
walt99@tiscali.co.uk says...
> On Thu, 14 Feb 2002 13:17:51 GMT, "paul friedman"
> <pfriedman8426@attbi.com> wrote:
>
> >I'm not sure why you think it necessary to cast aspersions on this
> >organization.
>
> I believe the answer to that question is contained in the preceding
> message.

Walt is correct, Vito nailed it with ".... and never attribute to
malice that which can be explained by ignorance :o)"

Glenn

3198. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:18:06 UTC
From: Joe <joe@joe.com>
Message-ID: <O3Ua8.4680$Nv5.379166@bgtnsc05-news.ops.worldnet.att.net>
Source record: 148637

"Richard Clark" <kb7qhc@attbi.com> wrote in message
news:b42o6u8lldrpl5i4t5fcebo1q1ak7taq2g@4ax.com...

> Hi Steve,
>
> It would serve all to consider another form of well specified
> radiation.
>
> The noon day sun, at the equator, on the equinox, illuminates a square
> meter with roughly 1KW of radiation. Your numbers reveal exposure
> nearly 5 orders of magnitude below what would be acceptable to any
> Caribbean vacationer. A one week cruise (with only one hour's
> exposure each day) would equate to roughly 100 years of constant cell
> phone transmission exposure. There won't even be tan lines to worry
> about, much less a sarcoma.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,

Good point.

Its funny how people perceive things they don't understand. Most people would be amazed as to the level of RF that surrounds them from countless sources - not that much of it is significant. We went through this in our town recently when one of the carriers wanted to put up a cell tower. People that panic about cell phone "radiation" gladly lie down on a bed at the local tanning salon and merrily shower themselves with daily doses of UV - gotta look good on that vacation.

Take care,

Steve

3199. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:39:48 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <312o6u8lur2k0gliuicjub9mq7biq878de@4ax.com>
Source record: 148638

On 14 Feb 2002 06:12:06 -0800, jim.bolinger@lintek.aeroflex.com (JLB) wrote:

>A microwave link would be of more concern, but again you would have to >be a few feet directly in front of the thing.

Actually, analysis of microwave parabolic reflectors shows you'd need somewhere around 50 watts of power going in to an 8' dish to reach ANSI limits anywhere in front of a radome.

I can tell you with good certainty that it's indeed rare to use that much energy on a terrestrial link. We have 15 mile paths with huge fade margins and a 10 MHz wide signal and we only use 250 mW.

The size of the dish is usually mandated by the need for narrow beam widths --not signal strength.

/* Begin Rant */

I had a hoot with those FCC regulations too. The place where I work had a few rooftops where antennas could be accessed by plant personnel and I had to show that there was no danger.

The one and only place were I could find a hazard was if someone climbed inside the radome of the dish and stared right in to the feed-horn. Nevertheless, when some roofers came through to do work on the building where our dish was mounted, they refused to work unless we could get the microwave station turned off.

We gave the project manager hell for agreeing to this without asking us first. We asked him: which is less safe? Exposure well below ANSI limits; or shutting down, police, fire, telemetry, and telephone traffic from that area? Anyhow, we shut the thing off for 30 minutes so these wankers could get the job done. But while it was shut down, one of our staff went to the roofing foreman and pointed in the distance to another dish. "See that?", he said. "That dish is pointed right at this one. This dish is off, but that one is still beaming you right now. You didn't ask us to turn it off, so it's still on. Have a nice day!"

Even to this day, we still have bogus warning signs near our dishes to warn away the unwashed idiots who make policy all over this. There is no use explaining what ANSI limits are all about or what the term Non-ionizing means. Ignorance and stupidity are the ruling factors here.

/* End Rant */

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

3200. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:43:15 UTC
From: peter@strg-alt-entf.org
Message-ID: <a4h40j$8klr$1@ID-31.news.dfncis.de>
Source record: 148639
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.dx Charles Johnston <ctj92@cableone.net> wrote:
> Hello Richard,
> How much "security" is really needed for a "hobby awards" program
> anyway? The eQSL Authenticity Guarantee is quite adequate security for
> the job of administering "hobby awards"

I always thought CB was the fun hobby.

Peter Lemken
DF5JT
Berlin

--
Yes, it works!

3201. Re: RFI from AC line

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:51:16 UTC
From: Leaf <4leaf@prosensing.com>
Message-ID: <u6o59l6vbf4fa5@corp.supernews.com>
Source record: 148640
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Hi Stan,

I hope you are not using Romex wire. Throw it all away and go with MC wiring. The galvanized steel jacket is best but the aluminum is a close second for shielding. Romex wire acts as a giant antenna for noise any and all. Usually the wire is long enough to pick up nearby lightning strikes and send that energy into all of your household items that are plugged in. The MC wire that is galvanized steel works well against magnetically induced noise (H field) as well as electrically induced noise (E field). The less expensive wire which is aluminum MC is only effective against electrically induced noise. Two panels is a complete waste of time and money. Put your time and money into using the right materials and an effective grounding system. More noise from switching and motors is the result of a bad or poor ground. Make sure you use a lightning protector at the main panel and Triplite noise/surge protectors at every electronic device in the house. You will not have any noise problems or lightning issues. Remember to use only shielded wire for everything in the house. This includes heating system low voltage wire, phone lines, RG6 for cable TV, door bell wires, and last but not least the garage door opener sensors and button wires. If you forget anyone of them, noise and lightning will remind you soon enough on a mountain.

Good luck,
Frank (N1SIF)
"Stan Huntting" <ng@huntting.com> wrote in message
news:NVQa8.7096$qt6.626299@newsread2.prod.itd.earthlink.net...
> I'm building a new home and trying very hard to make it a low RFI
> environment. I'm high in the mountains with few neighbors. I'm the
> electrician.
>
> I have dual 200 amp AC services, all the way from the pole: one for
"dirty"
> loads (mostly things with electric motors and other inductive loads) and
one
> for "clean" (the radios) loads. I am filling up the "dirty" load panel
> faster than the "clean" load panel and I am looking for loads that I might
> move to the clean load panel.
>
> Two possible candidates are the electric hot water heater (conventional
> Rheem 50 gallon with dual 4500 watt elements) and the electric range (GE
> Profile, smoothtop, conventional oven - NO convection). How noisy are
these?
> --
> Stan, KW7KW

> ng@huntting.com
>
>

3202. Re: Kenwood Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:51:20 UTC
From: peter@strg-alt-entf.org
Message-ID: <a4h4fn$8klr$2@ID-31.news.dfncis.de>
Source record: 148641
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.dx Charles Johnston <ctj92@cableone.net> wrote:
^^^^^^^^^^^^^^^^^^^^

Not only there, but also in *yet* *again* other newsgroups. Your
crossposting manners are about the worst I have ever seen. With missing
references in the headers of your message the crossposts come from *you*
only.

Moron.

Peter Lemken
DF5JT
Berlin

F'up trimmed accordingly
--
Yes, it works!

3203. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:53:46 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202141153.11aab3c4@posting.google.com>
Source record: 148642

n5kzw@arrl.net (Ed Bailen) wrote in message news:<3c6bdb13.62038550@news.ev1.net>...
> Unless you are in a rural setting, the cell phone xmitters are running
> a pretty low power to avoid interfering with other, non-adjacent,
> cells.
>
> You may, however, experience difficulties when the cell tower takes a
> lightning hit. My nephew lives across the street from a 400' radio
> tower and he frequently loses his ISDN router when the tower takes a
> hit. (Yes, he has a whole-house surge suppressor and point-of-use
> surge suppressors.)
>
> 73,
> Ed

Thats what I was thinking. The main impact to him will be he will have a new lightning rod across the street. I have one about 3 blocks away. It takes hits fairly often. Your nephew shouldn't be having problems though. He's doing something wrong with his wiring/ suppression scheme to keep having repeat damage from a strike that is across the street. He shouldn't be having any problems unless the cell site is not protecting their power or phone lines. And this is sort of unlikely or they would go offline with every strike. "I have to assume it's coming in on the power or phone lines as a surge"?? He should be able to protect his gear from that. Sounds like he may not be using a single point "star" grounding system. One reason this doesn't really seem right to me, is I've taken hits on MY mast 15 feet from where I'm now sitting, and never had any trouble like that. He shouldn't be having trouble with one across the street. Also, it's quite likely the cell tower is a good conductor to ground, so most of the strike should be going to ground at the cell tower. There should not be much energy left to cause all that damage elsewhere. Somethings not right somewhere...And I bet it's at your nephews house with his grounding/suppressor setup. MK

3204. Re: Kenwood Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 19:56:34 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6c1676$1@news.bnb-lp.com>
Source record: 148643
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Peter,
Please for crying out loud man....
take a f**king valium.....

..sorry this message won't make it to alt.hackers.malicious....nice
try...

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3205. Re: CC&R's - If the South had won The War ....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 20:02:13 UTC
From: Screaming Skull <KG4IVT@hot.mail.spicedmeat.sucks.leave.me.alone.com>
Message-ID: <9JUa8.140190$a07.40056490@typhoon.southeast.rr.com>
Source record: 148644

Whoa, I've never read that.....

Is there an English translation of this?

KG4IVT
Great Falls, Va.
"Vito" <vito@crosslink.net> wrote in message
news:3C6BE05E.1419F46E@crosslink.net...
> <http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+15.2-2293.1>
>
> Virginia code 15.2-2293.1. Placement of amateur radio antennas.
>
> Any ordinance involving the placement, screening or height of antennas
> shall reasonably accommodate amateur radio antennas and shall impose the
> minimum regulation necessary to accomplish the locality's legitimate
> purpose. In localities having a population density of 120 persons or
> less per square mile according to the 1990 United States census, no
> local ordinance shall
> (i) restrict amateur radio antenna height to less than 200 feet above
> ground level as permitted by the Federal Communications Commission or
> (ii) restrict the number of support structures. In localities having a
> population density of more than 120 persons per square mile according to
> the 1990 United States census, no local ordinance shall (i) restrict
> amateur radio antenna height to less than 75 feet above ground level or
> (ii) restrict the number of support structures. Reasonable and customary
> engineering practices shall be followed in the erection of amateur radio
> antennas. This section shall not preclude any locality, by ordinance,
> from regulating amateur radio antennas with regard to reasonable
> requirements relating to the use of screening, setback, placement, and
> health and safety requirements.

3206. Re: RFI from AC line

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 20:07:28 UTC
From: Bill <n8xv@yahoo.com>
Message-ID: <3C6C1900.6F95140B@yahoo.com>
Source record: 148716
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

I put in a single 350 amp feed underground to service panel when we build 13 years ago. From the service panel I feed 100 amps underground to my barn. Even arc welding in the barn or use of other high wattage items in the barn cause no voltage drops of noise problems at the house. I wired any watt hungry items with the next largest gauge wire above recommend size (30 amp load I used 8 ga instead of 10). This got rid of any voltage drops when these items start. For the wiring that went to my radio room, I took a path that allowed me to stay as far away as possible from other general house wiring. Stay away from the high wattage wiring as most of these watt hungry items have thermostats that have point contacts for switching. For the 220 line to the radio room I used shielded entrance cable, splitting off 220 for the amp and 2 110 lines. I never get noise from any motors or heat elements. I do get a little noise from the microwave at times, the monitor for the computer here in the radio room is my biggest RFI producer.

Bill

Stan Huntting wrote:

> I'm building a new home and trying very hard to make it a low RFI
> environment. I'm high in the mountains with few neighbors. I'm the
> electrician.
>
> I have dual 200 amp AC services, all the way from the pole: one for "dirty"
> loads (mostly things with electric motors and other inductive loads) and one
> for "clean" (the radios) loads. I am filling up the "dirty" load panel
> faster than the "clean" load panel and I am looking for loads that I might
> move to the clean load panel.
>
> Two possible candidates are the electric hot water heater (conventional
> Rheem 50 gallon with dual 4500 watt elements) and the electric range (GE
> Profile, smoothtop, conventional oven - NO convection). How noisy are these?
> --
> Stan, KW7KW
> ng@huntting.com

3207. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 20:08:31 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <3PUa8.6549$Nf3.389348@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148645

"Joe" <joe@joe.com> wrote in message
news:O3Ua8.4680$Nv5.379166@bgtnsc05-news.ops.worldnet.att.net...

> Hi Richard,
>
> Good point.
>
> Its funny how people perceive things they don't understand. Most people
> would be amazed as to the level of RF that surrounds them from countless
> sources - not that much of it is significant. We went through this in our
> town recently when one of the carriers wanted to put up a cell tower.
> People that panic about cell phone "radiation" gladly lie down on a bed at
> the local tanning salon and merrily shower themselves with daily doses of
> UV - gotta look good on that vacation.
>
> Take care,
>
> Steve
>

Richard,

Sorry for the response as "Joe". I just "upgraded" to Outlook Express 6
this week and have been having some real problems. I set up another account
with a quick alias of "Joe" to check the downloads and forgot to set the
alias back to VE9SRB before responding. I'm having some major problems
downloading messages with this version. Oh well.

Take care,

Steve VE9SRB

3208. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 20:33:17 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C6C1F0D.8F47245F@yahoo.com>
Source record: 148647

Jerry Oxendine wrote:
>
> Try black Nylon (Nylok). It is extremely rigid, resistant to UV rays, and
> RF neutral.
>
> Jerry
>
> www.qsl.net/k4kwh

I havnt heard of that, but Ill ask my tooling friend. Finding
Fiberglass tubing is a Beaaach too.

I was trying for Phenolic and or fiberglass but here in the PNW there
doesnt seem to be a listing of this kind of material.

Off to search for Nylok

Rick KF7QZ

3209. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 20:35:20 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C6C1F88.1AC66143@yahoo.com>
Source record: 148646

> Try black Nylon (Nylok). It is extremely rigid, resistant to UV rays, and
> RF neutral.
>

Addendum, I meant I hadnt heard of Nylok tubing. I work at Boeing and
the term Nylok has a whole different connotation (Nylok fastners)

Rick KF7QZ

3210. Email from ARRL - President about eQSL's

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 21:24:12 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6c2afa$1@news.bnb-lp.com>
Source record: 148648
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello interested Hams...

I have had some interesting, courteous, and informative emails with the ARRL president Jim Haynie, W5JBP concerning the recent flap about eQSL acceptance for DXCC.

Jim was also nice enough to forward to me in-house ARRL email from Bill Moore to Jim which goes a long way to further explain the likelihood of eqSL cards being accepted for DXCC as eQSL web site now states. Jim has asked me not to include the actual verbatim email from Bill..but has encouraged me to post "just the facts as Bill has laid them out" (Jim's words to me) .... and so to the best of my abilities I'll do that now....if you want to skip ahead I can tell you it still looks like eQSL cards can be and will be accepted by the ARRL as long as some important steps are taken....

Here are cut and paste excerpts from Bill's email to Jim....
---
1. It seems people have not read the entire message, especially the part that says "acting as QSL manager". On his site I see where he has OK for sending e-QSLs, not paper QSLs.In
order for us to accept anything from him we would need a letter from each
station he "manages" authorizing this

2. Then, we'd need something better than his word that he is verifying logs each time a request comes in (something we do not think he will be willing to do with all the stations he has logs
for).

3. The requesting station must send information listing the specific QSL information then the
manager must check the log for it. I believe the term for not doing this is
pre-emptive QSLing.

4. As I have mentioned to all who have written, that ARRL has not changed its
policy in any way regarding electronic QSLs.

---
end of cut and paste.....
--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3211. Re: Two repeaters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 21:56:26 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <eoWa8.7498$SJ3.251120@news1.east.cox.net>
Source record: 148649

Because it will take more than the combiner with ferrite isolators to do the job. He still has to notch TX noise from TWO transmitters--that's at least 8 notch cavities on the transmitters-- just to protect the two receivers from TX noise. Add another 4 cavities on each RX port to notch the two TX signals. Getting kind of big...

Pete

"Adam T. Cately" <atcately@bright.net> wrote in message news:3C6BC72A.46E23417@bright.net...
> What's wrong with using a combiner?.. other than expense?
>
> n4dav wrote:
> >
> > I want to use two UHF repeaters on one antenna, spaced about 20 Mhz
> > apart. I know i need isolators, cavities, etc, but dont know exactly
> > what or how it's hooked up. Can anybody draw a picture or otherwise
> > help?
> >
> > thanks
> > n4dav
> >
> > -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> > http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> > -----== Over 80,000 Newsgroups - 16 Different Servers! =-----
>
> --
>
> - Adam -

3212. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 22:24:59 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <qixsxPD7kDb8EAW7@ifwtech.com>
Source record: 148652

VE9SRB wrote:
>
>The antennas used in cell sites may have a gain up to 15+ dBi. At a
>maximum power of 500 W, a 15 dBi antenna will increase the effective
>radiated power to about 16 KW. Cell sites would not likely use a
>maximum gain antenna at maximum transmit power. 16 KW effective
>radiated power is an extreme unlikely estimate. I think an
>environmental evaluation is required by the FCC is the ERP exceeds 1 KW.
>
Oh no, please not the "effective radiated power" fallacy again!

I hate to see RF engineers quoting ERP in connection with RF hazards,
because it produces misleading results, and generates big numbers that
only confuse and frighten people.

Remember that RF hazards are related to power DENSITY in watts PER
SQUARE METRE. If you feed 1 watt into an antenna with an aperture of say
1 square metre, the power density is 1W/sq m (assuming uniform
illumination, and neglecting near-field effects for the moment). If you
increase the aperture to 2 sq m, you increase the gain by a factor of 2
and you double the ERP - but you have HALVED the power density across
the aperture.

Near-field effects and non-uniform illumination may change the minor
details, but the big picture is that the larger the antenna, the SMALLER
is the power density for the same amount of power.

And no matter how high the antenna gain is, you still only have the same
amount of RF power you started with.

ERP is only about long-distance communication effectiveness - it has
NOTHING to do with RF hazards.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3213. Re: Kenwood Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 22:46:19 UTC
From: peter@strg-alt-entf.org
Message-ID: <a4henr$ci9d$1@ID-31.news.dfncis.de>
Source record: 148650
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.dx Charles Johnston <ctj92@cableone.net> wrote:
> Hello Peter,
> take a f**king valium.....

Right.

http://www.cableone.net/ctj92/faq.html

Peter Lemken
DF5JT
Berlin

--
Yes, it works!

3214. Re: Kenwood Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 22:57:36 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6c40e6$1@news.bnb-lp.com>
Source record: 148651
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Peter,
Hey...works for me! You know Peter, seriously as one Ham to another..if any aspect of this hobby is causing you stress as is clearly indicated in your continual use of sarcasm in your messages ..then you might want to consider simply dropping out of the hobby ....or at least take a vacation from the internet.
If anything causes stress in my life..hey...it is outta there!
Hope to catch you on the bands one of these days....and thanks for the frequent visits to my humble web site...I appreciate the patronage....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3215. OT: A Technical Curiosity?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-14 23:35:42 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C6C3BB8.499FB0A@shaw.ca>
Source record: 148653

As the clock ticks over from 8:01PM on Wednesday, February
20th, 2002,
time will (for sixty seconds only) read in perfect symmetry.
To be more
precise: 20:02, 20/02, 2002.

It is an event which has only ever happened once before, and
is
something
which will never be repeated. The last occasion that time
read in such a
symmetrical pattern was long before the days of the digital
watch (or
the
24-hour clock): 10:01AM, on January 10, 1001.

And because the clock only goes up to 23.59, it is something
that will
never
happen again.

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3216. Re: "Dogbone" insulators-Where can I find them?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 00:42:53 UTC
From: Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna6omd0.b12.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 148654

On Wed, 13 Feb 2002 22:18:00 -0600, Crazy George <munschNO@attglobal.net.SPAM> wrote:
> Just how much power do you intend to run? If the center of the dipole is 75
> ohms, and you feed a full kilowatt to it, the voltage across the insulator
> will be a gigantic 273 volts, just measurably higher than the 240 volts
> difference between the red and black wires in your electric power

Just higher than the RMS measure... Of course peak is much higher.

> connection. Of course, if you are lucky enough to have one of those 100 kW
> Collins 308U modules I have been looking for, then use a big insulator.

> Tom Nelson <nelsonca@stormnet.com> wrote in message
> news:3C69E7B1.47BE48D1@stormnet.com...
>> In fact, we have two horses and a very quiet electric fence! I have a pile
>> of the little black "egg" insulators but need the classic porcelain
> dogbone
>> for a high power dipole.

And considering the typical electric fence operates at 5000-10000
volts, how many kilowatts are you pumping thru that dipole?

I'd think the electric fence porcelain insulators to be good for
most amateur uses.

sdb
--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

3217. Re: 3905 club

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 00:48:59 UTC
From: Gary Danaher <gdanaher@attbi.com>
Message-ID: <3C6C5B29.DC244CD0@attbi.com>
Source record: 148655
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Everyone thinks that they have a sense of humor, even if they don't.

Charles Johnston wrote:

> Hello Walt,
> You'll have to excuse Derek - AA5BT..he thinks he's a comedian....
>
> Here is the website URL for the 3905 Century Club...
> http://www.3905ccn.com/
>
> This should be a good starting point to find out more about
> them.....maybe see you on the bands one of these days.....
>
> --
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com

3218. Re: OT: A Technical Curiosity?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:00:52 UTC
From: pete owen <nutmeg@w-link.net>
Message-ID: <3C6C5DC4.58F46458@w-link.net>
Source record: 148656

Hmmmmmm! Interesting, and I shall miss it! I'm flying to New Zealand on the 19th and, due to the date line, I will arrive in Auckland on the 21st having missed out on the 20th completely. Ah well.....win some lose some!

Regards to all you lucky ones,

Pete

Irv Finkleman wrote:

> As the clock ticks over from 8:01PM on Wednesday, February
> 20th, 2002,
> time will (for sixty seconds only) read in perfect symmetry.
> To be more
> precise: 20:02, 20/02, 2002.
>
> It is an event which has only ever happened once before, and
> is
> something
> which will never be repeated. The last occasion that time
> read in such a
> symmetrical pattern was long before the days of the digital
> watch (or
> the
> 24-hour clock): 10:01AM, on January 10, 1001.
>
> And because the clock only goes up to 23.59, it is something
> that will
> never
> happen again.
>
> --
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> --------------------
> Visit my website at http://members.home.net/finkirv/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

3219. Re: ARES (was Re: PROOF THAT ILLEGAL ...)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:13:53 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4hnch$k1m$5@quark.scn.rain.com>
Source record: 148657

Richard Clark <kb7qhc@attbi.com> wrote:

> Obviously you have not flown into fog drenched SeaTac (Seattle-Tacoma)
> on United. SeaTac IS shut down to other airlines who haven't ponied
> up the money for new equipment.

> The services are there. Expect to enjoy them once the lagging
> airlines find a way to call for welfare relief over this "security
> issue."

The service certainly is available. There are a number of airports in
Europe that are rated "zero-zero". Aircraft that are properly equipt
can land at those airports with zero visibility. This capability has
existed for many years.

The problem is getting the FAA to spend the money out of the massive
airport improvement fund to upgrade the major US airports. It would
also be necessary to get the aircraft upgraded and pilots certified
to land under such conditions.

--
Bill Nelson (billn@peak.org)

3220. Re: ATU problem, advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:19:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4ho1d$dl99$1@ID-124126.news.dfncis.de>
Source record: 148658

Will,

I don't recollect ever hearing the term "binding posts" mentioned on the air in the UK.

I remember it from American radio books (recreational, make your own radio receiver) prior to the 1950s and I guess most old timer Gs are familiar with the term.

Mantenance instructions handbooks which came with American radio and radar equipment 1942-45 used the term.

Over here they were known by the more mundane name "screw-terminals". 1920-40, all-brass, no insulation, intended to be bolted through ebonite panels. Baseboard and back-panel connections were made with square brass wire. All changes in wire direction were at the mandatory angle of 90 degrees. Havn't seen any for many a long year. If only I had kept a handfull!

Reg G4FGQ

>
> Is that not the common term in the UK? Come to think of it, it would be
> interesting to see a list of ham terms for the same things side by side,
US
> and UK (e.g., "hamfest" v. "rally"). Yes, radio jargon is among the most
> colorful, interesting, and dare I say truly descriptive, i.e. accuracy and
> clarity as opposed to the vagueness and obfuscation of some other fields
> ("sales engineer," "sanitation technician.").
>
> Will, KD7BFX
>
> Reg Edwards wrote:
>
> > Will, I just love your description "binding posts".
> >
> > What better ?
> >
> > Long may such phrases remain in the language of both hams and so-called
> > professionals.
> > ---
> > ****************************
> > Regards, Reg G4FGQ
> > Free Radio Modelling Software
> > Http://www.g4fgq.com
> > ****************************

>

3221. Re: OT: A Technical Curiosity?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:28:12 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <OuZa8.22067$NP4.3195374@news20.bellglobal.com>
Source record: 148659

"pete owen" reported:
> Hmmmmmm! Interesting, and I shall miss it! I'm flying to
> New Zealand on the 19th and, due to the date line, I will
> arrive in Auckland on the 21st having missed out on the
> 20th completely. Ah well.....win some lose some!

Christmas Day 1994 more or less never happened for me. I was on a Japan Airlines 747 heading West. To a fairly high degree of accuracy (based on the navigation screen that they show after the movies are done and having nothing better to do but pay attention to such nonsense) we hit the International Dateline at just about midnight on 24 December 1994.

Within the accuracy available to me at the time, it could have been bang on. It was certainly within a very few minutes.

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

PS: My Senru...
"As we chase the sun across the sky,
I must decide - coffee or green tea ?"

(A statement concerning the apparent invisibility of advanced technology.)

3222. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:31:33 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4hodl$k1m$6@quark.scn.rain.com>
Source record: 148660

Jake Brodsky <frussle@erols.com> wrote:

> I had a hoot with those FCC regulations too. The place where I work
> had a few rooftops where antennas could be accessed by plant personnel
> and I had to show that there was no danger.

Yep. I installed a 900 MHz trunked radio system for a business here in Oregon. There was a woman on the top floor of the building that was concerned about the exposure to RF, so the Environmental Health and Safety people got in touch with me to check it out. They brought their super expensive field strength equipment and we checked the signal intensity. They could not get any meter indication at all while standing on the roof of the building - and no indication inside the building. They could get an indication if they held the probe close to the antenna.

On the other hand, they checked the woman's cell phone, while she was using it. That gave a quite measurable reading - still so low that it is considered harmless, but orders of magnitude higher than what she was getting from the trunking system. I am glad we tested the phone, as that shut her up. Like a lot of people these days, hazard depends on how "important" something is - and having a cell phone against the side of your head for hours on end every day seems to be "important".

--
Bill Nelson (billn@peak.org)

3223. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:36:52 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4honk$k1m$7@quark.scn.rain.com>
Source record: 148661

n5kzw@arrl.net (Ed Bailen) wrote in message news:<3c6bdb13.62038550@news.ev1.net>...
>
> You may, however, experience difficulties when the cell tower takes a
> lightning hit. My nephew lives across the street from a 400' radio
> tower and he frequently loses his ISDN router when the tower takes a
> hit. (Yes, he has a whole-house surge suppressor and point-of-use
> surge suppressors.)

There must be something wrong with his suppressor installation.

If "point of use surge suppressors" are what I think they are, that is
most likely the problem. He needs the suppressor ground to be at the
same potential as the phone system ground and the house ground. This
is not accomplished by plugging a suppressor into the wall and then
plugging the router into the suppressor.

--
Bill Nelson (billn@peak.org)

3224. FS Discone Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:45:49 UTC
From: Lou <tech@dp.net>
Message-ID: <a4hpo5$25d0$1@news.dp.net>
Source record: 148664

For Sale:

Discone antenna. Was installed for a very brief period of time (couple days tops). Owner took it down to erect a vertical. All appears to be here. It appears to be in pretty good shape. It is "similar" to the present model sold by Radio Shack for $59.95. I believe this to be a "former" model.

Shipped and AS IS - $30.

--
Lou
Owner of: C.L. FURLONG ENTERPRISES

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E-Mail: Tech@DP.NET
Hours: M-F 9-5 - S/S by appt.
Closed on Holidays

3225. Re: CC&R's - If the South had won The War ....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:49:25 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4hpf5$k1m$8@quark.scn.rain.com>
Source record: 148662

Vito <vito@crosslink.net> wrote:

> Any ordinance involving the placement, screening or height of antennas
> shall reasonably accommodate amateur radio antennas and shall impose the
> minimum regulation necessary to accomplish the locality's legitimate
> purpose. In localities having a population density of 120 persons or

Note that this applies to ordinances. It does not apply to CC&Rs.

--
Bill Nelson (billn@peak.org)

3226. Re: CC&R's - If the South had won The War ....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:51:49 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4hpjl$k1m$9@quark.scn.rain.com>
Source record: 148663

Screaming Skull <KG4IVT@hot.mail.spicedmeat.sucks.leave.me.alone.com> wrote:
> Whoa, I've never read that.........

> Is there an English translation of this?

It is pretty straightforward. It says that the local governments and government agencies are limited in how they restrict amateur antenna installations.

It does not deal with CC&Rs, which are not ordinances. They are contract clauses made between the buyer and the homeowner's association having enforcement rights.

--
Bill Nelson (billn@peak.org)

3227. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:52:00 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <6RZa8.22125$NP4.3209067@news20.bellglobal.com>
Source record: 148665

> [Lightning] suppressor installation.

Isn't it possible that EM can be coupled into the house bypassing the main entrance ?

A few years ago, I had a good-sized lightning strike on a tree about 200' away from the house. The tree, a huge old pine, was split in half. Some of the damage in the house was more associated with direct pickup (on long wires runs INSIDE the house) than with anything entering through the service entrances.

I guess one should treat long wire runs as if they were antennas (since they are...).

3228. Re: OT: A Technical Curiosity?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 01:56:52 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4hpt3$k1m$10@quark.scn.rain.com>
Source record: 148666

Irv Finkleman <finkirv@shaw.ca> wrote:
> As the clock ticks over from 8:01PM on Wednesday, February
> 20th, 2002,
> time will (for sixty seconds only) read in perfect symmetry.
> To be more
> precise: 20:02, 20/02, 2002.

> It is an event which has only ever happened once before, and
> is
> something
> which will never be repeated. The last occasion that time

Funny. I would think that 21:12 21/12 2112 would qualify.

--
Bill Nelson (billn@peak.org)

3229. Re: CC&R's - If the South had won The War ....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 02:34:01 UTC
From: Screaming Skull <KG4IVT@hot.mail.spicedmeat.sucks.leave.me.alone.com>
Message-ID: <ts_a8.413$8W1.432403@typhoon.southeast.rr.com>
Source record: 148667

Doh. That's what I thought. Thanks.

> It does not deal with CC&Rs, which are not ordinances. They are contract
> clauses made between the buyer and the homeowner's association having
> enforcement rights.
>
> --
> Bill Nelson (billn@peak.org)
>

3230. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 02:41:29 UTC
From: richardharrison@webtv.net
Message-ID: <1937-3C6C7559-36@storefull-114.iap.bryant.webtv.net>
Source record: 148569

Ian, G3SEK wrote:
"ERP is only about long distance communication effectiveness - it has NOTHING to do with RF hazards.

Effective Radiated Power (ERP) increases power per unit area, the same as higher transmitter power does. This works just like the flashlight (electric torch?) reflector concentrates the feeble light output of a tiny lamp into a bright beam.

There are directional antennas which concentrate power into a narrow beam. The measure of power concentration is the ratio of maximum radiation intensity of the directional antenna in a particular direction to the maximum radiation in the same direction from an isotropic radiator.

The effective power increase produced by antenna gain is just as real as that produced by an amplifier. There is no way a receiver can tell the difference.

One watt radiated by an antenna with 30 db gain produces the same signal at a given distance on the beam of that antenna that a 1000 watt signal transmitted from the same site by an isotropic antenna would produce.

So, a one-watt transmitter can produce an ERP of 1000 watts by using a 30 db gain antenna. Anything in the beam of that antenna is affected the same way as if it were irradiated by 1000 watts from an isotropic antenna at the site of the gain antenna. ERP is valid and useful.

Best regards, Richard Harrison, KB5WZI

3231. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 02:59:02 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0202141859.4a8cc802@posting.google.com>
Source record: 148668
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

"Unclaimed Mysteries" <k4doh@mindspring.com> wrote in message
news:<a49qi2$f5r$1@slb5.atl.mindspring.net>...
> "Brian Kelly" <kelly@dvol.com> wrote in message
> news:d22b54c3.0202111659.20c85e4e@posting.google.com...
> > "Adam MAURER" <vk4cp@bigpond.comNOSPAM> wrote in message
> news:<Gnk98.4130$BE4.11235@newsfeeds.bigpond.com>...
> > > Yeah, and watch this "convenience" see the demise of DXpeditions!
> > > DXpeditions rely heavily on income & donations that is included with the
> > > request for a good ol QSL card.
> > >
> > > I hope you advocates of e-QSLing have already worked the rare ones on
> all
> > > band/mode combos, coz it'll be a different ball game now.
> > >
> > >
> > Don't bet on that. This thing is another techie brainfart whose time
> > will never come. Just like all those "e-commerce" brainfarts crashed
> > and burned a couple years back and dropped the tech stock markets thru
> > the cellar floors. There is no "law" which sez that the expeditions
> > "must" post their logs. Back to bizness as usual.
> > >
>
> Yeah. Get a horse!
>
>
Don't need a horse to carry my cards and the well-earned & deserved
green stamps to the expeditioneers, just the postage and an SASE. Hams
have DIED trying to give us a New One. How do ya pass along the green
stamps via e-QSLs?
>
>
Or maybe you figger they somehow "owe" you the card just because they
had the "honor" of working you?
>
>
w3rv

3232. Re: ATU problem, advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 03:20:41 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3c6c802a$0$35568$1dc6e903@news.corecomm.net>
Source record: 148570

Screw terminals work by screwing a threaded rod into a tapped hole in a
piece of metal. The hole is fixed and the screw is not. A "Binding Post"
works by turning a piece of metal with a threaded hole in it onto a
threaded rod which is fixed. They are different but do the same job.

Dave WD9BDZ

Reg Edwards wrote:
>
> Will,
>
> I don't recollect ever hearing the term "binding posts" mentioned on the air
> in the UK.
>
> I remember it from American radio books (recreational, make your own radio
> receiver) prior to the 1950s and I guess most old timer Gs are familiar with
> the term.
>
> Mantenance instructions handbooks which came with American radio and radar
> equipment 1942-45 used the term.
>
> Over here they were known by the more mundane name "screw-terminals".
> 1920-40, all-brass, no insulation, intended to be bolted through ebonite
> panels. Baseboard and back-panel connections were made with square brass
> wire. All changes in wire direction were at the mandatory angle of 90
> degrees. Havn't seen any for many a long year. If only I had kept a
> handfull!
> ---
> Reg G4FGQ
>
> >
> > Is that not the common term in the UK? Come to think of it, it would be
> > interesting to see a list of ham terms for the same things side by side,
> US
> > and UK (e.g., "hamfest" v. "rally"). Yes, radio jargon is among the most
> > colorful, interesting, and dare I say truly descriptive, i.e. accuracy and
> > clarity as opposed to the vagueness and obfuscation of some other fields
> > ("sales engineer," "sanitation technician.").
> >
> > Will, KD7BFX
> >
> > Reg Edwards wrote:
> >
> > > Will, I just love your description "binding posts".
> > >

> > > What better ?
> > >
> > > Long may such phrases remain in the language of both hams and so-called
> > > professionals.
> > > ---
> > > ****************************
> > > Regards, Reg G4FGQ
> > > Free Radio Modelling Software
> > > Http://www.g4fgq.com
> > > ****************************
> >

3233. Re: FS Discone Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 03:37:07 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Dn%a8.30157$8s4.2772924@news20.bellglobal.com>
Source record: 148571

Radio Shack in Canada has recently discontinued their discone and they're on 'clearance' for Cdn$50 (about US$31). There seems to be plenty in stock according to their 'Find It In Store'.

http://www.radioshack.ca/en/htmen/disco.asp

BASE STATION SCANNER ANTENNA

Stock # 20-0043

Scanner antenna. High performance omnidirectional receives 25-1300 MHz (1.3 GHz). Transmits at 50/144/220/440/900/1296 MHz (200 watts max.). Accepts PL-259 connector. Has durable, stainless steel radiators and radials. For masts up to 3.8cm (11/2") dia.

Catalogue Number: 2000043
Clearance Price: Cdn $ 49.99
Was: Cdn $ 89.99

3234. Dipole Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 03:54:40 UTC
From: NI4L <ni4l@charter.net>
Message-ID: <3C6C8680.FDF3A065@charter.net>
Source record: 148572

NI4L CUSTOM RESONANT DIPOLE
LEGAL LIMIT ++ CUSTOM MADE CENTER FED DIPOLE
Made with the same components used by our military forces today
Custom made to YOUR FREQUENCY of operation
Let me take the hassle out of making a RESONANT DIPOLE for you.
Click here for more info... <http://www.angelfire.com/nb/ni4l/>

3235. Re: OT: A Technical Curiosity?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 04:13:33 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <DC0605FBF47CCC73.973C95EFDF69DB09.FED3B7FCD4A70F0E@lp.airnews.net>
Source record: 148574

On Fri, 15 Feb 2002 01:56:52 +0000 (UTC), Bill Nelson
<billn@spock.peak.org> wrote:

>Irv Finkleman <finkirv@shaw.ca> wrote:
>> As the clock ticks over from 8:01PM on Wednesday, February
>> 20th, 2002,
>> time will (for sixty seconds only) read in perfect symmetry.
>> To be more
>> precise: 20:02, 20/02, 2002.
>
>> It is an event which has only ever happened once before, and
>> is
>> something
>> which will never be repeated. The last occasion that time
>
>Funny. I would think that 21:12 21/12 2112 would qualify.

Interesting how close together all these interesting times are.

Remember 01:23:45 6/7/89, and 12:34:56 7/8/90 ?

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

3236. Re: Dipole Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 04:21:25 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C6C8CC5.334414A0@coqui.net>
Source record: 148573

NI4L wrote:
>
> NI4L CUSTOM RESONANT DIPOLE
> LEGAL LIMIT ++ CUSTOM MADE CENTER FED DIPOLE
> Made with the same components used by our military forces today
> Custom made to YOUR FREQUENCY of operation
> Let me take the hassle out of making a RESONANT DIPOLE for you.
> Click here for more info... <http://www.angelfire.com/nb/ni4l/>

;-)

3237. 4 W FM Transmitter from Smart Kit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 05:01:10 UTC
From: Victor Andr&#65533; Moinhos <raves@clix.pt>
Message-ID: <1013749001.216344@news.iol.pt>
Source record: 148575

Hello,
any one know the diammeter of the wire used in the coils of the kit 4W FM transmitter from smart kit?

Tank you

3238. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 08:08:31 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <MtQVibD$HMb8EADV@ifwtech.com>
Source record: 148581

Richard Harrison wrote:
>Ian, G3SEK wrote:
>"ERP is only about long distance communication effectiveness - it has
>NOTHING to do with RF hazards.
>
>Effective Radiated Power (ERP) increases power per unit area, the same
>as higher transmitter power does. This works just like the flashlight
>(electric torch?) reflector concentrates the feeble light output of a
>tiny lamp into a bright beam.
>
>There are directional antennas which concentrate power into a narrow
>beam. The measure of power concentration is the ratio of maximum
>radiation intensity of the directional antenna in a particular direction
>to the maximum radiation in the same direction from an isotropic
>radiator.
>
>The effective power increase produced by antenna gain is just as real as
>that produced by an amplifier. There is no way a receiver can tell the
>difference.
>
There's your problem: that statement is only half-true.

It is only true at normal "communication" distances - hundreds,
thousands or millions of wavelengths away from the antenna. At these
distances the inverse square law applies, so the power density is
continuously decreasing with distance. Although a receiver can detect
the signal, the power density is always far below hazardous levels.

In contrast, RF hazards only arise close to the antenna, where all the
taken-for-granted assumptions of RF communications engineers cease to
apply.

Let's look at that statement again, but this time close to the antenna:

>The effective power increase produced by antenna gain is just as real as
>that produced by an amplifier. There is no way a receiver can tell the
>difference.
>
When your receiver is a field strength probe, making RF hazard
measurements close to the antenna, that statement is very obviously
false. For the same power level, you will get SMALLER field strength
measurements around a large antenna than you do around a smaller one -
simply because the RF energy is spread out over a larger area.

Power density - the measure of RF hazard, in watts per square metre - is
roughly related to the square of the field strength (V/m) [1].

For example, when surveying a microwave dish, you find the biggest field strength is right at the mouth of the feedhorn, where the available watts are still concentrated into the smallest number of square metres. Obviously the power density here does not change with the size of the dish.

Elsewhere around the dish, for example at the edges, you find LOWER power densities for larger dishes. The available watts are spread out over a larger area, so the watts per square metre are reduced.

There is another place where RF hazards have to be considered, which is on the axis of the beam, just where the near field is transitioning into the far field. Here you may find a power density peak... but beyond that the far-field inverse square law takes over, and power density drops off as the square of the distance.

It is perverse that some RF communication engineers, who are generally all for promoting the safe uses of RF, seem to be absolutely determined to shoot themselves in the foot on this issue. (I am not picking on Richard individually here - he is far from alone.) The reason is simply that very close to the antenna, their everyday knowledge breaks down.

For anyone who still can't accept this, an internet newsgroup is the wrong place to run a detailed tutorial. The subject is very well covered in any book on RF hazards, including the ARRL book, 'RF Exposure and You'.

[1] In the near-field of the antenna the E and H fields are not in phase, so assuming that power density is proportional to the square of the E or H field strength will tend to over-estimate the hazard. This is normal prudent practice in hazard assessment.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3239. New Web Site

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 08:27:28 UTC
From: Joe Hawkins <joehawk@_nospam_.mac.com>
Message-ID: <150220020327284221%joehawk@_nospam_.mac.com>
Source record: 148576

Greetings,

We have started a Radio Monitoring Top Sites List that deals with all areas of radio monitoring. I invite you to check it out and hopefully list your site.

http://www.topsitelists.com/start/hawkins/

Best regards,

Joe Hawkins

--

3240. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 09:38:15 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <qalp6ucj7d14dd169qpoh1ke9pakn9ig7f@4ax.com>
Source record: 148577

On Thu, 14 Feb 2002 14:39:48 -0500, Jake Brodsky <frussle@erols.com>
wrote:

>But while it was shut down,
>one of our staff went to the roofing foreman and pointed in the
>distance to another dish. "See that?", he said. "That dish is
>pointed right at this one. This dish is off, but that one is still
>beaming you right now. You didn't ask us to turn it off, so it's
>still on. Have a nice day!"

Aside from the actual RF exposure issue, your staff member acted like an
idiot.

People are fearful not because of the actual hazard, but because they
half expect to be lied to about it. Idiots like the one you quote above
do not help the problem. What do you think the roofers told everybody
and his brother afterwards? What do you think they are going to do on
the NEXT roofing job?

If I'd been your staff member's boss, he would have had a day to
remember, I assure you.

Bill, W7TI

3241. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 09:41:48 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4il4s$cr6$7@quark.scn.rain.com>
Source record: 148578

J. Harvey <JM001.Harvey@sympatico.ca> wrote:

> Isn't it possible that EM can be coupled into the house bypassing the main
> entrance ?

Yes, to some extent. But a fair share of the energy in a lightning bolt
is at a frequency below 1 MHz.

> A few years ago, I had a good-sized lightning strike on a tree about 200'
> away from the house. The tree, a huge old pine, was split in half. Some of
> the damage in the house was more associated with direct pickup (on long
> wires runs INSIDE the house) than with anything entering through the service
> entrances.

How do you know it was picked up by the wires and did not enter through
the electrical service?

--
Bill Nelson (billn@peak.org)

3242. Re: CC&R's - If the South had won The War ....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 09:45:00 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <12mp6u00kfaovqj3nrksup434kh90rm0ip@4ax.com>
Source record: 148579

On Fri, 15 Feb 2002 01:51:49 +0000 (UTC), Bill Nelson
<billn@spock.peak.org> wrote:

>It does not deal with CC&Rs, which are not ordinances. They are contract
>clauses made between the buyer and the homeowner's association having
>enforcement rights.

Also, the last sentence effectively negates all the good sentences
preceeding it anyway.

Bill, W7TI

3243. Re: OT: A Technical Curiosity?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 09:51:06 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4ilma$cr6$8@quark.scn.rain.com>
Source record: 148580

Joe Bramblett, KD5NRH <kd5nrh-r.r.a.a@kd5nrh.net> wrote:
>>
>>Funny. I would think that 21:12 21/12 2112 would qualify.

> Interesting how close together all these interesting times are.

> Remember 01:23:45 6/7/89, and 12:34:56 7/8/90 ?

It is only interesting until you think about the artificial constraints
we place on such series.

For example, in the one I listed - we use the European date notation.
If we use the American date notation, with the format given, then there
can never be another date that fits. And the last would have been in
the year 1221. Note also that, using the European date notation, the
one I list above is the last one possible in that format.

Your series falls apart if we use the proper 4 digit year.

--
Bill Nelson (billn@peak.org)

3244. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 13:42:16 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Ze8b8.30264$Hv5.3461016@news20.bellglobal.com>
Source record: 148582

"Bill Nelson" asked the impossible:
> > Some of the damage in the house was more associated
> > with direct pickup (on long wires runs INSIDE the house)
> > than with anything entering through the service entrances.
>
> How do you know it was picked up by the wires and did not
> enter through the electrical service?

Well, obviously I don't "know" (for sure)... ...but 'the evidence suggests' that it was coupled directly. One household wire (only one) got burnt and ended up being shorted at the outlet box. This one wire was the longest such wire run in the house. There was no other damage associated with the household wiring. The lightning hit a tree near the lake, no where near the power wires.

I don't believe that lightning damage is necessarily confined to path taken by a single bolt. The lightning bolt is one side of a transformer. The secondary windings are everywhere else in the neighbourhood. My coworkers was watching lightning hit the lake in front of his house and he got a spark on his foot from the metal heating duct when a huge bolt hit the lake a bit closer to his house.

It shouldn't be a controversial suggestion that EM can travel through walls made of wood and drywall and then be coupled into long conductors. After all, most radios that are damaged by lightning are not in the main path (and vaporized). Their antenna or lead-in cable just picks up sufficient EM to pop a few circuit elements.

My point was that you might need to put suppressors elsewhere than ONLY at the service entrances. Unless your house is a Faraday Cage (aluminum siding perhaps). If you have long wires being run around inside your house, they will pick up energy just like an antenna. You would need to put some suppressor at each end of any such long wires.

There is too much focus being put on protecting 'The Entrance'. Commercial building are often made of steel (Faraday Cage). Houses are usually not made of steel and are therefore transparent to directly coupled EM on internal wiring.

That's the difference that seems to me to be often overlooked in such discussions.

Translating the approach that works in the commercial world to the household world, I have never seen this obvious difference explicitly mentioned.

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

3245. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 13:59:20 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <Yu8b8.6063$Nv5.512585@bgtnsc05-news.ops.worldnet.att.net>
Source record: 148583

"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
news:qixsxPD7kDb8EAW7@ifwtech.com...
> VE9SRB wrote:
> >
> >The antennas used in cell sites may have a gain up to 15+ dBi. At a
> >maximum power of 500 W, a 15 dBi antenna will increase the effective
> >radiated power to about 16 KW. Cell sites would not likely use a
> >maximum gain antenna at maximum transmit power. 16 KW effective
> >radiated power is an extreme unlikely estimate. I think an
> >environmental evaluation is required by the FCC is the ERP exceeds 1 KW.
> >
> Oh no, please not the "effective radiated power" fallacy again!
>
> I hate to see RF engineers quoting ERP in connection with RF hazards,
> because it produces misleading results, and generates big numbers that
> only confuse and frighten people.
>

Before you slam someone on the relevance of ERP, I would suggest you
understand it a bit more first.

>
> Remember that RF hazards are related to power DENSITY in watts PER
> SQUARE METRE.

If you read further in my post, you will see that I discuss power density
per square meter.

>If you feed 1 watt into an antenna with an aperture of say
> 1 square metre, the power density is 1W/sq m (assuming uniform
> illumination, and neglecting near-field effects for the moment).
>If you
> increase the aperture to 2 sq m, you increase the gain by a factor of 2
> and you double the ERP - but you have HALVED the power density across
> the aperture.
>

Power density across the "antenna aperture" is not the issue. The issue is
not how the total power is "distributed" across the antenna. The issue is
how the antenna "distributes" its total radiated power in space. The
antenna's gain and pattern shape are the important parameters to consider.

You forgot to consider the relative distribution of the total radiated power
in the far field. With the antenna having a 2 sq m aperture you may have
decreased the power density at the aperture by a factor of 2 but both
antennas still radiate the same total power - this does not change. Now,

with the 2 sq m antenna (assuming you doubled the aperture dimension in one direction), the pattern beamwidth of the antenna decreases by a factor of 2. So now you have the same total radiated power concentrated in a narrower beam (that's why the ERP increases), its also why the power density in the far field from the 2 sq m antenna is greater than that of the 1 sq m antenna.

You're confusing people by telling them that a bigger antenna with more gain has a lower radiated power density because the power delivered to it is spread over a bigger antenna size. Your discussion would lead people to believe that they are safer standing in the main beam of a 100 dB gain dish than a 1/2 wave dipole.

Steve VE9SRB

3246. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 14:09:11 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C6D1687.665A4FA2@umich.edu>
Source record: 148584
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Brian Kelly wrote:
>
> ... Hams
> have DIED trying to give us a New One.

Lessee - I'm envisioning the moments before the landing sortie ...

"I may die in this attempt, boys, but you know what this means to
our friends back home. I may not come back, but I gotta go activate
Mellish Reef! For Freedom and DXers everywhere!!"

You 'spose they really think like that? My, what heros these DXers are!

Bob, KI8AB

3247. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 14:19:10 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <7v4q6u8qene7t1ruq36hkmrhql948undcd@4ax.com>
Source record: 148585

On Fri, 15 Feb 2002 01:38:15 -0800, Bill Turner <w7ti@dslextreme.com>
wrote:

>On Thu, 14 Feb 2002 14:39:48 -0500, Jake Brodsky <frussle@erols.com>
>wrote:
>
>>But while it was shut down,
>>one of our staff went to the roofing foreman and pointed in the
>>distance to another dish. "See that?", he said. "That dish is
>>pointed right at this one. This dish is off, but that one is still
>>beaming you right now. You didn't ask us to turn it off, so it's
>>still on. Have a nice day!"
>
>_____
>
>Aside from the actual RF exposure issue, your staff member acted like an
>idiot.
>
>People are fearful not because of the actual hazard, but because they
>half expect to be lied to about it. Idiots like the one you quote above
>do not help the problem. What do you think the roofers told everybody
>and his brother afterwards? What do you think they are going to do on
>the NEXT roofing job?

Nothing. Bill, these folks had been watching too many Star Wars
movies where death rays came from dish antennas. Andrew Company's
logo doesn't help this situation much. We actually ordered our dish
antennas without the logo so that it wouldn't scare so many people.

And besides, we didn't lie to them. We told them the truth, and we
stood outside with them the whole time, waiting for them to clear out.
So they must have understood that if we were going to stand there with
them, we didn't think there was much harm. Keep in mind, these folks
were in the commercial roofing business, so they must have seen radio
antennas before. If they can't understand the hazards, they shouldn't
be there.

I can tolerate stupidity and ignorance among those who normally would
never see such things. But if you're in the business, if you're
someone who carries certifications of one sort or another, I have no
mercy whatsoever. If they don't like it, they can always do something
else.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

3248. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 14:21:50 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <a4j5hl$mi0@r02n01.cac.psu.edu>
Source record: 148586

Try McMaster Carr. There a big hardware and material supplier. They are on the Web and are a good company to deal with. They have all kind of plastic and metal tubing and the like.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"R. Scott" <kf7qz@yahoo.com> wrote in message
news:3C6C1F88.1AC66143@yahoo.com...
> > Try black Nylon (Nylok). It is extremely rigid, resistant to UV rays, and
> > RF neutral.
> >
>
> Addendum, I meant I hadnt heard of Nylok tubing. I work at Boeing and
> the term Nylok has a whole different connotation (Nylok fastners)
>
> Rick KF7QZ

3249. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 14:55:15 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <418q6ugl4vh2unu3jk9gqd14n83ugvpi57@4ax.com>
Source record: 148587

On Fri, 15 Feb 2002 09:19:10 -0500, Jake Brodsky <frussle@erols.com>
wrote:

>And besides, we didn't lie to them.

Quite correct, your folks did tell the truth. But as I said, a lot of
people EXPECT to be lied to about things which they have no personal
knowledge, like RF exposure hazards.

It's just the nature of our society nowadays - assume the worst and
you're probably right. I'm not saying that's correct; just that's what
a lot of people believe, and a lot of them have enough money and lawyers
to make your life miserable. IOW, be careful. <g>

Bill, W7TI

3250. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 15:21:48 UTC
From: richardharrison@webtv.net
Message-ID: <3573-3C6D278C-22@storefull-115.iap.bryant.webtv.net>
Source record: 148589

Ian, G3SEK wrote:
"There`s your problem: that statement is only half-true." (There is no way a receiver can tell the difference between more power from an amplifier and more power from antenna gain.)

Ian explained that a given power irradiating (illuminating) a high-gain antenna reflector produces fewer watts per square mtr on the large parabolic reflector than the same power illuminating a smaller, lower-gain reflector, in watts per square mtr.

Seems obvious. Same watts on a small area produces higher intensity than the same watts spread over a large area. Ian is correct in this.

There is a 23-cm ham band shown as extending from 1240 to 1300 MHz by my ARRL Handbook. 23 cm is 9 inches. You have only to be about 4 feet away to be out of the induction field (near-field), by most definitions, and into the far-field at these frequencies.

No one is going to be residing in the near-field of a microwave dish.

Ian also said:
"It is only true (No way a receiver can tell the difference.) at normal "communication" distances - hundreds, thousands, or millions of wavelengths away from the antenna."

Our FCC uses "Ground Wave Propagation Curves, 540 KHz - 1600 KHz" (my copy is very old) based on field intensity at one mile.

One mile is about 3 wavelengths at the lower frequencies covered by the curves. It obviously has been distance enough for far-field measurements for 68 years. The Communicaions Act of 1934 established the FCC as I recall.

Best regards, Richard Harrison, KB5WZI

3251. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 15:43:58 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <21ab8.464$BR3.15119@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148588

"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
news:MtQVibD$HMb8EADV@ifwtech.com...
> Richard Harrison wrote:

> >The effective power increase produced by antenna gain is just as real as
> >that produced by an amplifier. There is no way a receiver can tell the
> >difference.
> >
> There's your problem: that statement is only half-true.
>
> It is only true at normal "communication" distances - hundreds,
> thousands or millions of wavelengths away from the antenna. At these
> distances the inverse square law applies, so the power density is
> continuously decreasing with distance. Although a receiver can detect
> the signal, the power density is always far below hazardous levels.
>

Richard's statement is true a lot closer to the antenna than hundreds or
thousands of wavelengths.

And yes, at communications distances, the power density is far below RF
hazard levels.

> In contrast, RF hazards only arise close to the antenna, where all the
> taken-for-granted assumptions of RF communications engineers cease to
> apply.
>

Why do you assume that RF communications engineers don't understand what
happens close to an antenna? The original post referred to a situation
where the observer was 75 yards away from the antenna. The responses
discussing ERP and relative power density were based on that assumption.
There was no need to compare the RF hazards at 75 yards with those at 1
foot. We all know they are different at these distances. Had the original
poster said that he intended to climb the tower and rest his face on the
antenna radome, he might have received a different response.

Most RF engineers understand that antenna pattern, gain and ERP are not
relevant in the near field of the antenna. That however, was not the basis
of the post or the subsequent discussion.

> Let's look at that statement again, but this time close to the antenna:
>
> >The effective power increase produced by antenna gain is just as real as
> >that produced by an amplifier. There is no way a receiver can tell the
> >difference.

> >
> When your receiver is a field strength probe, making RF hazard
> measurements close to the antenna, that statement is very obviously
> false.

Again, the discussion and responses were not made based on a near-field
probe of the antenna.

>For the same power level, you will get SMALLER field strength
> measurements around a large antenna than you do around a smaller one -
> simply because the RF energy is spread out over a larger area.
>
> Power density - the measure of RF hazard, in watts per square metre - is
> roughly related to the square of the field strength (V/m) [1].
>
> For example, when surveying a microwave dish, you find the biggest field
> strength is right at the mouth of the feedhorn, where the available
> watts are still concentrated into the smallest number of square metres.
> Obviously the power density here does not change with the size of the
> dish.
>
> Elsewhere around the dish, for example at the edges, you find LOWER
> power densities for larger dishes. The available watts are spread out
> over a larger area, so the watts per square metre are reduced.
>

You measure a LOWER power density simply because the edge of the larger dish
is farther away from the feed horn. To turn this fact into a statement that
larger dishes present less RF hazard is absurd. For a large dish or a small
dish, the near-field strength along the dish surface is nearly the same when
the measurements are made at the same relative distance from the feed horn.

The important issue regarding near-field RF Hazard and a dish is how far you
are away from the radiating source of power.

Stand at a fixed point somewhere between the feed horn and the dish. Does
the RF hazard diminish if you double the size of the dish?

> There is another place where RF hazards have to be considered, which is
> on the axis of the beam, just where the near field is transitioning into
> the far field. Here you may find a power density peak... but beyond that
> the far-field inverse square law takes over, and power density drops off
> as the square of the distance.
>
> It is perverse that some RF communication engineers, who are generally
> all for promoting the safe uses of RF, seem to be absolutely determined
> to shoot themselves in the foot on this issue. (I am not picking on
> Richard individually here - he is far from alone.) The reason is simply
> that very close to the antenna, their everyday knowledge breaks down.
>

It's amusing that you entire discussion is based on an assumption that an RF communications engineer would have never guessed that at the edge of a large dish you measure a lower field strength than you do at the edge of a small dish.

Steve VE9SRB

3252. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 16:14:27 UTC
From: n5kzw@arrl.net
Message-ID: <3c6d31ae.67242536@news.ev1.net>
Source record: 148590

On 14 Feb 2002 11:53:46 -0800, nm5k@wt.net (Mark Keith) wrote:

>n5kzw@arrl.net (Ed Bailen) wrote in message news:<3c6bdb13.62038550@news.ev1.net>...
>> Unless you are in a rural setting, the cell phone xmitters are running
>> a pretty low power to avoid interfering with other, non-adjacent,
>> cells.
>>
>> You may, however, experience difficulties when the cell tower takes a
>> lightning hit. My nephew lives across the street from a 400' radio
>> tower and he frequently loses his ISDN router when the tower takes a
>> hit. (Yes, he has a whole-house surge suppressor and point-of-use
>> surge suppressors.)
>>
>> 73,
>> Ed
>
>Thats what I was thinking. The main impact to him will be he will have
>a new lightning rod across the street. I have one about 3 blocks away.
>It takes hits fairly often. Your nephew shouldn't be having problems
>though. He's doing something wrong with his wiring/ suppression scheme
>to keep having repeat damage from a strike that is across the street.
>He shouldn't be having any problems unless the cell site is not
>protecting their power or phone lines. And this is sort of unlikely or
>they would go offline with every strike. "I have to assume it's coming
>in on the power or phone lines as a surge"?? He should be able to
>protect his gear from that. Sounds like he may not be using a single
>point "star" grounding system. One reason this doesn't really seem
>right to me, is I've taken hits on MY mast 15 feet from where I'm now
>sitting, and never had any trouble like that. He shouldn't be having
>trouble with one across the street. Also, it's quite likely the cell
>tower is a good conductor to ground, so most of the strike should be
>going to ground at the cell tower. There should not be much energy
>left to cause all that damage elsewhere. Somethings not right
>somewhere...And I bet it's at your nephews house with his
>grounding/suppressor setup. MK

I think the surge is coming in on the phone lines. The tower was
originally built for use with a FM radio station. Once the radio
station moved closer in to Austin, the tower was leased out to a
number of users including the 800 MHz trunked system for the county
emergency services.

All of the trunking equipment is located out by the side of the road
near the base of the tower, and the phone lines run right next to the
trunking equipment. I'd be surprised if there weren't several lines

connected to the trunking equipment. I'll have to ask my nephew where his phone line surge suppressors are located. His house is wired with all phone lines and network cables tied in to a patch panel in his server closet.

Regards,
Ed

3253. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 17:23:34 UTC
From: richardharrison@webtv.net
Message-ID: <21351-3C6D4416-32@storefull-113.iap.bryant.webtv.net>
Source record: 148592

Steve, VE9SRB wrote:
"It`s amusing that your entire discussion is based on an assumption that an RF communications engineer would have never guessed that at the edge of a large dish you would measure a lower field strength than you do at the edge of a small dish."

I`m amused that Ian picked on a guy who has measured the illumination of dishes and periscope reflectors.

With a periscope, you collimate the beam with enough directivity so that the reflector catches nearly all of the beam. You also adjust the reflector to be slightly concave (checking for maximum signal) to refocus the beam exiting on the horizontal. A field strength indicator helps determine that the beam is centered on reflectors, but the ultimate indication is limiter current in the receiver.

I used a framing square across the edge of a dish to sight the reflector for initial set up, usually. I also usually used a bubble level to set the "fly-swatter" on the tower to 45 degrees. I`d lay out the azmuth with a transit, putting stakes in the ground to sight so as to set up the reflector. I digress.

The average power density on a reflector is usually straight forward. It is not uniform. It does fall off at the edges, but you know the power and the area it illuminates.

Best regards, Richard Harrison, KB5WZI

3254. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 17:33:45 UTC
From: millersg@dmapub.dma.org
Message-ID: <a4jgpp$cg6$1@dmapub.dma.org>
Source record: 148591

In article <Yu8b8.6063$Nv5.512585@bgtnsc05-news.ops.worldnet.att.net>,
VE9SRB <srbest@att.net> wrote:
>
>"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
>news:qixsxPD7kDb8EAW7@ifwtech.com...
>
>>If you feed 1 watt into an antenna with an aperture of say
>> 1 square metre, the power density is 1W/sq m (assuming uniform
>> illumination, and neglecting near-field effects for the moment).
>>If you
>> increase the aperture to 2 sq m, you increase the gain by a factor of 2
>> and you double the ERP - but you have HALVED the power density across
>> the aperture.
>>
>
>Power density across the "antenna aperture" is not the issue. The issue is
>not how the total power is "distributed" across the antenna. The issue is
>how the antenna "distributes" its total radiated power in space. The
>antenna's gain and pattern shape are the important parameters to consider.

Since antenna gain and pattern shape are determined by the field
distribution (i.e. the specific power density) of an aperture antenna,
all the parameters listed above are equally important.

<snip>

>You're confusing people by telling them that a bigger antenna with more gain
>has a lower radiated power density because the power delivered to it is
>spread over a bigger antenna size. Your discussion would lead people to
>believe that they are safer standing in the main beam of a 100 dB gain dish
>than a 1/2 wave dipole.

Assuming the same input power for both antennas, the correct answer depends
upon where your standing.

--
Steve Miller N8SM millersg@dma.org http://www.dma.org/~millersg

3255. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 17:53:22 UTC
From: richardharrison@webtv.net
Message-ID: <21352-3C6D4B12-9@storefull-113.iap.bryant.webtv.net>
Source record: 148595

Ed, N5KZW wrote:
"I think the surge is coming in on the phone lines."

Could happen and is worth checking. But, telcos know how to protect against lightning damage as well as anybody. How often do you hear of lightning injury or damage to a phone subscriber from his connection? Company I retired from leased thousands of miles of phone lines. I was telecom manager, checked the bills, and handled the trouble reports. There was little or no involvement in lightning damage.

Best regards, Richard Harrison,KB5WZI

3256. Re: Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 17:59:56 UTC
From: m3wdf@aol.com
Message-ID: <20020215125956.18951.00001292@mb-mk.aol.com>
Source record: 148593

Hi Keith, I am using one of these at the moment (club aerial) until I move into my new qth. It seems to work well for me, worked Hungary 2way qrp 2Wx4W psk this morning.
You can obtain one from Richard G7HJK at Coastal Communications on 01255-474292.

73 de Richard, G1WDF/M3WDF.

3257. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 18:11:28 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <kbcb8.6435$Nv5.543016@bgtnsc05-news.ops.worldnet.att.net>
Source record: 148594

"Steve Miller" <millersg@dmapub.dma.org> wrote in message
news:a4jgpp$cg6$1@dmapub.dma.org...

> >
> >Power density across the "antenna aperture" is not the issue. The issue
is
> >not how the total power is "distributed" across the antenna. The issue
is
> >how the antenna "distributes" its total radiated power in space. The
> >antenna's gain and pattern shape are the important parameters to
consider.
>
> Since antenna gain and pattern shape are determined by the field
> distribution (i.e. the specific power density) of an aperture antenna,
> all the parameters listed above are equally important.
>

That is a true statement but I trust you understood the point that I was
trying to make.

> <snip>
>
> >You're confusing people by telling them that a bigger antenna with more
gain
> >has a lower radiated power density because the power delivered to it is
> >spread over a bigger antenna size. Your discussion would lead people to
> >believe that they are safer standing in the main beam of a 100 dB gain
dish
> >than a 1/2 wave dipole.
>
> Assuming the same input power for both antennas, the correct answer
depends
> upon where your standing.
>

The "correctness" of our statements always depends on the perspective from
which they are written or read. We could play that game all day long.

I don't really disagree with much of what Ian was saying. I just had an
issue with the "Oh no, please not the "effective radiated power" fallacy
again!" statement and the ones that followed in his other post. He choose
to look at the issue from the perspective of standing within the near-field
of the antenna and then criticized my response for having chosen to look at
the issue from the perspective of standing in the far-field - which was the
basis from which the original question was asked.

Steve VE9SRB

3258. shared antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 18:31:55 UTC
From: rb <rbigg@seii.net>
Message-ID: <a4jngd$l4d$1@news.chatlink.com>
Source record: 148600

Anyone know of a 25 watt coupler that will allow me to use one antenna with two 2m VHF sets hooked to it at the same time and will keep one from blasting the other out? What I want to do is put one set in the garage, and another in the house so I can keep up with the repeater traffic as I walk back and forth.

3259. Re: Kenwood Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 18:57:32 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <9FhtPJ0w5BsR93vwKNULbAEmp1Ir@4ax.com>
Source record: 148596

"Charles Johnston" <ctj92@cableone.net> wrote:

>Hello Murray,
>Here is a URL that lists - low - average - and high - winning bids off
>eBAY for TS-530s
>http://www.aade.com/hampedia/prices2.htm
>
> Low Avg High
>TS-530S $250.00 $334.38 $480.00

Curious, any reason you're cross-posting to four different newsgroups?

Bob
k5qwg

3260. Low power television antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 19:04:19 UTC
From: Michael Largent <largent1@pacbell.net>
Message-ID: <TYcb8.2845$uV7.1172208817@newssvr14.news.prodigy.com>
Source record: 148597

We have a low power TV station in town that is hard to receive and I am looking for comments and suggestions about the best and cheapest antenna to use. Also tips on best installation methods would be welcome. I bought a RCA ANT200x settop antenna amplifier that works ok. I am just wondering if I can do better.
Thanks in advance,
Michael

3261. Re: Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 19:07:49 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <5Vcb8.135624$h31.10647290@e420r-atl1.usenetserver.com>
Source record: 148598
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Hi Don,
That's correct (antenna mounted center of rollbar & folded with canoe strapped down). I don't anticipate putting up a canoe on any regular basis but want to be capable when I want. There's no flat metal up there but, yes, I could use a mag mount on the hood or fenderwell. The hood's a bad option for me because I don't want to damage the new paint in any way at such an obvious location. My goal was a permanent mount, high and symmetric to the body without having to move it here and there. The 7900's a pretty tall antenna for 2m and they say don't use a mag mount. If I were to mount it on one of the supporting bars of the roll bar, how much affect do you think it'd have on radiation pattern? It wouldn't be parallel to sheet metal. The only metal within two feet would be the roll bar itself.
Thanks to Red Baron for the recommendation for the Diamond lip mount but the Jeep doesn't have any "lips" to speak of. I'll basically weld a horizontal steel tab (1" x 1") that I can mount in like through the roof of a regular auto.
Best Regards,
Drink, WP3JQ

"DonW" <n7don_J_@yahoo.com (to reply remove "_J_")> wrote in message news:KX%98.71523$zJ.1019831@news.easynews.com...
> If I understand correctly, you'd fold over the antenna so the canoe could
> rest on the roll bar. Would that mean the antenna would be horizontal when
> the canoe was mounted? If that's the case, I'd assume you wouldn't be using
> your radio with the ant. folded. You might try mounting the ant. to one
> side so the canoe and ant. could co-exist. That's why I mounted the ant. on
> the Trans Sport at the LR so I could use a roof top carrier when we camped.
> It works fine.
> Do you have any flat spots to use a mag. mount? You could move the ant. to
> jeep hood when the canoe was on top.
> Another consideration is what are the relative dimensions of the antenna and
> where it folds. For example my 39" ant. folds at 33" so there is a 6" stub
> that might interfer with a canoe seat. You'd need to check it out.
> Your best bet is to put the canoe in place and mock up an ant. and see what
> works best.

> Don
> N7DON
>
> "Drink" <REMOVE_THISdrink@coqui.net> wrote in message
> news:uIX98.124208$h31.9152771@e420r-atl1.usenetserver.com...
> > Thanks for the comments Don,
> > So, do you think my idea about folding over the antenna to put a canoe
> up
> > there is a good idea?
> > 73's,
> > Drink, WP3JQ
>
>
>

3262. Re: Chicken Little, Y2K, Cell Tower Effects, et al

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 19:18:30 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C6D5F06.6F76AE1@crosslink.net>
Source record: 148599

Jake Brodsky wrote:
>
> ... these folks had been watching too many Star Wars movies ....

Second that! Why not worry about the volcano under Yellowstone? It's past due to erupt - in fact the ground above it is already rising - and the last one like it, only 1/3 as powerful, brought man within 2000 souls of extinction. Or one could worry about an astroid hit like the one that killed all the dinosaurs. Or ..... whatever. But please excuse me from the fun. I got important things to think about .. like where to get the $$$ for a new radio ;o).
KA3DWW

3263. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 19:32:13 UTC
From: Walt Davidson <walt99@tiscali.co.uk>
Message-ID: <83oq6u804a65dm6a485spldk1rfbon9cr7@4ax.com>
Source record: 148601
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Fri, 15 Feb 2002 09:09:11 -0500, Robert Lyons <boblyons@umich.edu>
wrote:

>Lessee - I'm envisioning the moments before the landing sortie ...
>
> "I may die in this attempt, boys, but you know what this means to
> our friends back home. I may not come back, but I gotta go activate
> Mellish Reef! For Freedom and DXers everywhere!!"
>
>
>You 'spose they really think like that? My, what heros these DXers are!

"One small step for a ham ..... one giant leap ...... etc etc"

:-)
73 de G3NYY

--
Walt Davidson Email: g3nyy @freeuk.com

3264. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 19:44:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C6D6510.64346442@eznec.com>
Source record: 148602

When my Elmer retired he moved to a place in the Ozarks where he said there were some extremely impressive thunderstorms. On several occasions he saw ball lightning come out of his wall-mounted telephone and roll across the bedroom floor during a storm. Made a real impression on him.

Roy Lewallen, W7EL

Richard Harrison wrote:
>
> Ed, N5KZW wrote:
> "I think the surge is coming in on the phone lines."
>
> Could happen and is worth checking. But, telcos know how to protect
> against lightning damage as well as anybody. How often do you hear of
> lightning injury or damage to a phone subscriber from his connection?
> Company I retired from leased thousands of miles of phone lines. I was
> telecom manager, checked the bills, and handled the trouble reports.
> There was little or no involvement in lightning damage.
>
> Best regards, Richard Harrison,KB5WZI

3265. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 19:48:40 UTC
From: richardharrison@webtv.net
Message-ID: <3573-3C6D6618-37@storefull-115.iap.bryant.webtv.net>
Source record: 148605

Steve Miller, N8SM wrote:
"Assuming the same input power for both antennas (large and small), the correct answer depends upon where you`re standing."

That`s where we started. It was there that Ian muddied the water by saying the small dish has higher energy density at its surface, which is specious.

The larger dish has sharper focus. The beam of all dishes spreads. The spread angle of the larger dish appears to have originated at a point farther behind the dish, so that its beam spreads less in front of the dish. The sharper focus produces a smaller energy spot at a distance. A graphical representation makes clear that this distance is small.

Same power, smaller spot, means the larger dish has the higher power per unit area out there on the path, where there may be someone or something to be exposed.

The near-field argument is specious too The near-field extends only a few feet, at most, for microwave frequencies. Nobody is there long enough for exposure danger.

I could say that when the path length to a point on the center of the beam differs in distance from the emitter by 180 degrees from the path length to a point off to the side of the beam center, their energies are out-of-phase. But, that would be specious too.

Best regards, Richard Harrison, KB5WZI

3266. Re: Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 20:05:17 UTC
From: Den <Dennis@me.com>
Message-ID: <1Sdb8.903$BR3.43883@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148603
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Hi Drink
What type of Jeep do you have ?Wrangler or Cherokee
I have a 7900 on Wrangler and also have a 7500 on a pick up truck (both fold overs).
I will elaborate upon your reply.
73,Den

"Drink" <REMOVE_THISdrink@coqui.net> wrote in message news:5Vcb8.135624$h31.10647290@e420r-atl1.usenetserver.com...
> Hi Don,
> That's correct (antenna mounted center of rollbar & folded with canoe
> strapped down). I don't anticipate putting up a canoe on any regular basis
> but want to be capable when I want. There's no flat metal up there but,
> yes, I could use a mag mount on the hood or fenderwell. The hood's a bad
> option for me because I don't want to damage the new paint in any way at
> such an obvious location. My goal was a permanent mount, high and symmetric
> to the body without having to move it here and there. The 7900's a pretty
> tall antenna for 2m and they say don't use a mag mount. If I were to mount
> it on one of the supporting bars of the roll bar, how much affect do you
> think it'd have on radiation pattern? It wouldn't be parallel to sheet
> metal. The only metal within two feet would be the roll bar itself.
> Thanks to Red Baron for the recommendation for the Diamond lip mount but
> the Jeep doesn't have any "lips" to speak of. I'll basically weld a
> horizontal steel tab (1" x 1") that I can mount in like through the roof of
> a regular auto.
> Best Regards,
> Drink, WP3JQ
>
> "DonW" <n7don_J_@yahoo.com (to reply remove "_J_")> wrote in message
> news:KX%98.71523$zJ.1019831@news.easynews.com...
> > If I understand correctly, you'd fold over the antenna so the canoe could
> > rest on the roll bar. Would that mean the antenna would be horizontal
> when
> > the canoe was mounted? If that's the case, I'd assume you wouldn't be
> using
> > your radio with the ant. folded. You might try mounting the ant. to one
> > side so the canoe and ant. could co-exist. That's why I mounted the ant.

> on
> > the Trans Sport at the LR so I could use a roof top carrier when we
> camped.
> > It works fine.
> > Do you have any flat spots to use a mag. mount? You could move the ant.
> to
> > jeep hood when the canoe was on top.
> > Another consideration is what are the relative dimensions of the antenna
> and
> > where it folds. For example my 39" ant. folds at 33" so there is a 6"
> stub
> > that might interfer with a canoe seat. You'd need to check it out.
> > Your best bet is to put the canoe in place and mock up an ant. and see
> what
> > works best.
> > Don
> > N7DON
> >
> > "Drink" <REMOVE_THISdrink@coqui.net> wrote in message
> > news:uIX98.124208$h31.9152771@e420r-atl1.usenetserver.com...
> > > Thanks for the comments Don,
> > > So, do you think my idea about folding over the antenna to put a
canoe
> > up
> > > there is a good idea?
> > > 73's,
> > > Drink, WP3JQ
> >
> >
> >
>
>
>

3267. Re: Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 20:10:17 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <GPdb8.137135$h31.10664323@e420r-atl1.usenetserver.com>
Source record: 148604
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

I've got a 76 CJ-7 with a strapless bikini top. (For those who don't
Jeeps, the "strapless" thing is a big deal:)
Drink.
"Den" <Dennis@me.com> wrote in message
news:1Sdb8.903$BR3.43883@bgtnsc04-news.ops.worldnet.att.net...
> Hi Drink
> What type of Jeep do you have ?Wrangler or Cherokee
> I have a 7900 on Wrangler and also have a 7500 on a pick up truck (both
fold
> overs).
> I will elaborate upon your reply.
> 73,Den
>
>
> "Drink" <REMOVE_THISdrink@coqui.net> wrote in message
> news:5Vcb8.135624$h31.10647290@e420r-atl1.usenetserver.com...
> > Hi Don,
> > That's correct (antenna mounted center of rollbar & folded with canoe
> > strapped down). I don't anticipate putting up a canoe on any regular
> basis
> > but want to be capable when I want. There's no flat metal up there but,
> > yes, I could use a mag mount on the hood or fenderwell. The hood's a
bad
> > option for me because I don't want to damage the new paint in any way at
> > such an obvious location. My goal was a permanent mount, high and
> symmetric
> > to the body without having to move it here and there. The 7900's a
pretty
> > tall antenna for 2m and they say don't use a mag mount. If I were to
> mount
> > it on one of the supporting bars of the roll bar, how much affect do you
> > think it'd have on radiation pattern? It wouldn't be parallel to sheet
> > metal. The only metal within two feet would be the roll bar itself.
> > Thanks to Red Baron for the recommendation for the Diamond lip mount
but
> > the Jeep doesn't have any "lips" to speak of. I'll basically weld a
> > horizontal steel tab (1" x 1") that I can mount in like through the roof
> of
> > a regular auto.
> > Best Regards,
> > Drink, WP3JQ
> >
> > "DonW" <n7don_J_@yahoo.com (to reply remove "_J_")> wrote in message

> > news:KX%98.71523$zJ.1019831@news.easynews.com...
> > > If I understand correctly, you'd fold over the antenna so the canoe
> could
> > > rest on the roll bar. Would that mean the antenna would be horizontal
> > when
> > > the canoe was mounted? If that's the case, I'd assume you wouldn't be
> > using
> > > your radio with the ant. folded. You might try mounting the ant. to
one
> > > side so the canoe and ant. could co-exist. That's why I mounted the
> ant.
> > on
> > > the Trans Sport at the LR so I could use a roof top carrier when we
> > camped.
> > > It works fine.
> > > Do you have any flat spots to use a mag. mount? You could move the
ant.
> > to
> > > jeep hood when the canoe was on top.
> > > Another consideration is what are the relative dimensions of the
antenna
> > and
> > > where it folds. For example my 39" ant. folds at 33" so there is a 6"
> > stub
> > > that might interfer with a canoe seat. You'd need to check it out.
> > > Your best bet is to put the canoe in place and mock up an ant. and see
> > what
> > > works best.
> > > Don
> > > N7DON
> > >
> > > "Drink" <REMOVE_THISdrink@coqui.net> wrote in message
> > > news:uIX98.124208$h31.9152771@e420r-atl1.usenetserver.com...
> > > > Thanks for the comments Don,
> > > > So, do you think my idea about folding over the antenna to put a
> canoe
> > > up
> > > > there is a good idea?
> > > > 73's,
> > > > Drink, WP3JQ
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3268. Re: Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 20:56:36 UTC
From: Den <Dennis@me.com>
Message-ID: <8Ceb8.1094$BR3.50103@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148606
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

Hello again
I am using the 7900 on the wrangler only for its length.It is mounted on the spare tire bumper bracket which is next to the rt. tail lamp.Being mounted that low the length makes it reach about 18 to 24 inches above the roof height.I have a hard top.
As far as performance I can't distinguish any difference between the 41 inch 7500 model which is mounted
on a 6 1/2" Diamond mag mount which is designed for that antenna.That is used on the roof of my pick up truck and previously was on the trunk lid of a Cavalier Superb performance on all applications.Wouldn't buy anything else.
I had a bad experience with the 7500 when I had it on the roof and went into a very low clearance parking garage.the overhead beam was about 18" above the roof (the ant. is 41") It sounded like I took the roof off of the car !! When I checked the ant. and mount (which did get knocked of) I could not find a single mark on it, never mind broken ! That was two years ago and it is still working flawlessly.....what else can I say

Good luck
Den, KB1EKU

"Drink" <REMOVE_THISdrink@coqui.net> wrote in message
news:GPdb8.137135$h31.10664323@e420r-atl1.usenetserver.com...
> I've got a 76 CJ-7 with a strapless bikini top. (For those who don't
> Jeeps, the "strapless" thing is a big deal:)
> Drink.
> "Den" <Dennis@me.com> wrote in message
> news:1Sdb8.903$BR3.43883@bgtnsc04-news.ops.worldnet.att.net...
> > Hi Drink
> > What type of Jeep do you have ?Wrangler or Cherokee
> > I have a 7900 on Wrangler and also have a 7500 on a pick up truck (both
> fold
> > overs).
> > I will elaborate upon your reply.
> > 73,Den
> >
> >
> > "Drink" <REMOVE_THISdrink@coqui.net> wrote in message
> > news:5Vcb8.135624$h31.10647290@e420r-atl1.usenetserver.com...
> > > Hi Don,
> > > That's correct (antenna mounted center of rollbar & folded with
canoe
> > > strapped down). I don't anticipate putting up a canoe on any regular
> > basis

> > > but want to be capable when I want. There's no flat metal up there
but,
> > > yes, I could use a mag mount on the hood or fenderwell. The hood's a
> bad
> > > option for me because I don't want to damage the new paint in any way
at
> > > such an obvious location. My goal was a permanent mount, high and
> > symmetric
> > > to the body without having to move it here and there. The 7900's a
> pretty
> > > tall antenna for 2m and they say don't use a mag mount. If I were to
> > mount
> > > it on one of the supporting bars of the roll bar, how much affect do
you
> > > think it'd have on radiation pattern? It wouldn't be parallel to
sheet
> > > metal. The only metal within two feet would be the roll bar itself.
> > > Thanks to Red Baron for the recommendation for the Diamond lip mount
> but
> > > the Jeep doesn't have any "lips" to speak of. I'll basically weld a
> > > horizontal steel tab (1" x 1") that I can mount in like through the
roof
> > of
> > > a regular auto.
> > > Best Regards,
> > > Drink, WP3JQ
> > >
> > > "DonW" <n7don_J_@yahoo.com (to reply remove "_J_")> wrote in message
> > > news:KX%98.71523$zJ.1019831@news.easynews.com...
> > > > If I understand correctly, you'd fold over the antenna so the canoe
> > could
> > > > rest on the roll bar. Would that mean the antenna would be
horizontal
> > > when
> > > > the canoe was mounted? If that's the case, I'd assume you wouldn't
be
> > > using
> > > > your radio with the ant. folded. You might try mounting the ant. to
> one
> > > > side so the canoe and ant. could co-exist. That's why I mounted the
> > ant.
> > > on
> > > > the Trans Sport at the LR so I could use a roof top carrier when we
> > > camped.
> > > > It works fine.
> > > > Do you have any flat spots to use a mag. mount? You could move the
> ant.
> > > to
> > > > jeep hood when the canoe was on top.
> > > > Another consideration is what are the relative dimensions of the

> antenna
> > > and
> > > > where it folds. For example my 39" ant. folds at 33" so there is a
6"
> > > stub
> > > > that might interfer with a canoe seat. You'd need to check it out.
> > > > Your best bet is to put the canoe in place and mock up an ant. and
see
> > > what
> > > > works best.
> > > > Don
> > > > N7DON
> > > >
> > > > "Drink" <REMOVE_THISdrink@coqui.net> wrote in message
> > > > news:uIX98.124208$h31.9152771@e420r-atl1.usenetserver.com...
> > > > > Thanks for the comments Don,
> > > > > So, do you think my idea about folding over the antenna to put a
> > canoe
> > > > up
> > > > > there is a good idea?
> > > > > 73's,
> > > > > Drink, WP3JQ
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3269. Re: shared antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 20:59:50 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C6D76C6.1535170@crosslink.net>
Source record: 148607

rb wrote:
>
> Anyone know of a 25 watt coupler that will allow me to use one antenna with
> two 2m VHF sets hooked to it at the same time and will keep one from
> blasting the other out? What I want to do is put one set in the garage,
> and another in the house so I can keep up with the repeater traffic as I
> walk back and forth.

Go to <http://www.hamtronics.com/> , scroll down the left-hand sidebar
and click on "Duplexers".
73 KA3DWW

3270. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 21:29:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C6D7DC9.E1EACB1F@eznec.com>
Source record: 148608

This isn't really something I've thought about or dealt with before, but it seems to me that the issue is more one of simple geometry than a near field/far field distinction. The question is how far away from the dish do the emanations from all parts of the dish add up in phase. I'm having a little trouble expressing the conditions in words in a way that's not too convoluted, but let me try. Imagine a straight line drawn from the rim of the dish, across the dish's center to the other rim. Put an observer directly in line with the main beam, at a variable distance from the dish. The observer will see the full gain or power density of the dish if the distance from the observer to all points on the imaginary line across the dish is the same within a small fraction of a wavelength. If the observer is closer than this, then the power density reduction Ian speaks of will occur. Of course there's no abrupt change -- the dilution gets greater and greater as you get closer to the dish.

Let's say for argument that the diameter of a dish is 10 wavelengths. At a distance of 125 wavelengths, the radiation from all parts of the dish will add together with the same phase within 36 degrees. That is, when an observer is 125 wavelengths from the dish, the distance from the observer to the center of the imaginary line is 0.1 wavelength shorter than the distance from the observer to the rim of the dish (an end of the imaginary line). For phase errors this small and smaller, the distance for a phase error of e degrees is about 45 * d^2 / e where d is the dish diameter in wavelengths. It wouldn't be much of a problem to integrate the field strength at a given distance or phase error for a uniform dish illumination to get an accurate idea of the actual field strength, so I'm sure it's been done long ago.

Roy Lewallen, W7EL

3271. Re: 18 inch cock !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 21:39:42 UTC
From: "Ken Eckel Jr." <airboy@juno.com>
Message-ID: <yefb8.127422$Ar5.4965683@typhoon.austin.rr.com>
Source record: 148609

New design, the Bio antenna.
Dang, 1/4 wave so to speak whip on 2M!

Can you grow one for 6M?

K

<timothy@freenet.it> wrote in message
news:ZDcb8.37803$gs4.1379409960@hestia.telenet-ops.be...
> http://clik.to/freepornsites
>
> LAST DAYS !!!!
>
> Hurry up : it's now or never !
> 10 000s of pics, 1 000s of video's and lots of live shows : all 4 free for
life !
> You don't need a card, you don't have to download software. Just enter a
valid e-mail adress and that's it !!! Unbelievable, but really true !
> Amateur, Asian, Fetish, Gay, Lesbian, Mature, Hardcore and Teens : 8
topsites, all 4 free !
>
> http://clik.to/freepornsites
>
> Remember : this offer will expire in a few days...
>
>

3272. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 22:20:20 UTC
From: cprstn54zz@att.net
Message-ID: <3c6d87eb.1929203@news-server.optonline.net>
Source record: 148610

On Thu, 14 Feb 2002 15:19:50 GMT, "R. Scott" <kf7qz@yahoo.com> wrote:
>Besides PVC. Ive seen phonelic

I looked into this when considering different screwdrivers. Phenolic has the best dielectric and RF characteristics, but it is not an easy DIY. Looking at the tables of electrical properties of materials, I concluded that the best DIY was glass-reinforced epoxy.

You could take a PVC pipe of the correct diameter, put a long 1/8" slot in it. Put some chips or a wire in the slot to keep it from closing. Cover the PVC with poly sheeting. Wrap the thing with 2" woven roving tape saturated with epoxy and let harden. Then squeeze the tube (close the slit) and pull out the pipe & poly.

Ken
(to reply via email
remove "zz" from address)

3273. Re: Low power television antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 22:25:57 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c6d8f7a_4@news1.prserv.net>
Source record: 148611

I recently did some research on TV antennas, and the only manufacturer I found selling consumer grade antennas besides all channel models any more is Channel Master. I admit I didn't put a lot of effort into it, but all my old sources are gone, merged, bought out, whatever. Your best choice is to get a cut to channel antenna and install it as high and in the clear as possible. You should be able to get a grade A picture at least 15 miles from the transmitter that way, if the outside antenna is at least above the local trees and rooflines.

--
Crazy George
Remove NO and SPAM from return address
Michael Largent <largent1@pacbell.net> wrote in message
news:TYcb8.2845$uV7.1172208817@newssvr14.news.prodigy.com...
> We have a low power TV station in town that is hard to receive and I am
> looking for comments and suggestions about the best and cheapest antenna
to
> use. Also tips on best installation methods would be welcome. I bought a
> RCA ANT200x settop antenna amplifier that works ok. I am just wondering
if
> I can do better.
> Thanks in advance,
> Michael
>
>

3274. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 22:40:42 UTC
From: richardharrison@webtv.net
Message-ID: <3575-3C6D8E6A-8@storefull-115.iap.bryant.webtv.net>
Source record: 148613

Roy Lewallen wrote:
"The observer will see the full gain or power density of the dish if the distance from the observer to all points on an imaginary line across the dish is the same within a small fraction of a wavelength."

Here is a related bit of trivia. There is an optimum spacing between dish and reflector in a periscope system which depends on their sizes, and vice versa.

It comes about because of path length phase shift differences.

From Lenkurt curves for a periscope, a 6-ft dish with an 8X12-ft reflector, separated by 300 ft, gives 39 db gain at 6725 MHz.

The width of the reflector (height of 12 ft, too) is limited to 8 feet because 4 ft from the center of the reflector there is a phase reversal near the outside edge of the reflector. This is caused by a 180 degree difference in pathlength between the ray striking the middle of the reflector and the pathlength of the ray striking the outside edge of the reflector (approximately).

The signal from the elevated reflector would contain out-of-phase energy in addition to in-phase energy were the reflector larger. That would reduce system gain.

So much for trivia.

Best regards, Richard Harrison, KB5WZI

3275. Re: Low power television antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-15 22:41:34 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C6D8E9E.94473A3C@coqui.net>
Source record: 148612

Michael Largent wrote:
>
> We have a low power TV station in town that is hard to receive and I am
> looking for comments and suggestions about the best and cheapest antenna to
> use. Also tips on best installation methods would be welcome. I bought a
> RCA ANT200x settop antenna amplifier that works ok. I am just wondering if
> I can do better.
> Thanks in advance,
> Michael

Any outdoor antenna oriented towards the station will make a zillion
percent improvement. Radio Shack has some pretty inexpensive models,
but once you get outdoors the differences between them are minor.
-Bill

3276. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 00:54:57 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna6rbf0.3ge.QSB@animas.frontier.net>
Source record: 148614

On Fri, 15 Feb 2002 16:40:42 -0600 (CST), Richard Harrison scribbled:
> Roy Lewallen wrote:
> "The observer will see the full gain or power density of the dish if the
> distance from the observer to all points on an imaginary line across the
> dish is the same within a small fraction of a wavelength."
>
> Here is a related bit of trivia. There is an optimum spacing between
> dish and reflector in a periscope system which depends on their sizes,
> and vice versa.
>
> It comes about because of path length phase shift differences.

Ain't we talking about Frenzel effects here?

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

3277. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 00:57:37 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <NTP1dogB6ab8EAAi@ifwtech.com>
Source record: 148615

VE9SRB wrote:
>
>"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
>news:qixsxPD7kDb8EAW7@ifwtech.com...
>> VE9SRB wrote:
>> >
>> >The antennas used in cell sites may have a gain up to 15+ dBi. At a
>> >maximum power of 500 W, a 15 dBi antenna will increase the effective
>> >radiated power to about 16 KW. Cell sites would not likely use a
>> >maximum gain antenna at maximum transmit power. 16 KW effective
>> >radiated power is an extreme unlikely estimate. I think an
>> >environmental evaluation is required by the FCC is the ERP exceeds 1 KW.
>> >
>> Oh no, please not the "effective radiated power" fallacy again!
>>
>> I hate to see RF engineers quoting ERP in connection with RF hazards,
>> because it produces misleading results, and generates big numbers that
>> only confuse and frighten people.
>>
>
>Before you slam someone on the relevance of ERP, I would suggest you
>understand it a bit more first.
>

We'll see... I'll revisit that quote later.

>>
>> Remember that RF hazards are related to power DENSITY in watts PER
>> SQUARE METRE.
>
>If you read further in my post, you will see that I discuss power density
>per square meter.
>
>>If you feed 1 watt into an antenna with an aperture of say
>> 1 square metre, the power density is 1W/sq m (assuming uniform
>> illumination, and neglecting near-field effects for the moment).
>>If you
>> increase the aperture to 2 sq m, you increase the gain by a factor of 2
>> and you double the ERP - but you have HALVED the power density across
>> the aperture.
>>
>
>Power density across the "antenna aperture" is not the issue. The issue is
>not how the total power is "distributed" across the antenna. The issue is
>how the antenna "distributes" its total radiated power in space. The

>antenna's gain and pattern shape are the important parameters to consider.
>
>You forgot to consider the relative distribution of the total radiated power
>in the far field.

For all practical RF hazard assessments, the far-field behavior of a beam antenna is irrelevant. All the action is in the near field, and in the transition region before far-field pattern is created.

Let's talk about dishes, although the same principles apply to any "aperture antenna" such as a corner reflector, slotted panel etc. For simplicity let's assume that the aperture diameter D is several wavelengths, so that physical optics apply.

If the whole aperture is illuminated uniformly, with no taper or sidelobes, you can imagine the power flowing out of the aperture in a parallel-sided "tube" which then begins to flare-out into the diverging beam that we see in the far field.

At first sight, the RF power density in this tube is simply the power P divided by the cross-section area in square metres:

Power density = P / (pi * (D/2)^2) = 4 * P / (pi * D^2) W/m^2 (eq 1)
where D is the diameter in metres

Unfortunately this ignores the fact that wave interference in the near field makes the power density on the axis of the beam build up to a peak at the edge of the near field. More accurately, then:

Maximum power density = 16 * P / (pi * D^2) W/m^2 (eq 2)

Distance of max PD in front of aperture = 0.2 * D^2 wavelengths (approx) (eq 3)

Beyond the location of the peak, the power density falls away, and by the time we're truly in the far field it is accurately following the inverse square law.

There are several things to note here:

1. The maximum quoted above is the greatest power density that can be found *anywhere* (unless you actually climb inside the dish and get close to the feedhorn where the power is still concentrated into a much smaller area).

2. The maximum power density is *inversely* proportional to the frontal aperture area of the antenna, i.e. inversely proportional to the far-field gain and the ERP. Let me repeat that: as the size and gain of the antenna go up, and the far-field ERP goes up, the maximum value of power density goes *down* - check equation 2.

3. When you increase the diameter of the aperture, the location of that power density maximum moves further away (eq 3)... but its value gets

smaller (eq 2).

4. Whether or not you need to exclude people from the main beam of the antenna depends on both the RF power and the size of the aperture. Increasing power works against you (obviously) but increasing area works *for* you.

5. (a) If the maximum power density calculated above is less than the Maximum Permissible Exposure limit (for uncontrolled exposure, at that frequency) then you only need to keep people out of the near field and prevent them from actually handling the antenna, or climbing inside it if it's bigger then they are.

(b) IF the maximum power density calculated above exceeds the MPE limit, then - and only then - does the exclusion area have to extend into the transition region between the near-field and far-field.

If the MPE limit is L (W/m^2) then the distance X where the power density falls below L is given approximately by:

X = (D / 2) * SQRT(P * pi / L) wavelengths (eq 4)

Here it becomes true that exclusion distance X increases with D... but *only* if you have enough raw RF power and a *small* enough antenna to be forced into step 5b. As others have said, cellular base stations generally run lowish power into quite large antennas, so they are covered by step 5a.

>You're confusing people by telling them that a bigger antenna with more gain
>has a lower radiated power density because the power delivered to it is
>spread over a bigger antenna size.

Yes, because "the power delivered to it is spread over a bigger antenna size" is exactly what "lower power density" means! (You have a different definition?)

>Your discussion would lead people to
>believe that they are safer standing in the main beam of a 100 dB gain dish
>than a 1/2 wave dipole.

"100dB gain" is inflated rhetoric... but even that exaggerated statement is correct if the ERP, frequency and distance remain the same.

Earlier, you said:

>Before you slam someone on the relevance of ERP, I would suggest you
>understand it a bit more first.
>
ERP is P*(far-field gain) and is proportional to (P * D^2)... agreed, I hope?

You won't see any terms resembling (P * D^2) in the equations above - that's why I say it is irrelevant. Power density calculations for RF hazards need P and D *separately*, not bundled together as ERP.

Bottom line: ERP is meaningful and useful for far-field (communication) purposes, but it is useless for RF hazard assessment. You don't know whether it comes from a large antenna and low RF power (good) or a small antenna and high power (could be a problem). The hazard assessment calculations don't go anywhere near the concept because it is irrelevant.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3278. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 01:07:39 UTC
From: C <cpierce@usit.net>
Message-ID: <cpierce-2AF05F.19073515022002@news.earthlink.net>
Source record: 148616

In article <3c6d87eb.1929203@news-server.optonline.net>,
cprstn54zz@att.net (Ken) wrote:

> On Thu, 14 Feb 2002 15:19:50 GMT, "R. Scott" <kf7qz@yahoo.com> wrote:
> >Besides PVC. Ive seen phonelic
>
> I looked into this when considering different screwdrivers. Phenolic
> has the best dielectric and RF characteristics, but it is not an easy
> DIY. Looking at the tables of electrical properties of materials, I
> concluded that the best DIY was glass-reinforced epoxy.
>
> You could take a PVC pipe of the correct diameter, put a long 1/8"
> slot in it. Put some chips or a wire in the slot to keep it from
> closing. Cover the PVC with poly sheeting. Wrap the thing with 2"
> woven roving tape saturated with epoxy and let harden. Then squeeze
> the tube (close the slit) and pull out the pipe & poly.
>
> Ken
> (to reply via email
> remove "zz" from address)

How about using a cardboard form and covering the coil with carbon fiber cloth you get at the hobby shop strong light durable cheep, good enough for the stealth bomber.... I picked up a roll ready to apply for less than $20.00 including tax. All you need to apply is scissors and a hair dryer..

If the carbon fiber detunes the coils go with the epoxy impregnated cloth. This takes a little longer to cure.

C.

3279. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 02:02:58 UTC
From: Hairy Harry <harmsharry-@dingoblue.net.au>
Message-ID: <3c6dbd25$0$18474$afc38c87@news.optusnet.com.au>
Source record: 148617

Be careful, carbon fibre is just as dangerous if nor more than asbestos.
Wear a face mask
HH
>
> How about using a cardboard form and covering the coil with carbon fiber
> cloth you get at the hobby shop strong light durable cheep, good enough
> for the stealth bomber.... I picked up a roll ready to apply for less
> than $20.00 including tax. All you need to apply is scissors and a
> hair dryer..
>
>
> If the carbon fiber detunes the coils go with the epoxy impregnated
> cloth. This takes a little longer to cure.
>
> C.

3280. IC-706 HS-1600 Screwdriver Tuning Circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 02:11:40 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C6DBFDC.1C57EDA1@IEEE.org>
Source record: 148618

I've finished installation of my IC-706/HS-1600 tuning circuit.
It works like a charm without pushing any buttons on the 706.
Anytime the screwdriver motor is running, the IC-706 automatically
goes into 10 watt CW transmit mode and displays the SWR. Click on
the following to view.
--
cheers, CAM http://www.qsl.net/w5dxp/706screw.htm

3281. Re: IC-706 HS-1600 Screwdriver Tuning Circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 03:04:07 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <snir6ugn5m8blk3pcinlgsn12e32eiur4u@4ax.com>
Source record: 148469

You do good work Cecil. How do you put it into practice? Let's say your screwdriver is tuned to 15-meters, and you want to QSY to 40-meters. I assume you would start the antenna going up, then watch for a dip in the SWR at 40-meters? Short of an Am-Com, this looks like the best solution.

73, Dick - W6CCD

On Fri, 15 Feb 2002 20:11:40 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

>I've finished installation of my IC-706/HS-1600 tuning circuit.
>It works like a charm without pushing any buttons on the 706.
>Anytime the screwdriver motor is running, the IC-706 automatically
>goes into 10 watt CW transmit mode and displays the SWR. Click on
>the following to view.

3282. Re: IC-706 HS-1600 Screwdriver Tuning Circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 03:28:30 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C6DD1DE.78743D1A@IEEE.org>
Source record: 148470

Dick Hughes wrote:
> You do good work Cecil. How do you put it into practice? Let's say
> your screwdriver is tuned to 15-meters, and you want to QSY to
> 40-meters. I assume you would start the antenna going up, then watch
> for a dip in the SWR at 40-meters? Short of an Am-Com, this looks
> like the best solution.

Yep, that's how you do it. Previously, I had to switch to AM mode,
hold the PTT button in one hand, hold the up/down switch in the
other hand, and watch the SWR meter. Now I don't have to switch
to AM mode or hold the PTT button down. It works really well
and is about $200 short of an Am-Com.

Next step is to make the antenna automatically stop moving when the
SWR hits a minimum so I don't have to watch the SWR meter. The
IC-706 side tone will tell me when power has been removed from the
screwdriver motor. I have the design worked out, I just have to
make it RFI proof.
--
cheers, CAM http://www.qsl.net/w5dxp

3283. Re: IC-706 HS-1600 Screwdriver Tuning Circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 03:55:23 UTC
From: Leland Cox <lcox107@comcast.net>
Message-ID: <3C6DD903.D0F25EBA@comcast.net>
Source record: 148471

How about a tone generator that changes with the SWR? We would have to
use an external swr bridge, but they are cheap!

Keep up the good ideas!
Les, AA4F

CAM wrote:
>
> Dick Hughes wrote:
> > You do good work Cecil. How do you put it into practice? Let's say
> > your screwdriver is tuned to 15-meters, and you want to QSY to
> > 40-meters. I assume you would start the antenna going up, then watch
> > for a dip in the SWR at 40-meters? Short of an Am-Com, this looks
> > like the best solution.
>
> Yep, that's how you do it. Previously, I had to switch to AM mode,
> hold the PTT button in one hand, hold the up/down switch in the
> other hand, and watch the SWR meter. Now I don't have to switch
> to AM mode or hold the PTT button down. It works really well
> and is about $200 short of an Am-Com.
>
> Next step is to make the antenna automatically stop moving when the
> SWR hits a minimum so I don't have to watch the SWR meter. The
> IC-706 side tone will tell me when power has been removed from the
> screwdriver motor. I have the design worked out, I just have to
> make it RFI proof.
> --
> cheers, CAM http://www.qsl.net/w5dxp

3284. Re: IC-706 HS-1600 Screwdriver Tuning Circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 04:11:29 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C6DDBF1.C9D04724@IEEE.org>
Source record: 148472

Leland Cox wrote:
> How about a tone generator that changes with the SWR? We would have to
> use an external swr bridge, but they are cheap!

I remember reading about such a device, a voltage controlled oscillator,
that changed pitch depending on the SWR. That's another way to do it.
The best circuit I've seen in my applications manuals is a 556.
--
cheers, CAM http://www.qsl.net/w5dxp

3285. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 04:15:19 UTC
From: richardharrison@webtv.net
Message-ID: <21351-3C6DDCD7-119@storefull-113.iap.bryant.webtv.net>
Source record: 148473

Marvin, W3DHJ wrote:
"Ain`t we talking about Fresnel effects here?"

Yes. That`s it. Fresnel zones are produced by interference between waves which have traveled different distances. These zones form concentric areas around a direction of travel. There is an inner disk centered on the direct ray.This disk is limited by the radius at which a phase inversion takes place. This disk is called the first Fresnel zone. This is like the bull`s eye of a target imposed on a spherical wavefront. Within this bull`s eye, the signal is in-phase.

At the outer edge of the bull`s eye the phase shifts from in-phase to out-of-phase as the difference in path lengths from source to middle of the bull`s eye, and from the source to edge of the bull`s eye becomes 1/2-wavelength.

The target ring immediately surrounding the bull`s eye is called the second Fresnel zone. Signal in the second Fresnel zone is out-of-phase with that in the first Fresnel zone.

SIgnal in the third Fresnel zone is in-phase with that in the first Fresnel zone.

This is a repeating pattern. Odd-numbered zones are in-phase. Even-numbered zones are out-of-phase.

There is a use for this information in path clearance calculations for "line-of-sight" paths.

Best regards, Richard Harrison, KB5WZI

3286. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 04:58:24 UTC
From: richardharrison@webtv.net
Message-ID: <3573-3C6DE6F0-97@storefull-115.iap.bryant.webtv.net>
Source record: 148478

Ian, G3SEK wrote:
"Unfortunately this ignores the fact that wave interference in the near field makes the power density on the axis of the beam build up to a peak at the edge of the near field.

960 MHz is about the lowest frequency at which dish antennas are commonly used. This is a 6wavelength of 31 cm, or 12.3 inches.

By anyone`s estimate, the near field is exhausted within a few wavelengths, or a few feet at 960 MHz.

These microwave frequencies require an almost line-of-sight path which clears all obstructions. Didh antenna paths must clear buildings, trees, hills, etc. This means located well overhead in most cases so that no one can approach the near field. Thus, the near field is not relevant to r-f exposure except in the most unusual cases.

Best regards, Richard Harrison, KB5WZI

3287. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 04:59:03 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0202152059.dda1bba@posting.google.com>
Source record: 148474

"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
news:<qixsxPD7kDb8EAW7@ifwtech.com>...
> Oh no, please not the "effective radiated power" fallacy again!
>
> I hate to see RF engineers quoting ERP in connection with RF hazards,
> because it produces misleading results, and generates big numbers that
> only confuse and frighten people.
>

> ERP is only about long-distance communication effectiveness - it has
> NOTHING to do with RF hazards.

Hi Ian,
In another message, you say that "RF hazards only arise close to the
antenna"
This is not true in general, but only when the transmitter power is
relatively low. I don't think you'd want to stand 25', 50', or even
100' in front of a high-gain antenna fed with 1 kW.

In general, the power density in the main lobe of an aperture antenna
is relatively constant (not inversely proportional to the distance
squared) out to the antenna's far-field distance of 2D^2/lambda. With
enough transmitter power, RF hazards could exist at distances ranging
from physically touching the antenna out to the far-field distance and
beyond. If your books on RF hazards don't cover this, they are wrong.

EIRP has *everything* to do with the radiation hazards of aperture
antennas. One way to determine if any hazard conditions exist is to
use EIRP with corrections for near-field effects.

73,
Bill N3WK

3288. Re: IC-706 HS-1600 Screwdriver Tuning Circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 04:59:16 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <rnpr6uggul9onn818natkb8ti58r8nu6vl@4ax.com>
Source record: 148475

There was one in the Sep 79 issue of QST. It was a modification to a standard Swan SWR meter.

Dick - W6CCD

On Fri, 15 Feb 2002 22:11:29 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

>Leland Cox wrote:
>> How about a tone generator that changes with the SWR? We would have to
>> use an external swr bridge, but they are cheap!
>
>I remember reading about such a device, a voltage controlled oscillator,
>that changed pitch depending on the SWR. That's another way to do it.
>The best circuit I've seen in my applications manuals is a 556.

3289. Re: 18 inch cock !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 05:10:22 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020216001022.02357.00000319@mb-cf.aol.com>
Source record: 148476

>New design, the Bio antenna.
>Dang, 1/4 wave so to speak whip on 2M!
>
>Can you grow one for 6M?

Get it up to a 1/4 wave for 6m and you've got yourself a 5/8 for 2m! :)
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

3290. 75/100 Ohm Impedance Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 05:15:40 UTC
From: bfranske@yahoo.com
Message-ID: <ce6da1e5.0202152115.772864d7@posting.google.com>
Source record: 148477

I'm trying to make something similar to this:
http://www.videobalun.com/lib/videoware/cctvbalundatasheet.pdf
Does anyone know of a place to buy 75:100 Ohm Transformers, or another way to do this? The idea is to run a 75 Ohm baseband video signal over Cat5 UTP cable.

Thanks,
Ben Franske

3291. Re: Part number needed for discontinued Hustler antenna mount

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 05:58:41 UTC
From: John_Breland@Yahoo.Com
Message-ID: <d2e1c59f.0202152158.35c082f5@posting.google.com>
Source record: 148479

The MM-3...Yep, that's it! When I read the part number it brought to
life an old brain cell that had been dormant for a while.

A couple have turned up in searches, now to find one that really
exists.

Thanks again guys.

John

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:<3c69e0aa_2@news1.prserv.net>...
> Universal Cowl Mount model MM-1.
> It also looks like the MM-3 Universal Mount may have the same guts mounted
> in a collar for surface mount. Their catalog is not very informative on
> details.
>
> --
> Crazy George
> Remove NO and SPAM from return address
> John <John_Breland@Yahoo.Com> wrote in message
> news:d2e1c59f.0202072200.34ca559@posting.google.com...
> > Hi all.
> >
> > A few years back I had a mobile antenna mount that was made by
> > Hustler. It used a hole in the fender like a factory AM/FM antenna
> > would use. The mount had a uhf connector on the feeline side and a
> > 3/8" female hole on the antenna side. This was just an antenna mount,
> > no electronics involved.
> >
> > I totaled the van, and did not take the time to remove the antenna
> > mount. I thought I could find another one easily, but it's been 5
> > years years now and I haven't seen one since! Can any of you recall
> > (or look up in an old catalog) the part number of that device? Then I
> > would at least know exctly what I was looking for. It would be
> > greatly appreciated.
> >
> > Thanks,
> > John Breland
> > KD4EXS
> > Birmingham, Alabama

3292. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 07:47:22 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202152347.4aa2ce47@posting.google.com>
Source record: 148480

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:<xRTa8.49264$TI5.2626779@e3500-atl2.usenetserver.com>...
> See below.
> Gary - KJ6Q <davison7@gte.net> wrote in message
> news:jnTa8.552$t8.387505@paloalto-snr1.gtei.net...
> > What Doc sez is true - about a month ago I ruined a screwdriver that had a
> PVC coil form while
> > running at the 500 watt level on 40 meters. 100 watts will undoubtedly
> present less heat, but if you
> > are going to use that type of material, use the grey stuff with a thic a
> wall thickness as you can
> > find - it's commonly use for electrical conduit, and is lots more
> resistant to heat distortion...
>
> BUT! It's composition is different and, I understand, contains some
> metallic properties that does wierd stuff to a loading coil! I was made to
> understand that this stuff is a no-no.
> >
> > --
> > Gary - KJ6Q

I had always thought it was the least metal content of the types. I
use it here and have had no problems. I also stuck it in a microwave
with a glass of water and fried it a while. It stayed cold. MK

3293. Re: Low power television antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 08:21:38 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4l4qi$k40$5@quark.scn.rain.com>
Source record: 148481

Michael Largent <largent1@pacbell.net> wrote:
> We have a low power TV station in town that is hard to receive and I am
> looking for comments and suggestions about the best and cheapest antenna to
> use. Also tips on best installation methods would be welcome. I bought a
> RCA ANT200x settop antenna amplifier that works ok. I am just wondering if
> I can do better.

An outside antenna - especially one cut for the channel you wish to
recieve, would be far better than the indoor antenna with amplifier.

If you need an amplifier, using one that mounts at the antenna is much
better than one that mounts at the TV set.

--
Bill Nelson (billn@peak.org)

3294. Wanted: FM antenna sorcerer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 10:23:55 UTC
From: wattle@eudoramail.com
Message-ID: <4b0a791.0202160223.34d5ed3b@posting.google.com>
Source record: 148482
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

I been reading both r.r.shortwave and r.r.a.antenna for a few weeks now and impressed about some of the posters knowledge in this area.

I am new to FMDX and just bought the Arcam FMJ t-21 tuner along with APS-9 yagi antenna and rotator which I installed on the roof 2 weeks ago on a 2 story house. The rotator is made by ChannelMaster and came with a remote.

This tuner does not have a signal meter to indicate the best level for optimum reception. How would I know where to point the antenna to get the best reception?

Is this a matter of locating the transmision tower of every radio station and point the antenna there? Where do I get the info. about their location? Right now I'm getting about 20-30 stations and wish to get more. I would listen to stations from San Francisco (45 miles away) but the antenna had to be pointed the other way around to get the best reception. Why is this?

I'd like to hear some opinion please.

Watt
San Jose CA
Silicon Valley

3295. Antenna Net inquiry

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 11:41:36 UTC
From: Mont O'Leary <k0ycn@arrl.net>
Message-ID: <a4lhes$l02$1@news.chatlink.com>
Source record: 148483

Are there any active HF nets that focus primarily on the same issues as this newsgroup? Also, I would be interested in any nets that focus on other technical ham radio related matters.
Tnx and 73, Mont - K0YCN

3296. Re: IC-706 HS-1600 Screwdriver Tuning Circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 12:30:50 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C6E50FA.5BE2A3E0@IEEE.org>
Source record: 148484

Dick Hughes wrote:
> There was one in the Sep 79 issue of QST. It was a modification to a
> standard Swan SWR meter.

Mine will be using a Daiwa CN-101L although I do have an old
Heathkit HM-15.
--
cheers, CAM http://www.qsl.net/w5dxp

3297. Re: Wanted: FM antenna sorcerer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 14:38:11 UTC
From: Jay <japolicownospam@snet.net>
Message-ID: <n9ub8.1931$k5.1215089@newssvr28.news.prodigy.com>
Source record: 148485
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

One thing is for sure...if you have to point your antenna AWAY from San Francisco in order to hear stations there, you are getting a reflection off of something as your primary signal. What is the topography of your area? Are there mountains or tall buildings near you? The only other thing that would explain this phenomenon would be that you are minimizing some kind of interference source or multipath (or possibly overload) by pointing your antenna away from that interference source.

In general, under ideal conditions, yes...you would point the antenna directly at the transmitting antenna for best reception. Your antenna should be quite directional, so if the signal is weak, just a few degrees of antenna rotation should cause change in noticeable signal strength. I'm not familiar with the Arcam, but if it doesn't have a signal strength meter, you have to use your ears and gut instincts to judge signal strength. And remember...maximum signal strength doesn't necessarily equal best reception. Sometimes a weaker signal is cleaner (less multipath or interference). Multipath can cause horrendous distortion on FM if its bad enough. It's caused by the signal bouncing off some object (like a building or hill) then reaching your antenna just slightly later in time than the direct signal. These two signals now have phase mismatch and actually jam one another.

"Watt" <wattle@eudoramail.com> wrote in message
news:4b0a791.0202160223.34d5ed3b@posting.google.com...
> I been reading both r.r.shortwave and r.r.a.antenna for a few
> weeks now and impressed about some of the posters knowledge
> in this area.
>
> I am new to FMDX and just bought the Arcam FMJ t-21 tuner
> along with APS-9 yagi antenna and rotator which I installed on
> the roof 2 weeks ago on a 2 story house. The rotator is made by
> ChannelMaster and came with a remote.
>
> This tuner does not have a signal meter to indicate the best
> level for optimum reception. How would I know where to point
> the antenna to get the best reception?
>
> Is this a matter of locating the transmision tower of every
> radio station and point the antenna there? Where do I get the
> info. about their location? Right now I'm getting about 20-30
> stations and wish to get more. I would listen to stations from
> San Francisco (45 miles away) but the antenna had to be pointed
> the other way around to get the best reception. Why is this?
>
> I'd like to hear some opinion please.

>
>
> Watt
> San Jose CA
> Silicon Valley

3298. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 15:20:28 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <0Nub8.5445$BR3.179136@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148486

"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
news:NTP1dogB6ab8EAAi@ifwtech.com...

Ian:

I snipped the entire message because I don't intend to respond in detail. I understand your points and I don't necessarily disagree with many of them.

The problem that I had with your responses was that you slammed "RF communications engineers" and the far-field analysis I presented because you believe there is more RF hazard in the near field. You presumed that I did not know what I was talking about because I did not address the near-field issues. The original poster did not indicate that he intended to be in the near-field of the antenna, so why address that aspect of the problem? If someone asked you what the RF field intensity was at 100+ wavelengths from the antenna would you start with an analysis of the near-field distribution immediately surrounding the antenna elements or look at the total power delivered to the antenna, the antenna pattern and the antenna gain? That was my only issue with your posts.

Take care,

Steve

3299. Re: Wanted: FM antenna sorcerer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 16:02:15 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c6e85f5_4@news1.prserv.net>
Source record: 148487
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Watt:

Most, if not all of the SF FM stations are on the peak above South San Francisco (I forget the name, but it is a county park). The terrain works against you there, as the various hills between SJ and there are real scatterers, but on the other hand, I am usually able to hear most SF stations down to Mountain View on a car radio, so unless you are in a real deep hole in SJ, you shouldn't have any problem.

See 100,000 watts web page for station locations in the US. That isn't the exact URL, use Google or another search engine to look for broadcast stations.

Now for the part no one will tell you. The biggest problem with FM DXing is receiver front end overload. Local stations will put so much RF into most solid state and many vacuum tube receivers that it will block the reception of weak stations. That may be why you have to aim the antenna away from SF to hear them. SJ stations are likely in more or less the same direction, and you have to move the antenna to a point where they are no longer blocking the front end. Solution? A better tuner like a HK or one of the other tube monsters from the 60s.

--
Crazy George
Remove NO and SPAM from return address
Watt <wattle@eudoramail.com> wrote in message
news:4b0a791.0202160223.34d5ed3b@posting.google.com...
> I been reading both r.r.shortwave and r.r.a.antenna for a few
> weeks now and impressed about some of the posters knowledge
> in this area.
>
> I am new to FMDX and just bought the Arcam FMJ t-21 tuner
> along with APS-9 yagi antenna and rotator which I installed on
> the roof 2 weeks ago on a 2 story house. The rotator is made by
> ChannelMaster and came with a remote.
>
> This tuner does not have a signal meter to indicate the best
> level for optimum reception. How would I know where to point
> the antenna to get the best reception?
>
> Is this a matter of locating the transmision tower of every
> radio station and point the antenna there? Where do I get the
> info. about their location? Right now I'm getting about 20-30
> stations and wish to get more. I would listen to stations from

> San Francisco (45 miles away) but the antenna had to be pointed
> the other way around to get the best reception. Why is this?
>
> I'd like to hear some opinion please.
>
>
> Watt
> San Jose CA
> Silicon Valley

3300. Re: shared antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 17:25:49 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <xCwb8.11948$SJ3.461195@news1.east.cox.net>
Source record: 148488

You aren't serious, are you??? Those are designed and tuned to two
specific frequencies. They will not allow him to monitor or transmit using
two rigs sharing a common antenna on a local repeater. They would allow two
rigs to
share one antenna, provided both rigs were set to fixed simplex channels
with a minimum spacing (typically 400 kHz or more). There are cheap
"duplexers"
that permit sharing between different band rigs/antennas, but they are
horses
of a different color.

> Go to <http://www.hamtronics.com/> , scroll down the left-hand sidebar
> and click on "Duplexers".
> 73 KA3DWW

3301. Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 18:07:06 UTC
From: Tom Nelson <nelsonca@stormnet.com>
Message-ID: <3C6E9FCA.BEA45937@stormnet.com>
Source record: 148489

Has anyone "reverse engineered" a B&W folded dipole? What kind of balun is used? What is spreader length? What kind of trap?

I would like to make one for my own use.

TNX
Tom

3302. Re: 18 inch cock !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 18:23:04 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u6tahm91oeiv41@corp.supernews.com>
Source record: 148492

It's the buttfed balun that is a bitch to design.

Jim

"Ken Eckel Jr." <airboy@juno.com> wrote in message
news:yefb8.127422$Ar5.4965683@typhoon.austin.rr.com...

> New design, the Bio antenna.
> Dang, 1/4 wave so to speak whip on 2M!

3303. Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 18:43:43 UTC
From: kg4pss@arrl.net
Message-ID: <a3866922.0202161043.735420d4@posting.google.com>
Source record: 148490

I was planning to put up a home brew G5RV "Jr." antenna, but found that I may have enough long wire for the full-sized horizontal section. Unfortunately, I do not have the ability (at the present time) to elevate it high enough to accomidate the 34' ladder line. Also, I already have a piece of ladder line cut for 17'.

My question is, can you make a hybrid G5RV that has the horizontal length of a full-size (or longer?), mated with a half-sized vertical section? If I understand correctly, the full-size version only uses 16-17' of the vertical section to radiate on some bands, but I have yet to hear of anyone building one with less than 34' on a full sized antenna. I have tried using EZNEC, but it is way over my head.

Thanks,

Allen

3304. Ham radio parody of another Britney Spears song

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 18:44:10 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0202161044.662bde0e@posting.google.com>
Source record: 148491
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.dx

http://www.jasonhsu.com/humor.html

Check out my ham parody of the latest hit song by Britney Spears. The original is "I'm Not A Girl, Not Yet A Woman". My parody is "I Am A Ham, Not Yet An Old Hand".

Jason Hsu, AG4DG
jason_hsu_802701@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

3305. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 19:05:23 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0202161105.46147b6@posting.google.com>
Source record: 148493

"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
news:<NTP1dogB6ab8EAAi@ifwtech.com>...
> If the whole aperture is illuminated uniformly, with no taper or
> sidelobes, you can imagine the power flowing out of the aperture in a
> parallel-sided "tube" which then begins to flare-out into the diverging
> beam that we see in the far field.
>
> At first sight, the RF power density in this tube is simply the power P
> divided by the cross-section area in square metres:
>
> Power density = P / (pi * (D/2)^2) = 4 * P / (pi * D^2) W/m^2 (eq
> 1)
> where D is the diameter in metres
>
> Unfortunately this ignores the fact that wave interference in the near
> field makes the power density on the axis of the beam build up to a peak
> at the edge of the near field. More accurately, then:
>
> Maximum power density = 16 * P / (pi * D^2) W/m^2 (eq 2)
>
> Distance of max PD in front of aperture = 0.2 * D^2 wavelengths
> (approx) (eq 3)

There's something wrong with this equation. You can't get wavelengths
out of this equation unless D is either given in wavelengths (you've
already said D is
given in terms of metres) or the equation includes a lamdba term
(D/lambda would be the diameter in wavelengths).

> 5. (a) If the maximum power density calculated above is less than the
> Maximum Permissible Exposure limit (for uncontrolled exposure, at that
> frequency) then you only need to keep people out of the near field and
> prevent them from actually handling the antenna, or climbing inside it
> if it's bigger then they are.
>
> (b) IF the maximum power density calculated above exceeds the MPE limit,
> then - and only then - does the exclusion area have to extend into the
> transition region between the near-field and far-field.
>
> If the MPE limit is L (W/m^2) then the distance X where the power
> density falls below L is given approximately by:
>
> X = (D / 2) * SQRT(P * pi / L) wavelengths (eq 4)
>

There are a couple of things with your equation that are seriously wrong. First of all, if you look at the terms in the equation the units for X are
length * SQRT(watts*length^2/watts),
or length * SQRT(length^2),
or length * length,
or length^2
In other words X is given in units of square meters. This makes no sense.

Secondly, you can't get the answer in wavelengths unless D is given in wavelengths and L is given in watts per square wavelength. The other possibility
is that the equation would have to have a lambda term.

I suspect your equation should be
X = (D / (2*lambda)) * SQRT(P * pi / L) in *meters* (eq 4A)

The units for X is <metres>, not wavelengths. Put the units in the equation, cancel them where possible, and see for yourself. Run some examples with real numbers and you'll see that X can be a large distance.

Why add the lambda term? If you solve for L using 4A, you get
L = (P/(4*pi*X^2) * (pi*D/lambda)^2
The (pi*D/lambda)^2 factor is an approximate value for the maximum far-field gain of the antenna. L is then the power density evaluated at distance X using the EIRP.

73,
Bill N3WK

3306. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 19:42:54 UTC
From: Tom Nelson <nelsonca@stormnet.com>
Message-ID: <3C6EB63E.9464C91E@stormnet.com>
Source record: 148494

Fiberglass tube is readily available in this area (Sacramento Valley) because it is used as a handle material for "pole saws" for pruning orchard trees but only in 1 1/4" diameter. I think this is too small for your purposes. If you need a short length let me know.

Tom
KD6EVM

"R. Scott" wrote:

> Jerry Oxendine wrote:
> >
> > Try black Nylon (Nylok). It is extremely rigid, resistant to UV rays, and
> > RF neutral.
> >
> > Jerry
> >
> > www.qsl.net/k4kwh
>
> I havnt heard of that, but Ill ask my tooling friend. Finding
> Fiberglass tubing is a Beaaach too.
>
> I was trying for Phenolic and or fiberglass but here in the PNW there
> doesnt seem to be a listing of this kind of material.
>
> Off to search for Nylok
>
> Rick KF7QZ

3307. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 20:36:25 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c6ec8da_1@news1.prserv.net>
Source record: 148495

Do a Google search for T2FD. Look especially at W4RNL's site. The antenna was around long before B & W started making them commercially, and there are dozens of variations.

Second step: The T2FD was originally described in a US Air Force publication. Does anyone have a citation for that article (from the 40s or 50s IIRC), or a hard copy they can copy for me?.

--
Crazy George
Remove NO and SPAM from return address
Tom Nelson <nelsonca@stormnet.com> wrote in message news:3C6E9FCA.BEA45937@stormnet.com...
> Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> is used? What is spreader length? What kind of trap?
>
> I would like to make one for my own use.
>
> TNX
> Tom
>

3308. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 20:53:58 UTC
From: n5kzw@arrl.net
Message-ID: <3c6ec673.170879402@news.ev1.net>
Source record: 148496

I have lost several modems in thunder storms with no other equipment
affected. In the cases where there was visible damage, it usually
appeared on the phone side of the circuit. This is with plone line
surge suppressors.

YMMV
Ed Bailen

On Fri, 15 Feb 2002 11:53:22 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Ed, N5KZW wrote:
>"I think the surge is coming in on the phone lines."
>
>Could happen and is worth checking. But, telcos know how to protect
>against lightning damage as well as anybody. How often do you hear of
>lightning injury or damage to a phone subscriber from his connection?
>Company I retired from leased thousands of miles of phone lines. I was
>telecom manager, checked the bills, and handled the trouble reports.
>There was little or no involvement in lightning damage.
>
>Best regards, Richard Harrison,KB5WZI
>

3309. Re: Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 21:12:35 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4mjjq$1c2ll$1@ID-124126.news.dfncis.de>
Source record: 148499

Allen,

There's a nice simple little program DIPOLE2 available from website below.
Download in a few seconds. Run imediately.

It analyses performmance, SWR's, radiating efficiency, feeder loss, input
impedances at all junctions, of ANY center-fed dipole + balanced twin line +
balun + coax line + tuner. It even calculates your L-Tuner settings and
efficiency.

With one stroke of a key all G5RV details can be entered for further
experiments. Find all resonant frequencies in a few seconds.

But I suggest you clear you mind of a G5RV and its derivatives. Erect a
centre fed dipole, overall length of no particular value but which fits
nicely into your back yard. As high as you get it of course.

Feed it with ladder line or preferably open wire line of no particular
length right back to the shack, plus, initially, about another couple of
fathoms to allow some later variation in feeder length. (Visit CAM's
website. It is possible to dispense with a tuner and vary line length
instead.

Connect the feeder to a tuner via a choke balun. Avoid coax like the plague
except between tuner and transceiver. And you will have the most efficient
of all the simple all-band antennas which could be erected at your QTH.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

kg4pss <kg4pss@arrl.net> wrote in message
news:a3866922.0202161043.735420d4@posting.google.com...
> I was planning to put up a home brew G5RV "Jr." antenna, but found
> that I may have enough long wire for the full-sized horizontal
> section. Unfortunately, I do not have the ability (at the present
> time) to elevate it high enough to accomidate the 34' ladder line.
> Also, I already have a piece of ladder line cut for 17'.
>
> My question is, can you make a hybrid G5RV that has the horizontal
> length of a full-size (or longer?), mated with a half-sized vertical
> section? If I understand correctly, the full-size version only uses
> 16-17' of the vertical section to radiate on some bands, but I have
> yet to hear of anyone building one with less than 34' on a full sized

> antenna. I have tried using EZNEC, but it is way over my head.
>
> Thanks,
>
> Allen

3310. T2FD terminating resistor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 21:23:37 UTC
From: Keith <kwatkins@tr15.freeserve.co.uk>
Message-ID: <a4mig2iug1@newsg1.svr.pol.co.uk>
Source record: 148497

For Tx use to 250w--can anyone suggest a source of supply please.Thanks.

3311. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 21:34:31 UTC
From: k4yn@america.net
Message-ID: <3c6ed000.26229095@news.america.net>
Source record: 148498
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Fri, 15 Feb 2002 19:32:13 +0000, Walt Davidson
<walt99@tiscali.co.uk> wrote:

>On Fri, 15 Feb 2002 09:09:11 -0500, Robert Lyons <boblyons@umich.edu>
>wrote:
>
>>Lessee - I'm envisioning the moments before the landing sortie ...
>>
>> "I may die in this attempt, boys, but you know what this means to
>> our friends back home. I may not come back, but I gotta go activate
>> Mellish Reef! For Freedom and DXers everywhere!!"
>>
>>
>>You 'spose they really think like that? My, what heros these DXers are!
>
>"One small step for a ham ..... one giant leap ...... etc etc"
>
>:-)
>73 de G3NYY
>
>--
>Walt Davidson Email: g3nyy @freeuk.com

Hams have died trying to get to the Spratleys.
Ron

3312. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 21:48:08 UTC
From: richardharrison@webtv.net
Message-ID: <3575-3C6ED398-22@storefull-115.iap.bryant.webtv.net>
Source record: 148501

Ed Bailen wrote:
"I have lost several modems in thunder storms with no other equipment affected."

I have a similar experience with a clock-radio-telephone combination. I was plugged into both phone and power lines with this.

The phone and power lines share a common ground connection where they enter the premises. Obviously, the potentials of both lines are the same at this point when protection comes into play. Also obviously, the potentials of both lines were greatly different at my device at the instant when the lightning flashed. I would wager that out at the ground rod the volts on the phone and power lines were very nearly the same when the lightning did its thing. This causes me to think the house phone and power wiring acted as an antenna to collect the breakdown volts across my phone-radio-clock combination.

I needed, but did not have, suppressors on the phone and power lines at the device to shunt the device for its protection.

The telcos must have 200 million U.S. customers. For most of their century+ of experience most of their connected subscriber equipment was not also connected to the power line and if it was, protection was provided by the telco. Telcos don`t provide protection for customer owned and maintained (coam) equipment.

Best regards, Richard Harrison, KB5WZI

3313. Re: Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 22:09:49 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202161409.49ac94ed@posting.google.com>
Source record: 148500

kg4pss@arrl.net (kg4pss) wrote in message
>
> My question is, can you make a hybrid G5RV that has the horizontal
> length of a full-size (or longer?), mated with a half-sized vertical
> section? If I understand correctly, the full-size version only uses
> 16-17' of the vertical section to radiate on some bands, but I have
> yet to hear of anyone building one with less than 34' on a full sized
> antenna. I have tried using EZNEC, but it is way over my head.
>
> Thanks,
>
> Allen

I don't see why you would care if the vertical part radiated. I
wouldn't really want that anyway. Myself, I'd just string up the
longest wire you can and feed it in the center with ladder line. The
length being whatever it takes to get from the antenna to the tuner.
MK

3314. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 22:52:07 UTC
From: Walt Davidson <walt99@tiscali.co.uk>
Message-ID: <ufnt6u8noueqmkusjlj5a4vam7t45ec12b@4ax.com>
Source record: 148502
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Sat, 16 Feb 2002 21:34:31 GMT, k4yn@america.net (RJ) wrote:

>Hams have died trying to get to the Spratleys.

Other vacationers have died jet-ski-ing.
Does that make them national heroes?

73 de G3NYY

--
Walt Davidson Email: g3nyy @freeuk.com

3315. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 23:15:07 UTC
From: the-boatman <the-boatman@lineone.net>
Message-ID: <3c6ee7e8$1_2@mk-nntp-1.news.uk.worldonline.com>
Source record: 148503

you need a 6-1 ballun and a 390 ohm resistor, the resistor needs to be
rated
a quarter of your maximum op power.
If you make the antenna a total length of 50 feet and spacing 17 inches
the antenna will cover 40 through to 10 mtrs.

"Tom Nelson" <nelsonca@stormnet.com> wrote in message
news:3C6E9FCA.BEA45937@stormnet.com...
> Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> is used? What is spreader length? What kind of trap?
>
> I would like to make one for my own use.
>
> TNX
> Tom
>

3316. Re: My R7 blew down....HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 23:17:01 UTC
From: Jack S <sheehy@gsinet.net>
Message-ID: <3C6EE86D.92A11DB9@gsinet.net>
Source record: 148504

daniel wright wrote:

> Greetings.....!
>
> I have an early version of the Cushcraft R7. After many years of
> waving in the breeze (un guyed)(in Nebraska), the base insulator gave
> up the ghost and broke, causing the antenna which is mounted on a ten
> foot mast tied to my back fence, to become a "sloper"....(8-<....
>
> I contacted Cushcraft via the website and received a prompt reply that
> this antenna is no longer supported (I wonder if they realized the
> pun?) and there are no spare parts available.
>
> Anyone have experience with replacing the base insulator on one of
> these antennas? Some of the top of the antenna is also bent up pretty
> well, but I have not been able to get to the antenna to check closely
> becaue of snow and mud and I'm a wuss....
>
> Any help appreciated...thanks es
>
> 73 de Dan -- WAï¿½JRD ..
> Lincoln, Nebraska

Put out a plea for another broken one -- and piece together the parts...
I did that one time with an old Hy-Gain vertical which came down in an ice
storm. I bought another busted up one at a flea market and made a good
whole one. Worked out pretty well.

Good luck!

Jack
W1JS

3317. Help with 40m beam

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 23:22:43 UTC
From: wb4una@aol.com
Message-ID: <20020216182243.27565.00000408@mb-de.aol.com>
Source record: 148505

I have just gotten a 40 meter 2 element beam and have no paper work on it. it
is a large trap beam..it has DA on the boom to element bracket and that is all.
if someone has a idea what this might be PLEASE drop me a line ...

Thanks ahead of time..

randy

ARS: WB4UNA
Randy Chavis
247 Goff Court
West Columbia
S.C. 29172

3318. Re: Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-16 23:36:16 UTC
From: Roger Appleby <rappleby@ihug.co.nz>
Message-ID: <a4mqkr$uq0$1@lust.ihug.co.nz>
Source record: 148506

I can second the info given in other replies.

I had a 'half' G5RV as my first antenna here at 20ft height and it worked
well on 20/40m but not on any of the upper bands. I had a 51ft flat top and
abt 15ft of TV300ohm feeder. BUT the 10/12/15/17 were just quiet. So
following similar advice I put up a dipole 66 ft flat top (that was all the
space I had) and fed it with ladder line bought from the US and went
straight into the transmatch through its internal 4:1 balun.
Well 40 and 20M are just the same but the uplift in performance on the upper
bands is astonishing!
All this at 20 feet but overlooking the beach which helps!!
Good Luck!
Roger
ZL4AFM.

"kg4pss" <kg4pss@arrl.net> wrote in message
news:a3866922.0202161043.735420d4@posting.google.com...
> I was planning to put up a home brew G5RV "Jr." antenna, but found
> that I may have enough long wire for the full-sized horizontal
> section. Unfortunately, I do not have the ability (at the present
> time) to elevate it high enough to accomidate the 34' ladder line.
> Also, I already have a piece of ladder line cut for 17'.
>
> My question is, can you make a hybrid G5RV that has the horizontal
> length of a full-size (or longer?), mated with a half-sized vertical
> section? If I understand correctly, the full-size version only uses
> 16-17' of the vertical section to radiate on some bands, but I have
> yet to hear of anyone building one with less than 34' on a full sized
> antenna. I have tried using EZNEC, but it is way over my head.
>
> Thanks,
>
> Allen

3319. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 00:17:37 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3c6ef847$0$35571$1dc6e903@news.corecomm.net>
Source record: 148507

It uses a 12-1 balun and a 600 ohm resistor in the termination.

Tom Nelson wrote:
>
> Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> is used? What is spreader length? What kind of trap?
>
> I would like to make one for my own use.
>
> TNX
> Tom

3320. help with 40 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 00:20:54 UTC
From: wb4una@aol.com
Message-ID: <20020216192054.26898.00001161@mb-fb.aol.com>
Source record: 148508

I just picked up a 40 meter beam but have no manual with it. it has DA on the boom to element bracket. No other markings that I can find. It is a 40 meter 2 element beam...if you think you might know what this is are have any info on it please help ..

thanks AHEAD OF TIME..

Randy

ARS: WB4UNA
Randy Chavis
247 Goff Court
West Columbia
S.C. 29172

3321. Re: Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 00:39:49 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C6EFBD5.6A0345A6@IEEE.org>
Source record: 148510

kg4pss wrote:
> My question is, can you make a hybrid G5RV that has the horizontal
> length of a full-size (or longer?), mated with a half-sized vertical
> section?

Nope, won't work. On 20m, 102 ft is about 1.5 wavelengths and 28 ft
of twinlead is about one half wavelength. If you halve the vertical
section you screw up the antenna on 20m, the band for which it was
originally designed.
--
cheers, CAM http://www.qsl.net/w5dxp

3322. Re: Dual band single coax 2m/70cm base antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 00:42:41 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <50Db8.682$7Q6.48458@news1.east.cox.net>
Source record: 148509

I think the CC dual band beam uses two separate feeds, so you would need to use a dual band combiner to use one shared coaxial feed.

I think the most elegant solution is to use something like the KMA Rover LPY--it will give you coverage from the FM BCB thru 1300 MHz. I am using one vertically polarized for FM work and I love it.

Pete

"R. Scott" <kf7qz@yahoo.com> wrote in message news:3C6BD543.DE2CC4E0@yahoo.com...
> Not quite sure if the Copper Cactus J would work (Besides I dont like
> copper cactus looks). IS there a small beam design that is a single coax
> feed dual band 3 or 4 elem. I cant find my antenna hand book anywhere
> (Weve been doing a lot of moving stuff around lately) and I just did a
> net search off of AC6V's site and cannot seem to find one. The
> commercial ones are "Expensive" as all get out.
>
> Ideas ?
>
>
> Thanks in advance

3323. Re: T2FD terminating resistor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 00:44:02 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C6EFCD2.4BABB643@IEEE.org>
Source record: 148511

Keith wrote:
> For Tx use to 250w--can anyone suggest a source of supply please.Thanks.

I've got 600 ohm, 50 watt, non-inductive resistors for sale for $5 each.
You can series/parallel them to get the desired ohmage and wattage.
--
cheers, CAM http://www.qsl.net/w5dxp

3324. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 00:48:36 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0202161648.75f004cd@posting.google.com>
Source record: 148512
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

Walt Davidson <walt99@tiscali.co.uk> wrote in message
news:<83oq6u804a65dm6a485spldk1rfbon9cr7@4ax.com>...
> On Fri, 15 Feb 2002 09:09:11 -0500, Robert Lyons <boblyons@umich.edu>
> wrote:
>
> >Lessee - I'm envisioning the moments before the landing sortie ...
> >
> > "I may die in this attempt, boys, but you know what this means to
> > our friends back home. I may not come back, but I gotta go activate
> > Mellish Reef! For Freedom and DXers everywhere!!"
> >
> >
> >You 'spose they really think like that? My, what heros these DXers are!
>
> "One small step for a ham ..... one giant leap ..... etc etc"
>
>
Add two more entries to the list of assholes who hang out in this village.
>
>

>
> :-)
> 73 de G3NYY

3325. WANTED: how to make a wire flexible yet able to retain its shape

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 00:56:26 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0202161656.d803e97@posting.google.com>
Source record: 148513
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

As I mentioned before, I'm working on a better handheld antenna for better performance than my trusty 2m/70cm RD-98 antenna, yet retains much of its convenience. This antenna would have an SMA connector and radials.

The RD-98 antenna is VERY flexible but manages to retain its shape. If you apply pressure to the antenna, you can bend it into a curve. You don't have to worry about breaking it. Although the antenna is 17 inches long, I can compress it substantially. But in spite of the flexibility, the antenna retains its shape. If you let go of the antenna after bending it, it bounces back to its normal vertical shape.

How can I get a piece of wire to exhibit the same characteristics as my RD-98 antenna? The antenna is wrapped in a black plastic/rubber material. I would like the vertical element and radials to have the flexible-yet-shape-retaining shape. Does anyone know what material would give a thin wire (#18/20 solid copper) such properties?

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

3326. Re: Wanted: FM antenna sorcerer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 00:57:46 UTC
From: mwelch@madbbs.com
Message-ID: <39385c80.0202161657.25a5010b@posting.google.com>
Source record: 148514
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:<3c6e85f5_4@news1.prserv.net>...
> Watt:
>
> Most, if not all of the SF FM stations are on the peak above South San
> Francisco (I forget the name, but it is a county park). The terrain works
> against you there, as the various hills between SJ and there are real
> scatterers, but on the other hand, I am usually able to hear most SF
> stations down to Mountain View on a car radio, so unless you are in a real
> deep hole in SJ, you shouldn't have any problem.
>
> See 100,000 watts web page for station locations in the US. That isn't the
> exact URL, use Google or another search engine to look for broadcast
> stations.
>
> Now for the part no one will tell you. The biggest problem with FM DXing is
> receiver front end overload. Local stations will put so much RF into most
> solid state and many vacuum tube receivers that it will block the reception
> of weak stations. That may be why you have to aim the antenna away from SF
> to hear them. SJ stations are likely in more or less the same direction,
> and you have to move the antenna to a point where they are no longer
> blocking the front end. Solution? A better tuner like a HK or one of the
> other tube monsters from the 60s.
>
> --
> Crazy George
> Remove NO and SPAM from return address
> Watt <wattle@eudoramail.com> wrote in message
> news:4b0a791.0202160223.34d5ed3b@posting.google.com...
> > I been reading both r.r.shortwave and r.r.a.antenna for a few
> > weeks now and impressed about some of the posters knowledge
> > in this area.
> >
> > I am new to FMDX and just bought the Arcam FMJ t-21 tuner
> > along with APS-9 yagi antenna and rotator which I installed on
> > the roof 2 weeks ago on a 2 story house. The rotator is made by
> > ChannelMaster and came with a remote.
> >
> > This tuner does not have a signal meter to indicate the best
> > level for optimum reception. How would I know where to point
> > the antenna to get the best reception?
> >
> > Is this a matter of locating the transmision tower of every

> > radio station and point the antenna there? Where do I get the
> > info. about their location? Right now I'm getting about 20-30
> > stations and wish to get more. I would listen to stations from
> > San Francisco (45 miles away) but the antenna had to be pointed
> > the other way around to get the best reception. Why is this?
> >
> > I'd like to hear some opinion please.
> >
> >
> > Watt
> > San Jose CA
> > Silicon Valley

Okay, here's an opinion for you. The pound for pound (read dollar for dollar) champion among modern receivers for FM DXing is the Cambridge Soundworks (aka Kloss) Model 88; its only true rival is the even more inexpensive Tivoli Model One which is reputed to have greater selectivity. The 88 has no signal meter...the Model One has a tuning eye and a sweet gear reduced tuning knob. Presently, the 88 is on sale through CSW for $150. The Model One is widely available for $99. On the 88 I regularly listen to CBC One Toronto which is located a minimum of 105 miles north of me. Some nights, reception is excellent with no or minimal fading; other nights reception is so-so but intelligible. My antenna is a plastic dipole tacked to the bedroom wall on the first floor.

3327. Re: Wanted: FM antenna sorcerer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 01:28:27 UTC
From: wattle@eudoramail.com
Message-ID: <4b0a791.0202161728.26b10d41@posting.google.com>
Source record: 148515
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Jay" <japolicownospam@snet.net> wrote in message news:<n9ub8.1931

Hi Jay,

> One thing is for sure...if you have to point your antenna AWAY from San
> Francisco in order to hear stations there, you are getting a reflection off
> of something as your primary signal.

Wow! I didn't know this. Would this secondary reflections be sonically
inferior from direct signals from stations? It would seem to me.

> What is the topography of your area?

San Jose (aka Silcon Valley) is indeed a lowland surrounded by hills
and valleys but not mountains of any great height.

> Are there mountains or tall buildings near you? The only other thing that
> would explain this phenomenon would be that you are minimizing some kind of
> interference source or multipath (or possibly overload) by pointing your
> antenna away from that interference source.

I used a 15 ft. pole on top of 2 story house and I don't recall seeing
any obstractions of any kinds in the surrounding area. The only
thing I saw was hills far, far away!

> In general, under ideal conditions, yes...you would point the antenna
> directly at the transmitting antenna for best reception. Your antenna should
> be quite directional, so if the signal is weak, just a few degrees of
> antenna rotation should cause change in noticeable signal strength.

It was recommended that I used APS-9 for its directionality. Pls. see
www.antennaperformance.com for specs. I'm not sure if I'm getting
the best bang for the buck on this one.

> I'm not familiar with the Arcam, but if it doesn't have a signal strength
> meter, you have to use your ears and gut instincts to judge signal ...

Ok, thats probably why the meter was not built-in.

> strength. And remember...maximum signal strength doesn't
> necessarily equal best reception.
> Sometimes a weaker signal is cleaner (less multipath or interference).
> Multipath can cause horrendous distortion on FM if its bad enough. It's
> caused by the signal bouncing off some object (like a building or hill) then
> reaching your antenna just slightly later in time than the direct signal.
> These two signals now have phase mismatch and actually jam one another.

Ok Jay, it must be the hills.

Watt

3328. Re: 1975 ARRL CALLBOOK

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 01:31:24 UTC
From: DCLIFF@webtv.net
Message-ID: <6864-3C6F07EC-45@storefull-2173.public.lawson.webtv.net>
Source record: 148518

Callbook is what I need.

Dennis in Ga. (Please remove your hat when replying by E Mail.)

3329. Re: Ham radio parody of another Britney Spears song

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 01:31:56 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <a4n14k$a5a$1@slb0.atl.mindspring.net>
Source record: 148516
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.dx

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0202161044.662bde0e@posting.google.com...
> http://www.jasonhsu.com/humor.html
>
> Check out my ham parody of the latest hit song by Britney Spears. The
> original is "I'm Not A Girl, Not Yet A Woman". My parody is "I Am A
> Ham, Not Yet An Old Hand".

Considering the demographics and sensibilities of the majority of USA hams, you'd be better off making parodies about the likes of Phyllis Diller and George Gobel*. Mix in a few jew jokes and you'll have the Liberty Net crowd rolling in the aisles.

73 Corry K4DOH
--

It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net

*Not to be confused with George Goble, America's Most Dangerous Barbecue Chef:
http://ghg.ecn.purdue.edu/~ghg/

3330. Re: 18 inch cock !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 01:44:43 UTC
From: SideBand <abNO8SPAMlr@csotbs.org>
Message-ID: <3C6F0B0B.3010304@csotbs.org>
Source record: 148517

This is starting to sound an awful lot like 27.185 AM...

-SSB

Jim Weir wrote:

> It's the buttfed balun that is a bitch to design.
>
> Jim
>
>
>
> "Ken Eckel Jr." <airboy@juno.com> wrote in message
> news:yefb8.127422$Ar5.4965683@typhoon.austin.rr.com...
>
>
>>New design, the Bio antenna.
>>Dang, 1/4 wave so to speak whip on 2M!
>>
>
>
>

--
73 de AB8LR, Chris

http://csotbs.shopiwon.com/ for great deals on computer products.

3331. Re: Wanted: FM antenna sorcerer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 01:52:42 UTC
From: wattle@eudoramail.com
Message-ID: <4b0a791.0202161752.3f7406e4@posting.google.com>
Source record: 148419
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message

> Most, if not all of the SF FM stations are on the peak above South San
> Francisco (I forget the name, but it is a county park). The terrain works
> against you there, as the various hills between SJ and there are real
> scatterers, but on the other hand, I am usually able to hear most SF
> stations down to Mountain View on a car radio, so unless you are in a real
> deep hole in SJ, you shouldn't have any problem.

I actually live in South SJ area near hwy.101/hwy.85 intersection. I was
hoping to capture Fresno stations on the other side of the hills.
So far, so bad, zip.

> See 100,000 watts web page for station locations in the US. That isn't the
> exact URL, use Google or another search engine to look for broadcast
> stations.

Thanks for this info. Crazy George!

> Now for the part no one will tell you. The biggest problem with FM DXing is
> receiver front end overload. Local stations will put so much RF into most
> solid state and many vacuum tube receivers that it will block the reception
> of weak stations. That may be why you have to aim the antenna away from SF
> to hear them. SJ stations are likely in more or less the same direction,
> and you have to move the antenna to a point where they are no longer
> blocking the front end. Solution? A better tuner like a HK or one of the

Arcam t-21, I heard, is highly regarded tuner in audio press. Its made by
a co. from U.K with a good reputation. Pls. see www.arcam.co.uk for info.
It cost $799.00. As far as its fron end, I have no way of knowing how it
perform against HK or ...

> ... other tube monster from the 60s.

W

3332. Re: Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 02:42:32 UTC
From: kg4pss@arrl.net
Message-ID: <a3866922.0202161842.31dd0844@posting.google.com>
Source record: 148420

Wow, I wasn't expecting replies so soon! Thanks for all the good input. I could spend days playing around with Dipole2!

I should have clarified my situation a little more. For the time being (possible 12-18 months), I am limited in height (no trees, got to set some tall fence posts)and method of routing the feeder. I was thinking G5RV because, for now, I can roll the coax out to where the antenna will be, connect it without having to get on a ladder, not have to worry about running close to gutters, metal window/door frames, and roll it back up when I'm done. Also, my "starter" budget was just enough to squeeze an MFJ-945E tuner(no balun). I am most interested in 75/40/20m work for now. My goal for now is just to have something to get started with to get on air; When I am finally able to get my shack (er, I mean office in the house addition:) built, it will be on the end of the house where I will have much greater flexibility for a number of better antenna projects.

That may not change anyone's advice, which was all good, and very much appreciated. I just wanted to give you a better idea of where I was coming from with the question.

Thanks again!

3333. WTB Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 02:45:05 UTC
From: torreylm@aol.com
Message-ID: <20020216214505.04701.00000942@mb-fo.aol.com>
Source record: 148421

I'm moving to Des Moines, Iowa in a few weeks and want to erect a tower. Looking for tower in 50-70 foot range. Would love to find a nice Tri-EX 51W crank up.

Torrey N9AUJ
cell 815-988-6632
Preferred email torreym@uic.edu

3334. Swan TB-3HA Antenna manual needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 03:35:32 UTC
From: James Hurry <jdhurry@austin.rr.com>
Message-ID: <8yFb8.132350$Ar5.5221074@typhoon.austin.rr.com>
Source record: 148422

Hi, I am looking for a manual for a Swan TB-3HA antenna.. Can I get a copy for someone, I will be gald to pay for coping and postage..

--
Thanks and 73's,
Dudley
WA5QPZ
jhurry@austin.rr.com

3335. Re: WANTED: how to make a wire flexible yet able to retain its shape

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 04:45:44 UTC
From: richardharrison@webtv.net
Message-ID: <23900-3C6F3578-208@storefull-118.iap.bryant.webtv.net>
Source record: 148423

Jason Hsu wrote:
"Does anyone know what material would give a thin wire (#18/20 solid copper) such properties?"

Stainless steel is used for its return to original shape, post distortion. If you don`t like its surface resistivity, coat it with copper.

Best regards, Richard Harrison, KB5WZI

3336. New Web Site

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 06:00:12 UTC
From: joehawk@mac.com
Message-ID: <78a8e86f.0202162200.39cd8649@posting.google.com>
Source record: 148424

Greetings,

We have started a Radio Monitoring Top Sites List that deals with all areas of radio monitoring. I invite you to check it out and hopefully list your site.

http://www.topsitelists.com/start/hawkins/

Best regards,

Joe Hawkins

3337. Re: 75/100 Ohm Impedance Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 08:52:02 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <tbru6u4ejev3h7fln2j799l0nnt1u4f55q@4ax.com>
Source record: 148425

On 15 Feb 2002 21:15:40 -0800, bfranske@yahoo.com (Ben Franske) wrote:

>I'm trying to make something similar to this:
>http://www.videobalun.com/lib/videoware/cctvbalundatasheet.pdf
>Does anyone know of a place to buy 75:100 Ohm Transformers, or another
>way to do this? The idea is to run a 75 Ohm baseband video signal over
>Cat5 UTP cable.
>
>Thanks,
>Ben Franske

Hi Ben,

Try a T-Pad of three resistors.
R1 27 Ohms
R2 87 Ohms
R3 60 Ohms
is neither optimal nor even available resistor values. However values
nearby (27 Ohms is a standard value, 82 or 91 Ohms, 56 or 62 Ohms)will
come quite close.

connect (using fixed font):
```
____ R1 _______ R3 ___
| | |
75 R2 100
|__________|__________|
```

73's
Richard Clark, KB7QHC

3338. Corrosion on mast and treatment for it?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 08:58:29 UTC
From: googlyelmo@earthlink.net
Message-ID: <3C6F70B2.E4EF12DC@earthlink.net>
Source record: 148426

I just put of a 20' mast mounted via a 3' tripod to my roof. Antennas are performing well. The trouble is, they have only been up since mid-December, and already the tripod is a bit rusty. Now granted, this is Seattle, but OTOH it may be wet, but no salt air, and little ice or snow to occasion the use of rock salt on roadways. Thus I am a bit puzzled why galvanized steel should be rusting, however superficially, in just two months. Is this really normal? I seem to recall some stuff in a spray can that might be of help for this problem, "Galvano-something", basically aerosol zinc. Is that the correct treatment for a rusty tripod?

--
Will, KD7BFX
Seattle WA US
King County, Grid CN87tq
ITU Zone 6, CQ Zone 3
****
"The wireless telegraph is not difficult to understand.
The ordinary telegraph is like a very long cat.
You pull the tail in New York, and it meows in Los Angeles.
The wireless is the same, only without the cat."
- Albert Einstein
****

3339. Two more antenna q's

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 09:01:40 UTC
From: tucansam@whodis.org
Message-ID: <a4nrhkgjt1@reader2.panix.com>
Source record: 148427

Thanks to everyone who replied to my "chimney" antenna post a week or so ago. I am still debating what to do, but in the meantime, have two more ideas I'd like feedback on.

As you may recall, I live in a complex with a no visible antenna rule. Right now I can get lots of 2 meter activity with my HTX indoors, so I'm not too concerned about a transmitting antenna. But I would still like to be able to monitor some frequencies, as previously mentioned, nearby ATC, some HF, etc.

As the majority of my free time exists in the evenings anyway, I was wondering about the possibility of building some sort of temporary antenna. I could cut several 6' lengths of 1" pvc and glue mates to one end of each, string coax through the lengths, and then have an erectable antenna I could store in the closet... In the evenings I could get it up pretty high above the roof line and not upset too many pesky neighbors, bringing it down when I am finished.

But how would I support a tall, plastic antenna like this? Even short lengths of thick PVC tend to bow under their own weight. Perhaps there is a better option?

Thanks!

3340. Solid copper

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 10:47:07 UTC
From: "news.jonged.myweb.nl" <ed@jonged.myweb.nl>
Message-ID: <a4o1mo$ob6$1@cyan.nl.gxn.net>
Source record: 148428

Hi,

My antenna is a wire 5.5 mtrs in length.
It is made of solid 2 mm copper, it used to be an AC lead.

Is this a good material for reception on HF, or does it have to be some
woven construction?

Thanx!

--
Galactic
URL: http://beam.to/galact
E-mail: ed@jonged.myweb.nl <mailto:ed@jonged.myweb.nl> (default)
____
{The night hides a world but unveils a universe}

3341. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 11:05:28 UTC
From: Walt Davidson <walt99@tiscali.co.uk>
Message-ID: <sh1v6uor06ppbgbp2g7e85mdpgj4h7atqu@4ax.com>
Source record: 148429
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On 16 Feb 2002 16:48:36 -0800, kelly@dvol.com (Brian Kelly) wrote:

>Add two more entries to the list of assholes who hang out in this village.

Are you trying to tell me I am one of the "undeserving"?

;-)
73 de G3NYY

--
Walt Davidson Email: g3nyy @freeuk.com

3342. Re: Solid copper

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 11:36:10 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4o7mj$1ii36$1@ID-124126.news.dfncis.de>
Source record: 148430

You have absolutely nothing to worry about.

The antenna wire can be of any diameter, size or weight, of any number of strands, insulated or non-insulated, copper, aluminium or brass. For receiving purposes even rusty old iron wire will do.

There's only one consideration - for best performance the length of the antenna wire should not be very short in comparison with the wavelength of radio waves you want to listen to.

Its a good idea for the antenna wire to be longer than 50 metres divided by the radio frequency in megahertz.

For example, if you want to listen to all HF amateur-band frequencies then, for good results, the wire should be longer than roughly 50 / 2 = 25 metres = 80 feet..

A good ground connection is a help. Try connecting to your domestic water plumbing system if you have metal pipes.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

news.jonged.myweb.nl <ed@jonged.myweb.nl> wrote in message
news:a4o1mo$ob6$1@cyan.nl.gxn.net...
> Hi,
>
> My antenna is a wire 5.5 mtrs in length.
> It is made of solid 2 mm copper, it used to be an AC lead.
>
> Is this a good material for reception on HF, or does it have to be some
> woven construction?
>
> Thanx!
>
> --
> Galactic
> URL: http://beam.to/galact
> E-mail: ed@jonged.myweb.nl <mailto:ed@jonged.myweb.nl> (default)
> _____________________________________
> {The night hides a world but unveils a universe}
>
>

>

3343. Re: shared antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 14:01:04 UTC
From: richardharrison@webtv.net
Message-ID: <9996-3C6FB7A0-249@storefull-112.iap.bryant.webtv.net>
Source record: 148432

R Bigg wrote:
"What I want to do is put one set in the garage and another in the house so I can keep up with the repeater traffic as I walk back amd forth."

First solution would be, one base station connected to your prized antenna, but use as many wired remote control units as you like in as many control points as you like.

Second solution would be, a repeater of your own connected bact to back with the radio connected to your prized antenna. Then use a hand-held radio to control your repeater from whatever point you like. I don`t know if this solution is legal where you operate. It is likely more expensive than solution No. 1.

Multiple radios using the same antenna is likely the most expensive and troublesome solution.

Best regards, Richard Harrison, KB5WZI

3344. cord for dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 14:04:01 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <lLOb8.10836$lI7.1545497698@newssvr15.news.prodigy.com>
Source record: 148431

I am looking for a strong and durable cord material. Both my dipoles came down yesterday we had fairly strong winds all day. Broke the poly? cords I had around a limb of my oak tree. This is the kind that comes with the Van Gorden dipoles.

Any suggestions?
73's

3345. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 15:17:20 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <fsvBSQEAm8b8EAg0@ifwtech.com>
Source record: 148433

Bill Klocko wrote:
>"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote

>>
>> If the MPE limit is L (W/m^2) then the distance X where the power
>> density falls below L is given approximately by:
>>
>> X = (D / 2) * SQRT(P * pi / L) wavelengths (eq 4)
>>
>
>There are a couple of things with your equation that are seriously
>wrong.
[...]
>
>I suspect your equation should be
>X = (D / (2*lambda)) * SQRT(P * pi / L) in *meters* (eq 4A)
>
>The units for X is <metres>, not wavelengths.

Sorry, typo in copying out the equation late at night - your eq 4A is
correct.

> Put the units in the
>equation, cancel them where possible, and see for yourself. Run some
>examples with real numbers and you'll see that X can be a large
>distance.
>
Yes it can... well, sometimes. Really the only way to approach RF hazard
assessments is by going through a methodical procedure, starting at the
near field and working outwards. The maximum power density is always
expected at the outer edge of the near field, and if the maximum is less
than the MPE limit, assessment at longer distances is unnecessary.

A larger antenna will always make the maximum power density smaller, but
if the RF power is high then the exclusion zone may have to extend into
the far field.

>Why add the lambda term? If you solve for L using 4A, you get
>L = (P/(4*pi*X^2) * (pi*D/lambda)^2
>The (pi*D/lambda)^2 factor is an approximate value for the maximum
>far-field gain of the antenna. L is then the power density evaluated
>at distance X using the EIRP.

Thank you, that's a very good insight.

However, I'm unrepentant in saying that it's a Bad Thing to quote EIRP in connection with RF hazard assessments. You're dealing with non-technical administrators, lawyers and worried members of the public. None of them understands what ERP is, but all of them want to see reassuringly low power levels.

It's always difficult to prepare an RF safety case that non-technical people can understand and accept. In that situation, it's crazy to deliberately and unnecessarily inflate the *apparent* power you're proposing to use. For example, 50W RF and 15dBi can be inflated to 1.6 kilowatts EIRP... yet the safety case is all about what happens to the available 50 watts of RF.

Nobody would expect you to say "1.6 kilowatts" when you could more correctly talk about 50 watts. The result is utter confusion - they just don't know where you're coming from. By the time you've explained that by "1600" you actually mean "50", you've lost their confidence and probably lost your case.

I'm not just spinning scenarios here. I've seen things very like that happen... depressingly often.

All I'm arguing is that since ERP need not be used in RF hazard assessments, it *should* not be used. If I've side-tracked anyone away from that simple point, I apologize.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3346. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 16:19:59 UTC
From: kf7qz@yahoo.com
Message-ID: <3c6fd834.2441918@news.verizon.net>
Source record: 148435

>Fiberglass tube is readily available in this area (Sacramento Valley) because it
>is used as a handle material for "pole saws" for pruning orchard trees but only
>in 1 1/4" diameter. I think this is too small for your purposes. If you need a
>short length let me know.
>
>Tom
>KD6EVM
Ive been looking around town for Fiberglass tubing supplies but is
seems to not be available. Although Im going ot check a local
Hobby/Kite supply as I understand its used in shipping somtimes.

Ill Keep looking.

3347. home made tower

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 16:40:56 UTC
From: Jason <uPVC@btinternet.com>
Message-ID: <a4omendot1@helle.btinternet.com>
Source record: 148434

does any know of a web site that shows designs of towers that have been made or modified, Iam planning to renew my aerials and wish to build a new one possibly wind up or tilt over. I know it can be done as an ex boss did it.

--
Yours
Jason

uPVC@btinternet.com

3348. 1967 to 1977 old call book listing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 16:58:13 UTC
From: Jay Tuttle <tuttlej3@attbi.com>
Message-ID: <FiRb8.77807$AV5.379078@rwcrnsc51.ops.asp.att.net>
Source record: 148436

Help! I need an old call book listing for current FCC test I am taking. My call sign was WA7HYX. If you can provide me with this infor mation please email me at tuttlej2@attbi.com

3349. Re: Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 17:01:58 UTC
From: n7ws@yahoo.com
Message-ID: <3c6fdde9.254002648@news.triconet.org>
Source record: 148437

On 16 Feb 2002 10:43:43 -0800, kg4pss@arrl.net (kg4pss) wrote:

Allen,

From this and your follow up post I guess that this wire will be only a few feet above ground. If true, this will be a real compromise antenna, but as you say, you just want to get on the air.

I suggest that you consider a trap dipole for your three bands. Forget the ladderline since it is such a small part of the overall transmission line and is way more trouble than it's worth. Traps built from coax are easily made; if you are interested, I can provide references.

Use a balun at the feedpoint (ferrite if you can afford it, otherwise, a few turns of coax) and run the coax to the rig. I know you've shelled out for the tuner in anticipation of needing it for a multiband antenna but it will still come in handy for covering the extreme band edges, particularly 80 meters.

BTW, there is a common misconception, started by G5RV, that part of the "antenna" is "folded into the transmission line." In theory, the antenna is the part that radiates, the transmission line is the part that doesn't. Being transmission line, the vertical section should not radiate.

Welcome to the fold.

73,

Wes N7WS

|I was planning to put up a home brew G5RV "Jr." antenna, but found
|that I may have enough long wire for the full-sized horizontal
|section. Unfortunately, I do not have the ability (at the present
|time) to elevate it high enough to accomidate the 34' ladder line.
|Also, I already have a piece of ladder line cut for 17'.
|
|My question is, can you make a hybrid G5RV that has the horizontal
|length of a full-size (or longer?), mated with a half-sized vertical
|section? If I understand correctly, the full-size version only uses
|16-17' of the vertical section to radiate on some bands, but I have
|yet to hear of anyone building one with less than 34' on a full sized
|antenna. I have tried using EZNEC, but it is way over my head.
|
|Thanks,
|
|Allen

3350. Re: cord for dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 17:04:40 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <79ov6ukcm7c7ijbjbsp70qu4ktjnn2h6h6@4ax.com>
Source record: 148438

On Sun, 17 Feb 2002 14:04:01 GMT, "Jerry" <jerryaa@prodigy.net> wrote:

>I am looking for a strong and durable cord material. Both my dipoles came
>down yesterday we had fairly strong winds all day. Broke the poly? cords I
>had around a limb of my oak tree. This is the kind that comes with the Van
>Gorden dipoles.
>
>Any suggestions?
>73's
>

Nylon is strong, UV-resistant, abrasion-resistant and fairly
inexpensive. I've used 1/8" braided nylon for years with no trouble.
Nylon is a little bit stretchy, so if you need less stretch, dacron
would be a good choice, although usually more expensive and not as
strong. Small boat sailors invariably use nylon for anchoring and
dacron for sail-handling lines, which gives a clue to their relative
usefulness.

I'd avoid polyethylene; not nearly as strong.

73, Bill W7TI

3351. Re: cord for dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 17:17:25 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c6fe5a5@news.bnb-lp.com>
Source record: 148439

My W9INN dipole came with black Dacron cord. It has been up for close
to 6 years with no issues.

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3352. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 17:32:03 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <dHRb8.145071$h31.11307096@e420r-atl1.usenetserver.com>
Source record: 148440

Hi John,
Very well presented. Your post gave me lot to think about beyond the
normal, tailpipe and ten pounds of aluminum foil under hood (which sounds
more painful than S5 noise:)
Your last statement about the lowest radiators being more significant made
me think about the axles. They're insulated by bushings and the driveshaft
is a slip joint with plenty of grease packed in likewise. My first
impression is that you can eliminate most noise by grounding *everything*
(i.e. frame, body and hinges, tailpipe, axles, drivetrain, fuel & brake
lines, etc). What about ground loops, though? I'm, humbly, a pretty good
mechanic and familiar with automotive electrical systems. However, grounds
loops and the like can tend to pop up from some pretty unexpected places.
What's a good scheme to avoid this? Is it as simple as, "Everything grounds
to frame"? Or, are there other things to think about?
Best Regards and Thanks for the Post,
Drink, WP3JQ
"hurstjsj" <hurstjsj@gte.net> wrote in message
news:xsm98.3288$qI1.732224@paloalto-snr1.gtei.net...
> Here are some ideas on mobile ignition noise reduction.
>
>
> 1. Keep in mind that there are probably many ways the ignition noise is
> being coupled into the antenna system. If one has say, only two equal
> sources causing an S9 noise level removing one will drop the noise only a
> small amount (-3db). It's therefore important not to try just one "fix" at
a
> time but to leave all supression "fixes" in until the noise is reduced to
a
> satisfactory level. You can then remove them one at time to see which ones
> are necessary. Usually the last needed "fix" will result in a DRAMATIC
> improvement.
>
> 2. I added all the usual things under the hood of my Caprice wagon
> (grounding the hood, the block etc.) with only a small improvement. I then
> went under the car and added ground wires from the trans to chassis and
> tailpipe to chassis with only a small effect. When I finally grounded the
> metal fuel line the noise dropped about 6 S units to a satisfactory level.
> And no, it wasn't fuel pump noise that was eliminated it was ignition
noise
> on the fuel line and gas tank that was bypassed to chassis.
>
> 3. I discovered that the noise on the transmission, tailpipe, etc. could
> actually be measured with a diode probe connected (by a very short lead)
to

> a DVM. I initially used 1/2 inch wide braid about 6 inches long between
the
> trans pan screws and the chassis. I could actually see the voltage drop
> change from 0 to several mV as I move the signal side of the probe along
the
> 6 in. length of the braid! This convinced me that the signal sources from
> the ignition system into the drive train, exhaust, fuel lines are very low
Z
> and it takes a very low impedance lead to bypass these noise conductors
> (over a wide frequency range) to the chassis. I found that 3 or 4 paralled
> #16 wires worked better than the 1/2 inch braid. Connections to the
chassis
> were made with 1/4 in. sheet-metal screws.
>
> 4. Items under the car like the drive train , muffler and gas tank are a
> part of the "top electrode" of the car to ground "capacitor". Noise on
these
> are actually in series with part of the car's coupling to ground and are
not
> necessarily "radiated" into the antenna. This would imply that large area
> noise sources closest to the ground are the most significant.
>
> Any thoughts?
>
> John, KU6X
>
>
>

3353. Re: My R7 blew down....HELP!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 17:32:22 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C6FE80A.94912CA4@bellatlantic.net>
Source record: 148441

An Old Timers trick was to use a coke bottle (Antiques now!) as a vertical
insulator. I suppose you could climb a power pole and swipe an insulator
as well.

'73 KI4Z

daniel wright wrote:

> Greetings.....!
>
> I have an early version of the Cushcraft R7. After many years of
> waving in the breeze (un guyed)(in Nebraska), the base insulator gave
> up the ghost and broke, causing the antenna which is mounted on a ten
> foot mast tied to my back fence, to become a "sloper"....(8-<....
>
> I contacted Cushcraft via the website and received a prompt reply that
> this antenna is no longer supported (I wonder if they realized the
> pun?) and there are no spare parts available.
>
> Anyone have experience with replacing the base insulator on one of
> these antennas? Some of the top of the antenna is also bent up pretty
> well, but I have not been able to get to the antenna to check closely
> becaue of snow and mud and I'm a wuss....
>
> Any help appreciated...thanks es
>
> 73 de Dan -- WAï¿½JRD ..
> Lincoln, Nebraska

3354. Re: RFI from AC line

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 17:39:41 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C6FE9C1.3B5D6028@bellatlantic.net>
Source record: 148442
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Resistance elements are completely quiet. The fact that the noisey stuff is on a seperate feed helps to supress conducted noise, however you still have radiated noise to contend with. I believe you could do as well with relatively common AC line filters. Usually harmonics of the radiated stuff is what you're fighting.

'73 KI4Z

Stan Huntting wrote:

> I'm building a new home and trying very hard to make it a low RFI
> environment. I'm high in the mountains with few neighbors. I'm the
> electrician.
>
> I have dual 200 amp AC services, all the way from the pole: one for "dirty"
> loads (mostly things with electric motors and other inductive loads) and one
> for "clean" (the radios) loads. I am filling up the "dirty" load panel
> faster than the "clean" load panel and I am looking for loads that I might
> move to the clean load panel.
>
> Two possible candidates are the electric hot water heater (conventional
> Rheem 50 gallon with dual 4500 watt elements) and the electric range (GE
> Profile, smoothtop, conventional oven - NO convection). How noisy are these?
> --
> Stan, KW7KW
> ng@huntting.com

3355. G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 18:06:36 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <BbSb8.145439$h31.11316363@e420r-atl1.usenetserver.com>
Source record: 148443

Hi Folks,
I'm putting up a G5RV inverted V for 40m - 10m and want to avoid TVI for the neighbors. The installation will be as follows:
67' inverted V dipole with the apex at 30'. Feedline is 450 Ohm "window" ladder line down through an aluminum framed window into a MFJ 949E tuner into my IC-730 and RigBlaster Plus/desktop PC.
Understanding that the dipole and feedline will radiate, what are optimum feedline & dipole lengths to avoid TVI to the surrounding neighborhood?
Also, how great an impact will the ladderline to aluminum window frame have?
Any considerations that I haven't mentioned?
I know this is a simple system but appreciate advice and practical experience tips before I put it up and draw negative attention from the neighbors.
73's,
Drink, WP3JQ

3356. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 18:11:40 UTC
From: richardharrison@webtv.net
Message-ID: <23900-3C6FF25C-259@storefull-118.iap.bryant.webtv.net>
Source record: 148446

Ian, G3SEK wrote:
"All I`m arguing is that ERP need not be used in RF hazard assessment."

No, Ian has argued that field strength peaks near "the outer edge of the near field".

The outer edge of the near field is no more than several wavelengths.

A parabola transmits and receives rays parallel to its axis. These rays all emerge from a focal point or are reflected into that focal point.

The distance between the parabola`s focal point and its surface is variable. It is shortest on its axis.

When we plot a parabola, we know that x is a function of y squared.

Suppose we have a 10-ft parabola (dish) we will use at 3300 MHz. For a typical dish with f/D of 0.4, the focal length (f) is (4)-ft. Think about what you`ve seen. That ratio is about right. That is about how far the feed is sticking out in front of the dish.

4 feet at 3300 MHz is 13.4 wavelengths. The back side of the radiator illuminating the dish is blocked from direct radiation, illuminating only the dish.

Anywhere outside the dish is in the far field.
Concern with the near field is inane.

Best regards, Richard Harrison, KB5WZI

3357. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 18:32:42 UTC
From: richardharrison@webtv.net
Message-ID: <23902-3C6FF74A-42@storefull-118.iap.bryant.webtv.net>
Source record: 148447

Drink, WP3JQ wrote:
"However, ground loops and the like tend to pop up from some pretty unexpected places."

Only resonant circuits collect and re-radiate substantial r-f. Break up conductors frequently enough with ground connections and the pieces all resonate at too high a frequency to cause problems.

Try the RFI grounding with clip-leads, and you don`t invest too much work in RFI elimination.

Best regards, Richard Harrison, KB5WZI

3358. NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 18:32:50 UTC
From: Gilbert Baron <gbaron@charter.net>
Message-ID: <bmtv6ucsd02fbsl7de354d9pp6m0k320gc@4ax.com>
Source record: 148444

Welcome to the horrible world of Cushcraft. They are the worst at
customer support in the entire Amateur Radio world. They even ignore
requests for help on my R7000 which IS still produced.

DO NOT BUY CUSHCRAFT, they are going to cheat you.

On Thu, 14 Feb 2002 07:34:54 -0600, daniel wright <dw73454@navix.net>
wrote:

>Greetings.....!
>
>I have an early version of the Cushcraft R7. After many years of
>waving in the breeze (un guyed)(in Nebraska), the base insulator gave
>up the ghost and broke, causing the antenna which is mounted on a ten
>foot mast tied to my back fence, to become a "sloper"....(8-<....
>
>I contacted Cushcraft via the website and received a prompt reply that
>this antenna is no longer supported (I wonder if they realized the
>pun?) and there are no spare parts available.
>
>Anyone have experience with replacing the base insulator on one of
>these antennas? Some of the top of the antenna is also bent up pretty
>well, but I have not been able to get to the antenna to check closely
>becaue of snow and mud and I'm a wuss....
>
>Any help appreciated...thanks es
>
>73 de Dan -- WAï¿½JRD ..
>Lincoln, Nebraska
>

Gil Baron http://webpages.charter.net/gbaron
44:04.925 N 92:30.758 W 1055'
"Hierro candente, batir de repente"

3359. Re: home made tower

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 18:35:58 UTC
From: Gilbert Baron <gbaron@charter.net>
Message-ID: <nrtv6uko8mdrs4edh3tndpiu8am1d0b5ge@4ax.com>
Source record: 148445

If you are not a Structural Engineer speicalizng in structures then
DON'T do it. Without the commerical equipment ot build it with don't
even do it if you are. Compared to your life and that of your
neighbors a commercial tower is DAMN CHEAP.
I would rather live!

On Sun, 17 Feb 2002 16:40:56 +0000 (UTC), "Jason"
<uPVC@btinternet.com> wrote:

>does any know of a web site that shows designs of towers that have been made
>or modified, Iam planning to renew my aerials and wish to build a new one
>possibly wind up or tilt over. I know it can be done as an ex boss did it.

Gil Baron http://webpages.charter.net/gbaron
44:04.925 N 92:30.758 W 1055'
"Hierro candente, batir de repente"

3360. Re: home made tower

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 19:19:35 UTC
From: Jason <uPVC@btinternet.com>
Message-ID: <a4ovo6$6fs$1@paris.btinternet.com>
Source record: 148448

perhaps I didn't put it right, the tower will only consist of a straight up scaffolding pole (with a joiner and another one on top). because of limited room and space I need someway of constructing either a wind up or wind up and tilt tower.

--
Yours
Jason

uPVC@btinternet.com

3361. Re: Coil Form Material for Screwdriver - Whats best

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 19:19:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C70024D.4E8359DE@IEEE.org>
Source record: 148449

"R. Scott" wrote:
>
> >Fiberglass tube is readily available in this area (Sacramento Valley) because it
> >is used as a handle material for "pole saws" for pruning orchard trees but only
> >in 1 1/4" diameter. I think this is too small for your purposes. If you need a
> >short length let me know.
> >
> Ive been looking around town for Fiberglass tubing supplies but is
> seems to not be available. Although Im going ot check a local
> Hobby/Kite supply as I understand its used in shipping somtimes.
>
> Ill Keep looking.

Don't know where you live, but Ryan Herco from Washington to California
to Texas carry an abundance of fiberglas products.
--
cheers, CAM http://www.qsl.net/w5dxp

3362. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 19:33:54 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <54sv6uo5a4crq1mptp4d4qnqdeccjgs839@4ax.com>
Source record: 148450

On Sun, 17 Feb 2002 15:17:20 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

> For example, 50W RF and 15dBi can be inflated to 1.6
>kilowatts EIRP... yet the safety case is all about what happens to the
>available 50 watts of RF.

Hi Ian,

Anyone can relate to the heat of the sun and the common lens.

That same heat through a large lens focused to the back of your head instead of over the area of your body (about that same gain) will teach a lesson that the original, acceptable power is more than lethal, and more than quick (compared to the original exposure) than without that same lens.

Prior restraint on the discussion of the technicalities because some might not get it (the confusion defense) more suggests the speaker is the one with the difficulty, not the audience. It took less than 60 words to express the correlation above in terms that are accessible to every 10 year old student who has already learned to fry ants. Your audience is certainly of greater experience and sophistication and the paragraph above fleshed out with an additional 100 words relating to existing exposure and added exposure should suffice - even for that same 10 year old student who already understands the pain from considerably smaller than lethal lenses.

There is no magic power level low enough to ignore UNLESS there is a corresponding heat (or RF) sink to draw away the power at the load and thus diminish the local peak power to an average region wide distributed load. For the human body, this sink would consist of circulating blood (and air in the lungs) and evaporation from the skin. However, this constitutes very little shedding of excess power in the face of the original KW of heat applied to a region the size of a coin (we are now in the sphere of solar furnaces). This is the point of the limit standards. We are not so much concerned about boiling blood as destroying DNA or disassociating elemental bonds at the molecular scale. A 1 Watt exposure over a sufficiently small space serves to destroy as effectively as a crematorium. You may not die (quickly) as a consequence of a 1 Watt exposure, but your chances (of a sooner death) are elevated out of proportion to no exposure. If you choose to accept the risk, it is only with the tacit understanding that not all destructive exposure leads to consequential damage - this time.

The reason why such standards are expressed in these technical shortcuts of mW/cMï¿½ (which is independent of source, be it magnified or isotropic) is that we can then scale the power applied to the load to determine the probability of destruction (as balanced against the capacity of that load to shed heat, termed in degree rise over ambient temperature for an applied power - otherwise known as thermal resistance).

I would offer one last observation. The heat I speak of can be sensate (that which causes us to feel it and perspire) or be an expression of the energy expended to break a bond, or fragment a DNA chain which is perhaps cooler, but crueler.

73's
Richard Clark, KB7QHC

3363. Re: Ford Ranger antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 19:39:09 UTC
From: Diablo <diablo_42@hotmail.com>
Message-ID: <u701m5jllnf33f@corp.supernews.com>
Source record: 148451

Hi Bill,

I have a '98 model Ranger 4X4 and use a Diamond dual band antenna. I mounted the antenna on a "L" shaped bracket in the gap between the hood and the fender. The bracket is mounted to the fender with sheet metal screws and the antenna mounts to the horizontal portion of the bracket.

I have had no problems with noise from the truck on VHF/UHF (I run an Icom IC-W32 HT with a Mirage dual band amp). I also have an IC706MkIIG installed and it works great. The '706's noise blanker kills all of the engine noise. Also, I ran the coax for both antennas under the carpet and out through the soft plugs on the bottom. I cut a hole in the rubber plug to run the coax through, and then sealed it up with RTV.

Good luck,

Bob
WA7VKF

Bill Grimwood <bill@grimwood.net> wrote in message
news:uxf88.108657$h31.7305858@e420r-atl1.usenetserver.com...
> I am going to mount my Kenwood TMG 707 in my truck. How do you recommend
I
> do it. I will use a magnetic antenna on the roof. Is there an access
hole
> to run the wire in or do I have to drill one. Have any of you had engine
or
> fuel pump problems with the Ford Ranger. Mine is a 99 model.
>
>
>

3364. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 19:43:26 UTC
From: Diablo <diablo_42@hotmail.com>
Message-ID: <u701udcbkg9i05@corp.supernews.com>
Source record: 148452

Make sure you have a low pass filter in line. That will help with TVI problems a lot. I also have a G5RV installed as an inverted vee and had a problem with RF feedback on the feed line. I did a little research and found a recommendation for making an RF choke out of the feed line just before the connection to the 1:1 balun. You make 6 to 8 loops at 6" diameter in the coax feed line.

Bob
WA7VKF

Drink <REMOVE_THISdrink@coqui.net> wrote in message
news:BbSb8.145439$h31.11316363@e420r-atl1.usenetserver.com...
> Hi Folks,
> I'm putting up a G5RV inverted V for 40m - 10m and want to avoid TVI for
> the neighbors. The installation will be as follows:
> 67' inverted V dipole with the apex at 30'. Feedline is 450 Ohm "window"
> ladder line down through an aluminum framed window into a MFJ 949E tuner
> into my IC-730 and RigBlaster Plus/desktop PC.
> Understanding that the dipole and feedline will radiate, what are
optimum
> feedline & dipole lengths to avoid TVI to the surrounding neighborhood?
> Also, how great an impact will the ladderline to aluminum window frame
have?
> Any considerations that I haven't mentioned?
> I know this is a simple system but appreciate advice and practical
> experience tips before I put it up and draw negative attention from the
> neighbors.
> 73's,
> Drink, WP3JQ
>
>
>

3365. Re: Kenwood Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 20:22:55 UTC
From: Chaos <chaos@no.spam.com>
Message-ID: <WeUb8.32$4F.66156@news.uswest.net>
Source record: 148453
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Charles Johnston <ctj92@cableone.net> wrote in message
news:3c6c40e6$1@news.bnb-lp.com...
<snip>
....and thanks for the
> frequent visits to my humble web site...I appreciate the patronage....
>

Patronage? So tell us Charles, how much commission do you get from the info-miners that sponsor your site? The sad thing here is; how quickly some folks will prostitute themselves to make a measly buck!

I suggest that you stop spamming this NG!

> --
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>
>

3366. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 20:32:47 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <FkUb8.148582$h31.11355162@e420r-atl1.usenetserver.com>
Source record: 148454

Hi Diablo,
I hope we're not confusing antennas. I'm not using coax. Rather, I'm
using 450 Ohm "window" ladder line fed into the MFJ-949E tuner. I'm pretty
sure it incorporates a balun (somebody correct me if I'm wrong). The
original G5RV design didn't use coax. I wouldn't worry much about feedline
radiation from coaxial cable. Hence, my concern about TVI with ladder line.
Thoughts anybody?
73's,
Drink, WP3JQ
"Diablo" <diablo_42@hotmail.com> wrote in message
news:u701udcbkg9i05@corp.supernews.com...
> Make sure you have a low pass filter in line. That will help with TVI
> problems a lot. I also have a G5RV installed as an inverted vee and had a
> problem with RF feedback on the feed line. I did a little research and
> found a recommendation for making an RF choke out of the feed line just
> before the connection to the 1:1 balun. You make 6 to 8 loops at 6"
> diameter in the coax feed line.
>
> Bob
> WA7VKF
> ----------------------
> Drink <REMOVE_THISdrink@coqui.net> wrote in message
> news:BbSb8.145439$h31.11316363@e420r-atl1.usenetserver.com...
> > Hi Folks,
> > I'm putting up a G5RV inverted V for 40m - 10m and want to avoid TVI
for
> > the neighbors. The installation will be as follows:
> > 67' inverted V dipole with the apex at 30'. Feedline is 450 Ohm
"window"
> > ladder line down through an aluminum framed window into a MFJ 949E tuner
> > into my IC-730 and RigBlaster Plus/desktop PC.
> > Understanding that the dipole and feedline will radiate, what are
> optimum
> > feedline & dipole lengths to avoid TVI to the surrounding neighborhood?
> > Also, how great an impact will the ladderline to aluminum window frame
> have?
> > Any considerations that I haven't mentioned?
> > I know this is a simple system but appreciate advice and practical
> > experience tips before I put it up and draw negative attention from the
> > neighbors.
> > 73's,
> > Drink, WP3JQ
> >
> >

> >
>
>

3367. Re: Kenwood Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 20:38:05 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c7014ac$1@news.bnb-lp.com>
Source record: 148455
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Chaos,
Your monetary concerns regarding my site - and - my posting practices
are addressed fully on the FAQ Page of the web site listed below.....

Thank you for your post.....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
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3368. Re: T2FD terminating resistor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 20:52:55 UTC
From: David Cook <nospam.davepc2@oz.net>
Message-ID: <HKUb8.79107$Pz4.353150@rwcrnsc53>
Source record: 148456

Hmm, using the trusty R = E**2/P formula, a 110v (RMS) 250 watt light bulb's impedance should be 48.4 ohms. Maybe not too practical, but just a thought. I used to use light bulbs for dummy loads when I was an economically-challenged Novice.

As an aside, I used to attach neon bulb lamps to the ends of my dipoles just for fun - the neighbors were mystified by my blinking antennas when I was sending CW. For an even better effect, you can hang a florescent light tube on your antenna. Whoa - Stupid Ham Tricks!

-- Dave, WA0TTN

"Keith" <kwatkins@tr15.freeserve.co.uk> wrote in message news:a4mig2iug1@newsg1.svr.pol.co.uk...
> For Tx use to 250w--can anyone suggest a source of supply please.Thanks.
>
>

3369. Re: T2FD terminating resistor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 21:03:50 UTC
From: mcduffie@xactcom.net
Message-ID: <7i607u49l9ughv7ee5pn3ejpntu6733615@4ax.com>
Source record: 148458

On Sun, 17 Feb 2002 20:52:55 GMT, "David Cook" <nospam.davepc2@oz.net>
wrote:

> I used to use light bulbs for dummy loads when I was an
> economically-challenged Novice.

The trouble is, the impedance changes with the brightness of the bulb.

gm
--
There is no x in my ISPs domain name.

3370. Re: T2FD terminating resistor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 21:22:39 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C701F1F.B399883B@dialpoint.net>
Source record: 148457

There is a major flaw in the lightbulb. It will only be around the 48 ohm value around one power level. If more or less power is used the impedance will be less. Also the frequency will have some effect. If the lamp is used for receiving the filiment will look almost like a short or maybe a small inductor depending on the frequency.

I also think the T2FD needs a much higher value resistor.

I too have loaded into a light bulb before I got a 50 ohm dummy load and watt meter for the transmitters. Not a very good way to go but it will tell if you are putting out power anywhere near what it should be.

David Cook wrote:
>
> Hmm, using the trusty R = E**2/P formula, a 110v (RMS) 250 watt light bulb's
> impedance should be 48.4 ohms. Maybe not too practical, but just a thought.
> I used to use light bulbs for dummy loads when I was an
> economically-challenged Novice.
>
>

3371. Re: Wanted: FM antenna sorcerer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 21:42:15 UTC
From: Jay <japolicownospam@snet.net>
Message-ID: <XsVb8.2159$k5.1384828@newssvr28.news.prodigy.com>
Source record: 148459
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

As far as the quality of reflected signals, while it would seem that a direct signal would be better, sometimes the reflected signal is better (or the only signal available). Basically, I would rotate the antenna through its complete 360 degrees of rotation listening to the station I wanted to get and choose the best direction. If it is not pointing towards the station, try to figure out what it IS pointing towards. A bit of sleuthing will usually tell you what you need to know.

I looked at the web page for your antenna and it looks like it should be a very nice antenna for dxing. Good directivity. Perhaps the hills around you aren't mountains, but even hills can cause the reflections I think you're getting. Also, the further away the stations are, the closer they are to the horizon, and the more easily hills between you and the stations will disrupt reception. This "line of sight" characteristic of the FM broadcast band causes much problems where I live in the Northeast. it's quite hilly here, and generally FM reception is limited to about 60 miles unless you are at a high elevation.
"Watt" <wattle@eudoramail.com> wrote in message
news:4b0a791.0202161728.26b10d41@posting.google.com...
> "Jay" <japolicownospam@snet.net> wrote in message news:<n9ub8.1931
>
> Hi Jay,
>
> > One thing is for sure...if you have to point your antenna AWAY from San
> > Francisco in order to hear stations there, you are getting a reflection
off
> > of something as your primary signal.
>
> Wow! I didn't know this. Would this secondary reflections be sonically
> inferior from direct signals from stations? It would seem to me.
>
> > What is the topography of your area?
>
> San Jose (aka Silcon Valley) is indeed a lowland surrounded by hills
> and valleys but not mountains of any great height.
>
> > Are there mountains or tall buildings near you? The only other thing
that
> > would explain this phenomenon would be that you are minimizing some kind
of
> > interference source or multipath (or possibly overload) by pointing your
> > antenna away from that interference source.
>

> I used a 15 ft. pole on top of 2 story house and I don't recall seeing
> any obstractions of any kinds in the surrounding area. The only
> thing I saw was hills far, far away!
>
> > In general, under ideal conditions, yes...you would point the antenna
> > directly at the transmitting antenna for best reception. Your antenna
should
> > be quite directional, so if the signal is weak, just a few degrees of
> > antenna rotation should cause change in noticeable signal strength.
>
> It was recommended that I used APS-9 for its directionality. Pls. see
> www.antennaperformance.com for specs. I'm not sure if I'm getting
> the best bang for the buck on this one.
>
> > I'm not familiar with the Arcam, but if it doesn't have a signal
strength
> > meter, you have to use your ears and gut instincts to judge signal ...
>
> Ok, thats probably why the meter was not built-in.
>
> > strength. And remember...maximum signal strength doesn't
> > necessarily equal best reception.
> > Sometimes a weaker signal is cleaner (less multipath or interference).
> > Multipath can cause horrendous distortion on FM if its bad enough. It's
> > caused by the signal bouncing off some object (like a building or hill)
then
> > reaching your antenna just slightly later in time than the direct
signal.
> > These two signals now have phase mismatch and actually jam one another.
>
> Ok Jay, it must be the hills.
>
>
> Watt

3372. Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 21:59:22 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <2s807u4qvgt3cktb144quj8t084ohl0uj1@4ax.com>
Source record: 148460

I have been trying to ascertain the value of knowing return loss values. I have checked several books in my library with little or no luck.

Thus far I've checked the indexes in Kraus, Terman and found nothing. In Reference Data for Radio Engineers it is mentioned but the information is given in a section discussing phone lines. The ARRL Antenna Books 18th and 19th editions show a graph for a piticular antenna with no explanation. In an older ARRL Antenna book (published in 1986) gave the most information (a graph, and table listing plus the formula) that I could find.

At the moment I know Return Loss = SWR-1 / SWR+1 and can also calculate the Return Loss in dB.

My question is what is the application(s) of knowing the Return Loss value useful? In other words say I have determined a return loss value of 2.439 (32.3 dB) - now what?

73
Danny, K6MHE

3373. Super Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 22:26:09 UTC
From: kc8fwd@hotmail.com
Message-ID: <2cc48b2a.0202171426.7a0603de@posting.google.com>
Source record: 148461

Hello,
I have heard of people using these on 80 meters can anyone point me to
a place on the internet on how to build them or can send me or e-mail
a article on them thanks Mike

3374. FS: Hustler 5BTV, Antron 99, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 22:40:37 UTC
From: k9sqg@aol.com
Message-ID: <20020217174037.18433.00002121@mb-bh.aol.com>
Source record: 148462

Helping a ham transition out of CB, etc. Right now he is into 2m and 440 so has no need for some items. He has two Antron 99 antennas that can be used on 10 meters, one of them has the ground radial kit. Both have been used but are in very good condition; no instructions but the adjustment rings on the bottom are easy to adjust. He also has a Hustler 5 BTV, it is the 4BTV with the 75/80m optional resonator; used but in good condition; no manual but instructions are readily available on this newsgroup. Finally, he has a brand new, never used, New-Tronics (i.e. Hustler brand I believe) Model 27-TD "Super Swamper" CB base station antenna; included the assembly instructions. Let me know if you are interested in some or all of these. Thanks for reading the posting.

Evan

3375. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 22:41:07 UTC
From: richardharrison@webtv.net
Message-ID: <25627-3C703183-232@storefull-111.iap.bryant.webtv.net>
Source record: 148465

Ian, G3SEK wrote:
"A larger antenna will always make the maximum power density smaller, but if the RF power is high then the exclusion zone will have to extend into the far field."

The smaller antenna`s higher power density doesn`t hold for very far.

1 watt into a 60% efficient dish is 0.6 watt into a cross sectional projected area of 2.63 square meters in a 6-ft dish, or 7.3 square meters in a 10-ft dish.

This produces 0.228 watts per square meter from the 6-ft dish or .082 watts per square meter from the 10-ft dish.

At a distance of 300 feet, an 8x12 reflector produces 39 db gain with the 6-ft dish and 42.5 db gain with the 10-ft dish at 6725 MHz. (This is slightly less than the gain figures for the bare dishes because the 8x12 reflector is not 100% efficient.

Why is the 10-ft dish now producing more concentrated energy than the 6-ft dish at a distance of 300 feet when energy concentration was higher in the smaller dish at the outset?

The 10-ft dish has focused the energy into a smaller spot 300 feet away than the 6-ft dish has. The larger dish gain advantage will hold to infinity.

According to Lenkurt`s charts, it is at a dish/reflector spacing of 220 feet where the intensity of the 10-ft dish surpasses the intensity of the 6-ft dish. These are 6725 MHz data as already said.

Best regards, Richard Harrison, KB5WZI

3376. Re: Super Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 22:55:37 UTC
From: me@nowwhere.com
Message-ID: <3C7034E9.A466AD67@swbell.net>
Source record: 148463

try:

http://hamgate.sunyerie.edu/~larc/SuperLoop.htm

kd5foy

Michael J Talkington wrote:

> Hello,
> I have heard of people using these on 80 meters can anyone point me to
> a place on the internet on how to build them or can send me or e-mail
> a article on them thanks Mike

3377. Re: T2FD terminating resistor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 23:05:05 UTC
From: lsb <l.s.booth@worldner.att.net>
Message-ID: <BGWb8.28503$Nv5.927610@bgtnsc05-news.ops.worldnet.att.net>
Source record: 148464

I once used a network of 2w carbons to obtain 450 ohms at 30 watts. Worked fine with 100w on ssb and cw. RTTY at 100w was a bit much though they didn't fail. Packaged the array in a clear plastic tube 1" diameter and about 8" long.
"Keith" <kwatkins@tr15.freeserve.co.uk> wrote in message news:a4mig2iug1@newsg1.svr.pol.co.uk...
> For Tx use to 250w--can anyone suggest a source of supply please.Thanks.
>
>

3378. MFJ 1621 Portable HF Ant

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 23:33:29 UTC
From: "Keven R. Matthews" <mail@keven.worldonline.co.uk>
Message-ID: <3c703db5$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 148466

Has anyone any working experience of the MFJ 1621 portable HF Antenna that they could share. Perhaps also someone may know how well it compares to the 'miracle whip' which seems to be getting a good press here.

Thanks

Keven

3379. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 23:48:31 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C70414F.26332C5F@IEEE.org>
Source record: 148467

Dan Richardson wrote:
> At the moment I know Return Loss = SWR-1 / SWR+1 ...

Nope, that's the magnitude of the reflection coefficient.
--
cheers, CAM http://www.qsl.net/w5dxp

3380. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-17 23:59:49 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <rHl84mJ1PEc8EA8Z@ifwtech.com>
Source record: 148468

Richard Clark wrote:
>On Sun, 17 Feb 2002 15:17:20 +0000, "Ian White, G3SEK"
><G3SEK@ifwtech.com> wrote:
>
>> For example, 50W RF and 15dBi can be inflated to 1.6
>>kilowatts EIRP... yet the safety case is all about what happens to the
>>available 50 watts of RF.
>
>Hi Ian,
>
>Anyone can relate to the heat of the sun and the common lens.
>
>That same heat through a large lens focused to the back of your head
>instead of over the area of your body (about that same gain) will
>teach a lesson that the original, acceptable power is more than
>lethal, and more than quick (compared to the original exposure) than
>without that same lens.
>
>Prior restraint on the discussion of the technicalities because some
>might not get it (the confusion defense) more suggests the speaker is
>the one with the difficulty, not the audience. It took less than 60
>words to express the correlation above in terms that are accessible to
>every 10 year old student who has already learned to fry ants.

Unfortunately those 60 words are all about the receiving situation. A transmitting dish does not focus RF energy, it spreads it out before projecting it forwards across its whole area. You're then left with the difficulty of explaining the reciprocity theorem instead.

Leading off with a discussion based on incinerating ants does not look like a good way to get your proposed installation accepted.

The rest of the posting drifts off into "What is a 'safe' power density?" which is not the issue being discussed.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3381. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 00:01:50 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <I3T0UTKuREc8EA6$@ifwtech.com>
Source record: 148369

Richard Harrison wrote:
>Ian, G3SEK wrote:
>"All I`m arguing is that ERP need not be used in RF hazard assessment."
>
>No, Ian has argued that field strength peaks near "the outer edge of the
>near field".
>
Actually I'm arguing both. The first is a technical judgement, but the second is straight physics (originally derived from optics, but applicable at RF if the aperture is at least several wavelengths across)

>The outer edge of the near field is no more than several wavelengths.
>
Sorry, that's not always true. In particular it's not true for the example you yourself chose - see below.

>A parabola transmits and receives rays parallel to its axis. These rays
>all emerge from a focal point or are reflected into that focal point.
>
>The distance between the parabola`s focal point and its surface is
>variable. It is shortest on its axis.
>
>When we plot a parabola, we know that x is a function of y squared.
>
>Suppose we have a 10-ft parabola (dish) we will use at 3300 MHz. For a
>typical dish with f/D of 0.4, the focal length (f) is (4)-ft. Think
>about what you`ve seen. That ratio is about right. That is about how far
>the feed is sticking out in front of the dish.
>
>4 feet at 3300 MHz is 13.4 wavelengths. The back side of the radiator
>illuminating the dish is blocked from direct radiation, illuminating
>only the dish.
>
So far, so good... but then:

>Anywhere outside the dish is in the far field.

You forgot the (0.2*D^2 / wavelength) criterion for the near-field distance. (This is based on a reasonable degree of phase convergence between the E and H fields, as Roy accurately speculated earlier.) When you plug in some numbers for large dishes and small wavelengths, the results will surprise you.

Your chosen dish diameter of 10ft at 3300MHz is 33.5 wavelengths. The near field extends out to 225 wavelengths or 67 feet!

The bigger the dish in relation to the wavelength, the farther the edge of the near field. For the 40-footer at 4GHz, where I used to work, the near-field distance is a quarter-mile. Do your own calculation for Arecibo at 10GHz.

Those are the distances where the maximum power density occurs - or rather, where you should start to look for it with a survey instrument (at Arecibo, you'll need a very tall ladder). Although the edge of the near field gets farther way as the dish gets bigger, fortunately the maximum power density gets smaller.

With a real-life dish, it may be more important to look for spillover from the feedhorn past the edge of the dish towards the ground, because people can get to there much more easily. A larger dish produces smaller spillover power densities than a smaller one of the same f/D ratio, as Steve pointed out.

>Concern with the near field is inane.

Responsible RF hazard assessments start with the near field and then work systematically outwards as far as it's necessary to go. Nothing is excluded on the basis of someone's opinion - everything is checked by calculation and confirmed by measurement.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3382. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 00:58:44 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0202171658.38353b45@posting.google.com>
Source record: 148370

"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
news:<fsvBSQEAm8b8EAg0@ifwtech.com>...
> Yes it can... well, sometimes. Really the only way to approach RF hazard
> assessments is by going through a methodical procedure, starting at the
> near field and working outwards. The maximum power density is always
> expected at the outer edge of the near field, and if the maximum is less
> than the MPE limit, assessment at longer distances is unnecessary.
>
> A larger antenna will always make the maximum power density smaller, but
> if the RF power is high then the exclusion zone may have to extend into
> the far field.
>...
> However, I'm unrepentant in saying that it's a Bad Thing to quote EIRP
> in connection with RF hazard assessments. You're dealing with
> non-technical administrators, lawyers and worried members of the public.
> None of them understands what ERP is, but all of them want to see
> reassuringly low power levels.
>
> It's always difficult to prepare an RF safety case that non-technical
> people can understand and accept. In that situation, it's crazy to
> deliberately and unnecessarily inflate the *apparent* power you're
> proposing to use. For example, 50W RF and 15dBi can be inflated to 1.6
> kilowatts EIRP... yet the safety case is all about what happens to the
> available 50 watts of RF.
>
> Nobody would expect you to say "1.6 kilowatts" when you could more
> correctly talk about 50 watts. The result is utter confusion - they just
> don't know where you're coming from. By the time you've explained that
> by "1600" you actually mean "50", you've lost their confidence and
> probably lost your case.
>
> I'm not just spinning scenarios here. I've seen things very like that
> happen... depressingly often.
>
> All I'm arguing is that since ERP need not be used in RF hazard
> assessments, it *should* not be used. If I've side-tracked anyone away
> from that simple point, I apologize.

Hi Ian,
I can see where quoting ERP can lead to some confusion on the part of
lawyers and non-technical types. Are you really saying that ERP is not
necessary because, in the types of cases you have experience with, the
transmitter power and gain are both so low that RADHAZ limits are not
exceeded except possibly at touching distances? What happens with a

case where the transmitter power is high enough that the exclusion zone may go into the far-field? You then use ERP? Wouldn't the legal beagles be confused then? Maybe it would be better to come up with a standard procedure that works in all cases. 73,
Bill N3WK

3383. Re: T2FD terminating resistor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 01:11:34 UTC
From: David Cook <nospam.davepc2@oz.net>
Message-ID: <axYb8.80750$AV5.387417@rwcrnsc51.ops.asp.att.net>
Source record: 148371

Ok, ok, I give! It was a tongue-in-cheek post, not a serious suggestion. Although I do have a memorable QSO of when I clipped the plug of a desklamp onto the output of my 75 watt CW transmitter to tune up. A guy in Kansas hailed me with a 599 report (40 mtrs, my QTH was Colorado at the time). It was so bizarre that I strung the thing up on top of the house and actually made a few more QSOs on it. I imagine the few milliwatts that were actually being radiated were leaking out of the zip cord. But still, a pretty peculiar phenomenon.

"David Cook" <nospam.davepc2@oz.net> wrote in message news:HKUb8.79107$Pz4.353150@rwcrnsc53...
> Hmm, using the trusty R = E**2/P formula, a 110v (RMS) 250 watt light bulb's
> impedance should be 48.4 ohms. Maybe not too practical, but just a thought.
> I used to use light bulbs for dummy loads when I was an
> economically-challenged Novice.
>
> As an aside, I used to attach neon bulb lamps to the ends of my dipoles just
> for fun - the neighbors were mystified by my blinking antennas when I was
> sending CW. For an even better effect, you can hang a florescent light tube
> on your antenna. Whoa - Stupid Ham Tricks!
>
> -- Dave, WA0TTN
>
> "Keith" <kwatkins@tr15.freeserve.co.uk> wrote in message
> news:a4mig2iug1@newsg1.svr.pol.co.uk...
> > For Tx use to 250w--can anyone suggest a source of supply please.Thanks.

3384. Re: Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 01:17:33 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <NCYb8.100429$Zc.27495227@news2.rdc1.mi.home.com>
Source record: 148372
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

"Red Baron" <Red@baron.net> wrote in message
news:3c689d6e$0$79561$4bb17d6e@news.dwave.net...

> I have no complaints with the antenna, it works great. The only thing I
> will caution you about your proposed installation is that you may very well
> not want the antenna on your roof rack. I guarantee that you will bend the
> antenna eventually.

I have a Comet antenna similar to the Diamond 7900 attached to the roof rack on my Dodge mini van. I have whacked tree limbs etc. with it and have yet to bend the mount or antenna. It's been up there for almost two years now using the Diamond K550 mount.

--
Leland C. Scott
KC8LDO

ARRL Member
NCI Member

3385. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 01:28:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C7058A8.C1FBAC15@eznec.com>
Source record: 148373

Return loss is the magnitude of the reflection coefficient, expressed in dB. SWR refers to standing waves on a transmission line. Often it's imporant to know how good an impedance match is between two networks of any type, not necessarily involving transmission lines. For this purpose, reflection coefficient is more appropriately used and has more direct physical meaning than SWR. And expressing reflection coefficient in dB allows easy expression of a wider range of values than simply expressing it as a number. You'll often see the input impedance of microwave devices expressed or specified as return loss, as a way of indicating the quality of the impedance match.

It's pretty easy to measure return loss or the magnitude of the reflection coefficient directly. Examples of simple return loss bridges are shown in _Solid State Design for the Radio Amateur_ and _Introduction to Radio Frequency Design_, both by Wes Hayward W7ZOI and both published by the ARRL.

Roy Lewallen, W7EL

CAM wrote:
>
> Dan Richardson wrote:
> > At the moment I know Return Loss = SWR-1 / SWR+1 ...
>
> Nope, that's the magnitude of the reflection coefficient.
> --
> cheers, CAM http://www.qsl.net/w5dxp

3386. Re: Quality & Construction of VHF/UHF Foldover Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 01:35:17 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C705A55.C61B113D@IEEE.org>
Source record: 148374
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

"Leland C. Scott" wrote:
>
> "Red Baron" <Red@baron.net> wrote in message
news:3c689d6e$0$79561$4bb17d6e@news.dwave.net...
>
> > I have no complaints with the antenna, it works great. The only thing I
> > will caution you about your proposed installation is that you may very well
> > not want the antenna on your roof rack. I guarantee that you will bend the
> > antenna eventually.
>
> I have a Comet antenna similar to the Diamond 7900 attached to the roof rack on my Dodge mini van. I have whacked tree limbs etc. with it and have yet to bend the mount or antenna. It's been up there for almost two years now using the Diamond K550 mount.

Same here for the NR770 which is virtually indestructible.
--
cheers, CAM http://www.qsl.net/w5dxp

3387. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 02:01:08 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <lhk07uc0637amim011a13ntrm2fijta7rj@4ax.com>
Source record: 148375

On Sun, 17 Feb 2002 23:59:49 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.com> wrote:

>Richard Clark wrote:
>>On Sun, 17 Feb 2002 15:17:20 +0000, "Ian White, G3SEK"
>><G3SEK@ifwtech.com> wrote:
>>
>>> For example, 50W RF and 15dBi can be inflated to 1.6
>>>kilowatts EIRP... yet the safety case is all about what happens to the
>>>available 50 watts of RF.
>>
>>Hi Ian,
>>
>>Anyone can relate to the heat of the sun and the common lens.
>>
>>That same heat through a large lens focused to the back of your head
>>instead of over the area of your body (about that same gain) will
>>teach a lesson that the original, acceptable power is more than
>>lethal, and more than quick (compared to the original exposure) than
>>without that same lens.
>>
>>Prior restraint on the discussion of the technicalities because some
>>might not get it (the confusion defense) more suggests the speaker is
>>the one with the difficulty, not the audience. It took less than 60
>>words to express the correlation above in terms that are accessible to
>>every 10 year old student who has already learned to fry ants.
>
>Unfortunately those 60 words are all about the receiving situation. A
>transmitting dish does not focus RF energy, it spreads it out before
>projecting it forwards across its whole area. You're then left with the
>difficulty of explaining the reciprocity theorem instead.
>
>Leading off with a discussion based on incinerating ants does not look
>like a good way to get your proposed installation accepted.
>
>The rest of the posting drifts off into "What is a 'safe' power
>density?" which is not the issue being discussed.

Hi Ian,

You seem more intent on your answer than the matter at hand:
> Hi All,
>
> The local cell provider has just proposed putting a 150' cell tower behind
> my house. This would put the tower base at about 75 yards from my house.

> What are the MPE limits for cell frequencies? I know that at Microwave
> frequencies possible damage to eyesight is possible if MPE limits are
> exceeded
which clearly introduced the issue being discussed by everyone else.

You may also note that the original poster disclosed an issue I
DIRECTLY address and to the point of the situation vis-a-vis far field
NOT near field exposure; your characterization:
>The rest of the posting drifts off into "What is a 'safe' power
>density?" which is not the issue being discussed.
not withstanding.

Further, my same discussion illustrates the common experience of EIRP
and it shows quite clearly that what everyone has been saying is
supportable in the experience of children. You don't even have to
discuss the math of focus and curvatures which a child understands
conceptually within minutes of their first association with a lens kit
in the play yard.

Most, if not all, of your discussion seems to be predicated upon much
different matters far afield from the original poster's issue with
exposure. You may have some discomfort presenting the concept with
fried ants, but you have offered nothing in technical rebuttal, nor an
alternative discussion that covers the same issues so called for.

I would hesitate to offer lessons of reciprocity to that 10 year old
student, simply because it is not germane; not because it is difficult
(it isn't); and certainly not because it is above the comprehension of
the student who has undoubtedly already learned that an illuminated
image can be cast through a lens as a projected image. In other
words, even this issue takes far less to discuss than to pine about
the possibility of confusion/difficulty (and no ants were harmed in
the making of that projected image).

73's
Richard Clark, KB7QHC

3388. Re: cord for dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 02:01:40 UTC
From: cprstn54zz@att.net
Message-ID: <3c705f3d.16707765@news-server.optonline.net>
Source record: 148376

On Sun, 17 Feb 2002 09:04:40 -0800, Bill Turner <w7ti@dslextreme.com>
wrote:
>Nylon is strong, UV-resistant, abrasion-resistant and fairly
>inexpensive. I've used 1/8" braided nylon for years with no trouble.
>Nylon is a little bit stretchy, so if you need less stretch, dacron
>would be a good choice, although usually more expensive and not as
>strong. Small boat sailors invariably use nylon for anchoring and
>dacron for sail-handling lines, which gives a clue to their relative
>usefulness.

If tying to trees and not using pullies & weights, or a length of
bunge, I would use nylon. It will stretch as the trees move. If
there is less that 15' of nylon from the insulator to the tree, I
would leave the nylon slack and put a bungie cord between two loops in
the nylon to take up the slack and provide for tree movement.

Ken
(to reply via email
remove "zz" from address)

3389. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 02:28:48 UTC
From: n7ws@yahoo.com
Message-ID: <3c706507.288484551@news.triconet.org>
Source record: 148378

On Sun, 17 Feb 2002 13:59:22 -0800, Dan Richardson <k6mhe@arrl.net> wrote:

|I have been trying to ascertain the value of knowing return loss
|values. I have checked several books in my library with little or no
|luck.
|
|Thus far I've checked the indexes in Kraus, Terman and found nothing.
|In Reference Data for Radio Engineers it is mentioned but the
|information is given in a section discussing phone lines. The ARRL
|Antenna Books 18th and 19th editions show a graph for a piticular
|antenna with no explanation. In an older ARRL Antenna book (published
|in 1986) gave the most information (a graph, and table listing plus
|the formula) that I could find.
|
|At the moment I know Return Loss = SWR-1 / SWR+1 and can also
|calculate the Return Loss in dB.
|
|My question is what is the application(s) of knowing the Return Loss
|value useful? In other words say I have determined a return loss value
|of 2.439 (32.3 dB) - now what?

Danny,

As you know return loss (RL), reflection coefficient (rho) and SWR are just different ways to express the same thing. Sometimes the context determines the best form to use.

In the laboratory setting, if one is using power meters to measure mismatch, then return loss is what you measure; the ratio of two powers, one forward, the other reverse (and yes Peter, the powers are real). When expressed in dB then you can just add or subtract them like other logarithmic quantities.

If I have a particular load with a return loss of 14 dB and I need it to look like 20 dB, I can insert a 3 dB pad, which has 6 dB RL (3 dB going and another 3 returning) and the composite is 14 + 6, or ~1.2:1 SWR. Similarly, if I have measured a RL of 15 dB but I know the loss in the cable between me and the load is 1 dB, then I know that the load RL is actually only 13 dB. The cable loss makes the load look better than it is. This phenomenon is what makes off-resonant dipoles fed with wet window line so attractive <g>.

In the microwave world you often see device specs like, "Shall be unconditionally stable with a 3:1 VSWR at any phase angle." Going by memory, or my handy H-P reflection slide rule, I know that 3:1 SWR is a RL of 6 dB. So I can test this device by putting an adjustable length short on the end of a 3 dB attenuator and connecting it to the device. By changing the position of the short I vary the reflection phase while the reflection magnitude stays constant.

So in this case (in my mind anyway) it is easier to express 3:1 SWR as 6 dB RL when you're picking the attenuator value.

In your example, by inspection you can imagine whether or not a reflected signal 32.3 dB down from the incident will have much effect on your system.

It should be remembered that all of these quantities are scalar.

So the bottom line is whatever best rings your bell.

Wes

ps. How did you equate those two numbers in your example?

3390. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 02:43:24 UTC
From: MRR <PacificCommonwealth@SecuritiesDealer.com>
Message-ID: <3C706A4D.E8124476@SecuritiesDealer.com>
Source record: 148379

Tom:

You could save yourself some money by just taking a piece of coax and attaching a heavy duty 50
ohm resister to the end of it, submerging it in oil [commonly called a dummy load] and transmitting
on it.

This antenna is a really poor performer. If you find a ham claiming they have worked 200+ countries with this antenna, make a bid for his QTH because he has to be located on an island
surrounded by water or on top of a salt mine. In other words, any good experience with this antenna
is due to the QTH and not the antenna. The terminating resister in this antenna is used to give you
the 50 ohm match, just like the dummy load.

Good luck.

Ron W7MRR

Tom Nelson wrote:

> Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> is used? What is spreader length? What kind of trap?
>
> I would like to make one for my own use.
>
> TNX
> Tom

3391. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 03:03:33 UTC
From: richardharrison@webtv.net
Message-ID: <21351-3C706F05-309@storefull-113.iap.bryant.webtv.net>
Source record: 148383

Ian, G3SEK wrote:
"Your chosen dish diameter is 33.5 wavelengths. The near field extends out to 225 wavelengths or 67 feet."

OK. I hope to learn something here.

I thought the demarcation between near and far fields was at a distance from an antenna where the reactive energy was "small" compared with the radiation energy.

Near an antenna, fields are greater iin magnitude and different in phase from the radiated field because the induction fields are there too. The induction fields contain energy to be returned to the transmitting antenna and which is not a part of the radiated energy.

Induction fields fade away very rapidly as distance from the antenna grows. When induction fields are "small" as compared with the radiated fields, the near field ends and the far field begins.

At 1/8-wavelength, or less, from an antenna, the induction field is very strong.

The radiation field contains lines of force which have escaped or broken away from an antenna. An electric field produces a magnetic field which produces an electric field which produces yet another magnetic field. These reproduce each other on and on into space to consist of radiation traveling away never to return, A radio signal.

As I previously posted, medium wave broadcast radiation field measurements begin at one mile or as little as 3 wavelengths, regardless of the gain of the directional antenna array. This is far field measurement.

My memory is vague on the rates of decay for induction fields. I recall that either the electric field or the magnetic reactive field declined as the fifth power of the distance and the other reactive field wasn`t far behind. The power in the radiation field only declines as the square of the distance, as everyone knows. So, it`s easy to see why the induction fields are going nowhere.

Best regards, Richard Harrison, KB5WZI

3392. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 03:05:13 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <zc_b8.321$bM3.93378700@news.inreach.com>
Source record: 148380

Drink:

First, the antenna you describe is not a G5RV. You are describing a 40 meter dipole with open wire feeder.

There is nothing wrong with such an antenna, and if you plan to operate it on frequencies other than 7 Mhz, the open wire feeder will allow you to do so with mininal problems, providing your tuner can handle the mismatch it will encounter. That mismatch is what the real G5RV design minimizes...the antenna lengths and open wire feeder length keep the mismatches from getting too difficult to handle. If you only plan to operate on 7 Mhz a coaxial feeder will simplify things and make the tuner unnecessary.

Second, your "understanding" that the feeder will radiate is incorrect. An open wire feeder doesn't radiate any more than a coaxial feeder as long as the currents on each side of the feeder are in true differential mode (180 degrees out of phase). That is what you are trying to achieve with a balanced feed system. Does your tuner have balanced output?

Third, I have yet to see it demonstrated that feedline radiation causes more TVI than antenna radiation. I think this is one of the "urban myths" of ham radio. There have been many newsgroup posts by hams with TVI problems and they are consumed with worry about feedline radiation. They should first be sure they are not radiating harmonics from their antenna. A low pass filter is the easiest way to do that. Some tuners achieve a low pass configuration, but many do not--you should not assume your tuner will suppress harmonics. If your tuner is the popular "T " configuration with C-L-C arrangement of two tunable caps with a coil to ground in between you actually have high pass filter with relatively little harmonic suppression.

Lastly, one of the drawbacks of open wire feeders is the need to keep them away from other conducting (metal) objects. But that doesn't mean a disaster will happen if you must run the feeder near some metal. Do the best you can and try it. This is, after all, ham radio.

Good luck and 73,

Roger K6XQ

3393. Re: Corrosion on mast and treatment for it?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 03:06:10 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c707461_2@news1.prserv.net>
Source record: 148381

Are you sure that was galvanized? Even the thin stuff they sell these days should last a year. If it is really galvanized, the sacrificial zinc should hold off general rusting, allowing only localized rust where there is major mechanical damage. Just out of curiosity, what color was it originally, and what made you believe it is galvanized?

I have used "Cold Galvanizing" spray extensively for damage repair, but it has been pointed out that zinc suspended in a binder can't provide the galvanic action necessary to prevent rust in the same manner that hot dip galvanizing does. So, the alternative is several coats of a good high quality outdoor enamel, applied carefully so that all surfaces are fully and completely covered.

Keep us posted on what you find.

--
Crazy George
Remove NO and SPAM from return address
<googlyelmo@earthlink.net> wrote in message
news:3C6F70B2.E4EF12DC@earthlink.net...
> I just put of a 20' mast mounted via a 3' tripod to my roof. Antennas
> are performing well. The trouble is, they have only been up since
> mid-December, and already the tripod is a bit rusty. Now granted, this
> is Seattle, but OTOH it may be wet, but no salt air, and little ice or
> snow to occasion the use of rock salt on roadways. Thus I am a bit
> puzzled why galvanized steel should be rusting, however superficially,
> in just two months. Is this really normal? I seem to recall some stuff
> in a spray can that might be of help for this problem,
> "Galvano-something", basically aerosol zinc. Is that the correct
> treatment for a rusty tripod?
>
> --
> Will, KD7BFX
> Seattle WA US
> King County, Grid CN87tq
> ITU Zone 6, CQ Zone 3
> **********
> "The wireless telegraph is not difficult to understand.
> The ordinary telegraph is like a very long cat.
> You pull the tail in New York, and it meows in Los Angeles.
> The wireless is the same, only without the cat."
> - Albert Einstein
> **********
>
>

3394. Re: Wanted: FM antenna sorcerer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 03:16:20 UTC
From: wattle@eudoramail.com
Message-ID: <4b0a791.0202171916.90e3b36@posting.google.com>
Source record: 148382
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Jay" <japolicownospam@snet.net> wrote in message news:

> As far as the quality of reflected signals, while it would seem that a
> direct signal would be better, sometimes the reflected signal is better (or
> the only signal available)...<snip>

Ok, I guess it's better than not having signal at all. The good thing about
rotators is that I can always tweak it for better signal. Surprisingly,
rotators are quite easy to install. Everyone should have it.

> If it is not pointing towards the
> station, try to figure out what it IS pointing towards. A bit of sleuthing
> will usually tell you what you need to know.

The above statement I like too- as I never would have thought of it.
I guess I'll have to climb up the roof sometime this week.

Thanks Jay,

W

3395. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 03:29:51 UTC
From: cdn <dnorris@k7no.com>
Message-ID: <p5t07u8gjcs13bgidsc9gumdjmc4f3laab@4ax.com>
Source record: 148384
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Sat, 16 Feb 2002 22:52:07 +0000, Walt Davidson
<walt99@tiscali.co.uk> wrote:

>On Sat, 16 Feb 2002 21:34:31 GMT, k4yn@america.net (RJ) wrote:
>
>>Hams have died trying to get to the Spratleys.
>
>Other vacationers have died jet-ski-ing.
>Does that make them national heroes?
>
>73 de G3NYY

I don't believe anyone is trying to make them 'national heroes',
however to trivialize their deaths is rather poor taste.

JMNSHO

unkadean

3396. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 04:14:17 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C707176.5DADA80A@shaw.ca>
Source record: 148385

MRR wrote:
>
> Tom:
>
> You could save yourself some money by just taking a piece of coax and attaching a heavy duty 50
> ohm resister to the end of it, submerging it in oil [commonly called a dummy load] and transmitting
> on it.
>
> This antenna is a really poor performer. If you find a ham claiming they have worked 200+
> countries with this antenna, make a bid for his QTH because he has to be located on an island
> surrounded by water or on top of a salt mine. In other words, any good experience with this antenna
> is due to the QTH and not the antenna. The terminating resister in this antenna is used to give you
> the 50 ohm match, just like the dummy load.
>
> Good luck.
>
> Ron W7MRR

Baloney! You have demonstrated a high degree of ignorance
of antennas
with your reply. I doubt if you have ever owned one -- a
B&W Broadband
Dipole that is. I had one for quite some time, and used it
at two different
locations, and had very good results. I've also had
inverted vees and beams,
and although the B&W was down a bit, it provided a number or
good years of
fun on the bands.

>
> > Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> > is used? What is spreader length? What kind of trap?
> >
> > I would like to make one for my own use.
> >
> > TNX
> > Tom

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3397. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 04:28:39 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <uk017ugagpiinrjk3a6rss6aj616d6bb65@4ax.com>
Source record: 148388

On Mon, 18 Feb 2002 02:28:48 GMT, n7ws@yahoo.com (Wes Stewart) wrote:

>ps. How did you equate those two numbers in your example?

Right out of the 1986 ARRL Antenna Book page 35-38

3398. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 04:35:06 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4q09q$63t$9@quark.scn.rain.com>
Source record: 148386

Bill Klocko <klocko@toad.net> wrote:

> I can see where quoting ERP can lead to some confusion on the part of
> lawyers and non-technical types. Are you really saying that ERP is not
> necessary because, in the types of cases you have experience with, the
> transmitter power and gain are both so low that RADHAZ limits are not
> exceeded except possibly at touching distances? What happens with a
> case where the transmitter power is high enough that the exclusion
> zone may go into the far-field? You then use ERP? Wouldn't the legal
> beagles be confused then? Maybe it would be better to come up with a
> standard procedure that works in all cases. 73,

It would seem to me that the proper terms to use would be energy density
at given distances - which is precisely what the FCC uses.

There is not ambiguity or confusion possible if a statement is made that
the energy density is (for example) 0.3 microwatts/cm^2. ERP and EIRP
are not necessary. YOU use them to calculate the energy densities, but
do not mention them in the analysis for the non-technical.

The advantage here is that the energy densities can be directly measured,
if you have suitable equipment. ERP has to be computed, based on actual
signal strength measurements made or based on antenna theory.

--
Bill Nelson (billn@peak.org)

3399. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 04:46:45 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4q0vl$63t$10@quark.scn.rain.com>
Source record: 148387

Richard Harrison <richardharrison@webtv.net> wrote:

> I have a similar experience with a clock-radio-telephone combination. I
> was plugged into both phone and power lines with this.

> The phone and power lines share a common ground connection where they
> enter the premises. Obviously, the potentials of both lines are the same
> at this point when protection comes into play. Also obviously, the
> potentials of both lines were greatly different at my device at the
> instant when the lightning flashed. I would wager that out at the ground
> rod the volts on the phone and power lines were very nearly the same
> when the lightning did its thing. This causes me to think the house
> phone and power wiring acted as an antenna to collect the breakdown
> volts across my phone-radio-clock combination.

Well, the DC potentials of both the phone line ground and power line ground were the same. There is no guarantee that they were anywhere close to being the same for any given AC frequency. Since lightning is very broadbanded, you can bet that both "grounds" acted as if they were not even there at many of the frequencies generated.

The potentials "at the ground rod" were certainly identical - they have to be, assuming decent connections to the rod. But the further away you get from the rod, the less likely the potentials are likely to be identical.

As far as the two "hot" phone wires and the current carrying power wires, they are never close to being at the same potential. The highest that the phone wires normally reach is about 90 volts when a ring signal is applied.

The lengths of the house wiring for both phone and power are rather small, when compared to all the wiring outside the house. Although I cannot document it, it would appear that the outside wiring would be where the majority of the lightning's induced voltage/current would occur.

--
Bill Nelson (billn@peak.org)

3400. need plans for

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 05:12:24 UTC
From: mike beauchamp <yingly@sympatico.ca>
Message-ID: <UtZb8.41880$JZ.4022141@news20.bellglobal.com>
Source record: 148377

hello all i need a set of instructions for a 4 element vertical phased array for 140 mhz can anyone help or direct me to a good web site? thanks ve3 tya 73 and 88

3401. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 05:25:34 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C70904E.46A28BA6@coqui.net>
Source record: 148389

Dan Richardson wrote:
>

> My question is what is the application(s) of knowing the Return Loss
> value useful? In other words say I have determined a return loss value
> of 2.439 (32.3 dB) - now what?
>
> 73
> Danny, K6MHE

In cable tv work we use return loss exclusively for measuring match.
Its a very convenient unit for calculating reflections which will
ultimately show up as ghosting in analog pictures or raise all sorts of
havoc on digital signals.
Ghost reflections can be easily be seen on a TV set at 20-30 db down.
This is in the 1.1 to 1.2:1 SWR range. As you can appreciate, the RL
numbers are simply easier to work with in this case given that the
industry measures in dbmv and the return loss figures make for easy
math.
-Bill WX4A

3402. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 05:31:56 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <hl0c8.4075$Lc2.525376@news20.bellglobal.com>
Source record: 148390

> Ian, G3SEK wrote:
> "The near field extends out to...
> <blah blah blah phase deltas...>

"Richard Harrison"
> OK. I hope to learn something here.
> I thought the demarcation between near and
> far fields was...
> <blah blah blah reactive field...>

WARNING

You may be experiencing the differing meanings of near/far field as understood by the US and the UK (simplified demarcation). As a Canadian (stuck in the middle), I get to see both sides :-).

I was introduced to the UK version of "far field" by a very nice lady in Great Malvern, UK that writes some very nice GTD/UTD software. The UK version of "far field" is MUCH farther out than the US version. It is something like where the distance is sufficiently far away that the relative phases of the contributing portions of the overall signal are no longer a function of angle (something like that...).

Perhaps we need to subscript the phase "Far Field" with (US) or (UK)...

I believe that I had detected a third meaning at some point in my career, but I can't recall it right now.

3403. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 06:18:15 UTC
From: n7ws@yahoo.com
Message-ID: <3c709a0f.302063378@news.triconet.org>
Source record: 148391

On Sun, 17 Feb 2002 16:32:47 -0400, "Drink" <REMOVE_THISdrink@coqui.net> wrote:

| Hi Diablo,
| I hope we're not confusing antennas. I'm not using coax. Rather, I'm
|using 450 Ohm "window" ladder line fed into the MFJ-949E tuner. I'm pretty
|sure it incorporates a balun (somebody correct me if I'm wrong). The
|original G5RV design didn't use coax.

The "original G5RV" did have a coax option. Likewise it had an
all-open-wire-feed option and it had a
"short-the-transmission-line-conductors-together-and-feed-it-
as-a-top-loaded-vertical-option." You can see the "original" paper at:
http://users.triconet.org/wesandlinda/g5rv.pdf

About the only thing 'unique' about the "G5RV' is the 102' length.

| I wouldn't worry much about feedline
|radiation from coaxial cable.

Why not?

Wes N7WS

[snip]

3404. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 08:15:04 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <ZbKwPREIgLc8EAqu@ifwtech.com>
Source record: 148392

Bill Klocko wrote:
>I can see where quoting ERP can lead to some confusion on the part of
>lawyers and non-technical types. Are you really saying that ERP is not
>necessary because, in the types of cases you have experience with, the
>transmitter power and gain are both so low that RADHAZ limits are not
>exceeded except possibly at touching distances? What happens with a
>case where the transmitter power is high enough that the exclusion zone
>may go into the far-field? You then use ERP? Wouldn't the legal beagles
>be confused then?

That's precisely why I wouldn't mention ERP under any circumstances.

You rightly pointed out that if (but *only* if) the exclusion zone goes into the far field, then the calculation changes to become based on ERP. The formula involves multiplying the power by the far-field gain - but you still don't *have* to pull out that large number of "apparent watts" as a specific result, and then deliberately make a feature of it.

>Maybe it would be better to come up with a
>standard procedure that works in all cases.

The numbered steps that I listed a few days ago will do that (aside from my typo that you picked up). They address the question "What are the maximum possible power densities at various distances from this antenna, fed with X watts; and if exclusion zones are necessary, how large should they be?" That procedure, with a flow chart, is published in the Safety chapter of the RSGB Microwave Handbook (Volume 2).

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3405. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 08:35:49 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <QLRy77FlzLc8EAKA@ifwtech.com>
Source record: 148393

Richard Harrison wrote:
>Ian, G3SEK wrote:
>"Your chosen dish diameter is 33.5 wavelengths. The near field extends
>out to 225 wavelengths or 67 feet."
>
>OK. I hope to learn something here.
>
>I thought the demarcation between near and far fields was at a distance
>from an antenna where the reactive energy was "small" compared with the
>radiation energy.
>
>Near an antenna, fields are greater iin magnitude and different in
>phase from the radiated field because the induction fields are there
>too. The induction fields contain energy to be returned to the
>transmitting antenna and which is not a part of the radiated energy.
>
As far as I know, those general statements are correct. From the RF hazards viewpoint, another way of saying "reactive energy is small" is that the E and H fields are getting close to being in phase (which is generally not true in the near field).

The practical implication is that if E and H are in phase, you can measure either one (usually E-field) and calculate the power density accurately using E^2/377 (or I^2 * 377) where 377 ohms is the impedance of free space. Within the near field that calculation is an overestimate of power density, because of the unknown "power factor" related to the local phase angle between E and H fields.

>Induction fields fade away very rapidly as distance from the antenna
>grows.

That may not be true - it depends on the type of antenna, and each person's individual definition of "very rapidly".

>When induction fields are "small" as compared with the radiated fields,
>the near field ends and the far field begins.
>
That is generally (read: always) valid, though there is no sharp boundary between the near and far fields. Again it depends on a definition of "small", but the factor 0.2 in the (0.2 * D^2/wavelength) criterion represents a widely-used consensus.

>At 1/8-wavelength, or less, from an antenna, the induction field is
>very strong.
>
No doubt, but it doesn't say anything about the distance at which the

induction field becomes negligible. That distance varies with the type
of antenna.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3406. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 11:40:16 UTC
From: fractenna@aol.com
Message-ID: <20020218064016.11743.00000640@mb-df.aol.com>
Source record: 148394

>Welcome to the horrible world of Cushcraft. They are the worst at
>customer support in the entire Amateur Radio world. They even ignore
>requests for help on my R7000 which IS still produced.
>
>DO NOT BUY CUSHCRAFT, they are going to cheat you.
>

They cheated no one. The fact is that you got a great value and no one was cheated.

This issue of spare parts has come up again and again. The answers have been reasonable and consistent from the manufacturer.

Ask yourself the following question: if we hams DON'T buy Cushcraft, then what, exactly is your quality, cost-effective alternative?

The fact that so many Cushcraft antennas STILL EXIST, in PERFECT WORKING CONDITION has created more than a viable inventory of used spare parts; going the flea market or used alternative is not only a good idea, but is a great value.

Frankly, I am surprised that someone hasn't set up their own 'e-bay' on ham antenna parts. There's a small but viable market there fellows.

I have an A4 waiting to go up that's outlasted three owners; 3 radios, and 3 QTH's. How many OTHER parts of a ham station can you say that about?

73,
Chip N1IR

3407. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 13:09:12 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C70FCF8.8D9E74A9@IEEE.org>
Source record: 148395

-Your Friend Bill- wrote:
> In cable tv work we use return loss exclusively for measuring match.
> Its a very convenient unit for calculating reflections which will
> ultimately show up as ghosting in analog pictures or raise all sorts of
> havoc on digital signals.

You mean, you mean, the reflections are really there? :-)
--
cheers, CAM http://www.qsl.net/w5dxp

3408. Re: Helical Antenna Sidelobes - Pls Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 13:23:08 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202180523.6168d31d@posting.google.com>
Source record: 148396
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Gollywog" <_eng@ilos.net> wrote in message news:<VxAa8.842$8i2.26274@news2.mts.net>...
> Hi all,
>
> I've found what appears to be a cheap and easy homebrew helical suitable for
> use in a current project. If possible I'd like to reduce the side lobes that
> appear in the horizontal plane radiation pattern. Anybody here doing Phase
> 3D (AO 40) satellite stuff, etc could give me some pointers? What if I just
> bent a 1 foot wide piece of aluminum to make a 320 degree (or so)
> cylindrical shield. The antenna indicated would then be mounted inside and
> be pointed out the vertical slit. Would this "shear off" the side lobes?
>

No, it would probably make them worse and destroy the main beam in the
process.

All multielement antennas have sidelobes. Although there are things
that can be done to reduce them, it probably is not worth it.

Jim
N8EE

3409. Re: Antenna tuner observations.....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 14:12:51 UTC
From: n2ey@aol.com
Message-ID: <20020218091251.02067.00001485@mb-ct.aol.com>
Source record: 148397

In article <3C69C19A.3B8C3894@IEEE.org>, CAM <Cecil.A.Moore@IEEE.org> writes:

>Question for the gurus: For an RF transformer, would an open air coil
>be better than a ferrite transformer or a powdered iron transformer?
>--

Yes.

--

On the whole question of balanced/unbalanced tuners, where to put the balun,
etc., etc., see:

http://www.vcnet.com/measures/bbat.html

"Must read" on the whole subject. If you gotta use a lumped-element tuner,
might as well use a good one.

Although the above tuner uses variable inductors, there's no reason one
couldn't use a tapped inductor and a suitable switch. The taps would have to
be found just once for each band.

73 de Jim, N2EY

3410. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 14:36:19 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C711162.BF609E36@umich.edu>
Source record: 148398
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

cdn wrote:
>
> I don't believe anyone is trying to make them 'national heroes',
> however to trivialize their deaths is rather poor taste.

I assure you I am not trivializing their deaths. I am upset whenever
I hear of decent people losing their lives in an undeserving way.

What I *am* trivializing are the comments about how "hams have died
trying to activate X". The original discussion (a tangent from the
eQSL subject) was whether DXpeditioners lose money due to eQSL's; i.e.
whether they deserve monetary compensation for their efforts. I, for
one, typically send $5 to a DXpedition group when I request a QSL.
I appreciate what they do, and want to help out. That a few DXers
have died on an expedition does not make DXpeditions more noble, nor
does it make them more deserving of cash. It's simply an unfortunate
occurence, like an ice fisherman who falls through the ice or a skier
who hits a tree.

Bob, KI8AB

3411. Line of sight topographic mapping software

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 14:43:05 UTC
From: Pete <news0201@toward.com>
Message-ID: <3C7112F8.93C1CCD4@toward.com>
Source record: 148399
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,alt.ham-radio.fm,alt.radio.amateur

I'm hoping to find some topographic mapping software that will display all areas that are within line of sight of a given point. The principal idea is to use it with VHF and UHF radios to chart out signal propagation via line of sight to all areas around a given point. I'd like to use the software to help me with some "mountaintopping" excursions so I can see where I might reach from a given mountain top.

It seems that the problem is not an overly complex one, but it requires elevation information and a raytracing capability.

I was wondering if anyone knew of any existing software package that will do this -- perferably a modestly priced one. I'll bet that there are proprietary packages that do this and extremely high priced packages aimed at cell phone service providers. I need one that's aimed toward the amateur radio hobbiest.

I have the National Geographic (formerly Wildflower Productions) Topo! series maps. They have all the necessary data in the form of the Digital Elevation Model (DEM) data. They can also plot the elevation profile between two points on the map (along any route). The missing piece is being able to plot the areas within line of sight.

Thank you very much for any pointers.

Best regards,
Pete

3412. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 14:51:03 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C7114D7.E4721910@coqui.net>
Source record: 148400

CAM wrote:
>
> -Your Friend Bill- wrote:
> > In cable tv work we use return loss exclusively for measuring match.
> > Its a very convenient unit for calculating reflections which will
> > ultimately show up as ghosting in analog pictures or raise all sorts of
> > havoc on digital signals.
>
> You mean, you mean, the reflections are really there? :-)
> --
> cheers, CAM http://www.qsl.net/w5dxp

Been known to happen :-) But having said that, the connection to the
consumer TV receiver is generally the worst match in the entire network.
-Bill

-Bill

3413. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 15:00:10 UTC
From: k1bqt@aol.com
Message-ID: <20020218100010.11690.00000861@mb-bg.aol.com>
Source record: 148401

If you research further, I think you'll discover that Cushcraft no longer manufactures the R7000 and hasn't for some time.

Rick K1BQT

3414. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 15:07:04 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <73627ugaa68pvvd223cnapgieo1snhkcud@4ax.com>
Source record: 148402

A better discussion of the G5RV is here.
http://www.qsl.net/aa3px/g5rv.htm

Dick - W6CCD

On Mon, 18 Feb 2002 06:18:15 GMT, n7ws@yahoo.com (Wes Stewart) wrote:

>On Sun, 17 Feb 2002 16:32:47 -0400, "Drink" <REMOVE_THISdrink@coqui.net> wrote:
>
>| Hi Diablo,
>| I hope we're not confusing antennas. I'm not using coax. Rather, I'm
>|using 450 Ohm "window" ladder line fed into the MFJ-949E tuner. I'm pretty
>|sure it incorporates a balun (somebody correct me if I'm wrong). The
>|original G5RV design didn't use coax.
>
>The "original G5RV" did have a coax option. Likewise it had an
>all-open-wire-feed option and it had a
>"short-the-transmission-line-conductors-together-and-feed-it-
>as-a-top-loaded-vertical-option." You can see the "original" paper at:
>http://users.triconet.org/wesandlinda/g5rv.pdf
>
>About the only thing 'unique' about the "G5RV' is the 102' length.
>
>| I wouldn't worry much about feedline
>|radiation from coaxial cable.
>
>Why not?
>
>Wes N7WS
>
>
>[snip]

3415. Re: Line of sight topographic mapping software

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 15:57:37 UTC
From: gdsnkl@bellatlantic.net
Message-ID: <3c71231e.63645208@news.bellatlantic.net>
Source record: 148403
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,alt.ham-radio.fm,alt.radio.amateur

On Mon, 18 Feb 2002 09:43:05 -0500, Pete <news0201@toward.com> wrote:

>I'm hoping to find some topographic mapping software that will display
>all areas that are within line of sight of a given point. The principal
>idea is to use it with VHF and UHF radios to chart out signal
>propagation via line of sight to all areas around a given point. I'd
>like to use the software to help me with some "mountaintopping"
>excursions so I can see where I might reach from a given mountain top.
>
>Thank you very much for any pointers.
>

Another product, the Maptech mapping software, has a similar 3D
viewing capability. You can pick a viewing spot (the top of Mt.
Whatever), put your viewpoint at ground level, and then see everything
visible from that spot.

I believe there is is a sample available on their website so you could
evaluate it for your needs.

Let us know what ends up working for you.
Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

3416. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 15:58:45 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020218105845.26889.00001483@mb-fb.aol.com>
Source record: 148404

I haven't been following this thread, so I missed the original poster's message, but I have heard that Cushcraft is TERRIBLE when it comes to customer service, which is probably why I have hestiated to buy any of their products. I'd recommend to everyone out there to avoid them.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

3417. Re: 75/100 Ohm Impedance Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 16:45:23 UTC
From: bfranske@yahoo.com
Message-ID: <ce6da1e5.0202180845.4661a749@posting.google.com>
Source record: 148405

This was also suggested to me, do you see a benefit or drawback of
doing it this way?

o-------12 ohms--------o

75 ohm source cable

o-------12 ohms--------o

Thanks,
Ben

3418. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 16:47:14 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <dgac8.154159$h31.11656641@e420r-atl1.usenetserver.com>
Source record: 148407

Thanks for the replies. What the specific differences between a doublet
and a G5RV kind of confused me. Also, I confused what the ARRL Antenna Book
quoted in the initial description. Thanks much for the links and words.
I've a much better basic understanding of the G5RV. Of course, there is one
last thing that might be trivial or just so simple that it eludes me. I say
I'm running a 1/2 size G5RV but others describe it as a doublet. What
differentiates a doublet from the open wire fed G5RV (open wire fed dipole)?
Or is this just a different name for the same animal?
Cordial 73's,
Drink, WP3JQ
"Dick Hughes" <rhughes33@cableone.net> wrote in message
news:73627ugaa68pvvd223cnapgieo1snhkcud@4ax.com...
> A better discussion of the G5RV is here.
> http://www.qsl.net/aa3px/g5rv.htm
>
> Dick - W6CCD
>
> On Mon, 18 Feb 2002 06:18:15 GMT, n7ws@yahoo.com (Wes Stewart) wrote:
>
> >On Sun, 17 Feb 2002 16:32:47 -0400, "Drink" <REMOVE_THISdrink@coqui.net>
wrote:
> >
> >| Hi Diablo,
> >| I hope we're not confusing antennas. I'm not using coax. Rather, I'm
> >|using 450 Ohm "window" ladder line fed into the MFJ-949E tuner. I'm
pretty
> >|sure it incorporates a balun (somebody correct me if I'm wrong). The
> >|original G5RV design didn't use coax.
> >
> >The "original G5RV" did have a coax option. Likewise it had an
> >all-open-wire-feed option and it had a
> >"short-the-transmission-line-conductors-together-and-feed-it-
> >as-a-top-loaded-vertical-option." You can see the "original" paper at:
> >http://users.triconet.org/wesandlinda/g5rv.pdf
> >
> >About the only thing 'unique' about the "G5RV' is the 102' length.
> >
> >| I wouldn't worry much about feedline
> >|radiation from coaxial cable.
> >
> >Why not?
> >
> >Wes N7WS
> >

> >
> >[snip]
>

3419. Re: Line of sight topographic mapping software

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 16:51:14 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <3C713100.96EAECDE@earthlink.net>
Source record: 148406
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,alt.ham-radio.fm,alt.radio.amateur

Try posting your question to the
sci.geo.satellite-nav and comp.infosystems.gis newsgroups.
It a common discussion there.

Cheers, 73,
Ron McConnell
w2iol

Pete wrote:

> I'm hoping to find some topographic mapping software

3420. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 16:51:49 UTC
From: rich@iwantnospam.com
Message-ID: <slrna72bqn.8be.rich@zippy.aa2ys.ampr.org>
Source record: 148408

On 18 Feb 2002 15:58:45 GMT, VHFRadioBuff <vhfradiobuff@aol.comspamsux> wrote:
> I haven't been following this thread, so I missed the original poster's
> message, but I have heard that Cushcraft is TERRIBLE when it comes to customer
> service, which is probably why I have hestiated to buy any of their products.
> I'd recommend to everyone out there to avoid them.

That does seem to be the general consensus. It appears that they don't maintain
any meaningful stock of old parts at all, once they cease a production run.

I've had an R7 and a dual-band yagi from them up for several years, but their
reputation about the lack of service on their HF antennas pretty much guarantees
that I won't be buying another Cushcraft when it comes times to replace the R7.

- Rich

3421. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 16:54:55 UTC
From: n7ws@yahoo.com
Message-ID: <3c712576.337755262@news.triconet.org>
Source record: 148409

On Mon, 18 Feb 2002 08:07:04 -0700, Dick Hughes <rhughes33@cableone.net> wrote:

|A better discussion of the G5RV is here.
|http://www.qsl.net/aa3px/g5rv.htm

I'm familiar with that 'discussion' too. Later maybe but better, I dunno.

Varney says such things as:

"As it does not make use of traps or ferrite beads, the "dipole" portion becomes progressively longer in electrical length with increasing frequency.

This effect confer(s) certain advantages over a trap or ferrite-bead loaded dipole because, with increasing electrical length, the major lobes of the vertical component of the polar diagram tend to be lowered as the operating frequency is increased."

In other words, with fixed height and increasing frequency the main lobe of the elevation pattern is at a lower angle. The exact thing is true for any horizontal antenna, so there is absolutely no advantage to the extended length antenna. There are several disadvantages however.

Varney continues:

"Recent experiments by the author to determine the importance or otherwise of "unbalance" effects caused by the direct connection of a coaxial feeder to the base of the matching section had a rather surprising result. They proved that, in fact, the hf currents measured at the junction of the inner conductor or (sic) the coaxial cable with one side of the (balanced) matching section and at the junction of the outer coaxial conductor (the shield) with the other side of this section are virtually identical on all bands up to 28mhz, where a slight but inconsequential difference in these currents has been observed. There is, therefore, no need to provide an unbalanced-to-balanced device at this junction when using coaxial feeder."

Only to say later:

"Under certain conditions, either due to the inherent "unbalanced-to-balanced" effect caused by the direct connection of a coaxial feeder to the base of the (balanced) matching section, or to pick-up of energy radiated by the antenna, a current may flow on the outside of the coaxial outer conductor. This effect may be considerably reduced, or eliminated, by winding the coaxial cable feeder into a coil of 8 to 10 turns about 6in in diameter immediately below the point of connection of the coaxial cable to the base of the matching section. the turns may be taped together or secured by nylon cord."

So I guess it is a 'discussion,' with Varney arguing with himself <g>.

Wes Stewart N7WS

3422. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 17:16:31 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <PFac8.6099$7Q6.239917@news1.east.cox.net>
Source record: 148410

Every CC beam I've owned has been "retired" because it was replaced with
something better/bigger,
not due to failure.

Pete

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20020218100010.11690.00000861@mb-bg.aol.com...
> If you research further, I think you'll discover that Cushcraft no longer
> manufactures the R7000 and hasn't for some time.
>
> Rick K1BQT

3423. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 17:20:11 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <fJac8.6111$7Q6.240317@news1.east.cox.net>
Source record: 148411

Most ground protection affords common mode protection, the voltage
protection
levels for common mode and tranverse (across the line) may be different
depending
upon the type of protector being used. I suspect most phone line devices
being damaged by
lightning is due to the transverse voltage spikes

Pete

"Bill Nelson" <billn@spock.peak.org> wrote in message
news:a4q0vl$63t$10@quark.scn.rain.com...
> Richard Harrison <richardharrison@webtv.net> wrote:
>
> > I have a similar experience with a clock-radio-telephone combination. I
> > was plugged into both phone and power lines with this.
>
> > The phone and power lines share a common ground connection where they
> > enter the premises. Obviously, the potentials of both lines are the same
> > at this point when protection comes into play.

Snip

3424. Re: 75/100 Ohm Impedance Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 17:35:14 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <s1e27uoe287qosaafsbae31skm22loq923@4ax.com>
Source record: 148413

On 18 Feb 2002 08:45:23 -0800, bfranske@yahoo.com (Ben Franske) wrote:

>This was also suggested to me, do you see a benefit or drawback of
>doing it this way?
>
> o-------12 ohms--------o
>
>75 ohm source cable
>
> o-------12 ohms--------o
>
>Thanks,
>Ben

Hi Ben,

The 75 Ohm source will see an 124 Ohm load (nearly 2:1 SWR), but the cable will probably be a flat line (no ghosts) all the way to the video load. As long as the source is stable with this initial reflection, it should work.

If the source is not stable (observe for the loss of fine details lost in very close ghosting or the presence of ringing), try my design.

73's
Richard Clark, KB7QHC

3425. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 17:36:15 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C713B8F.B3234E36@dialpoint.net>
Source record: 148412

The doublet is usually a multiply of 1/4 or 1/2 wave lengths. That would be around 130 feet on 80 meters and 65 feet on 40 meters. The G5RV is not but some other length. Around 110 feet or less on 80 meters and 55 or less on 40.

> I'm running a 1/2 size G5RV but others describe it as a doublet. What
> differentiates a doublet from the open wire fed G5RV (open wire fed dipole)?
> Or is this just a different name for the same animal?
> Cordial 73's,
>

3426. Re: Line of sight topographic mapping software

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 17:47:21 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <u9f27ucdnh7hlkcfop8gued8skd5dnrr1a@4ax.com>
Source record: 148414
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,alt.ham-radio.fm,alt.radio.amateur

On Mon, 18 Feb 2002 09:43:05 -0500, Pete <news0201@toward.com> wrote:

>I was wondering if anyone knew of any existing software package that
>will do this -- perferably a modestly priced one. I'll bet that there
>are proprietary packages that do this and extremely high priced packages
>aimed at cell phone service providers. I need one that's aimed toward
>the amateur radio hobbiest.
>

Hi Pete,

This is a simple one to field. Go to:
http://www.cplus.org/rmw/english1.html
and download Radiomobile. Observe all the commentary on how to obtain
topo maps for your region (you may already have them, judging by other
comments).

This package contains all the features you seek, is professional
grade, and is free (because the author is a Ham).

73's
Richard Clark, KB7QHC

3427. Re: Chicken Little, Y2K, Cell Tower Effects, et al

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 17:51:45 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C72834C.5F1D82CB@worldnet.att.net>
Source record: 148415

Vito wrote:

> Jake Brodsky wrote:
> >
> > ... these folks had been watching too many Star Wars movies ....
>
> Second that! Why not worry about the volcano under Yellowstone? It's
> past due to erupt - in fact the ground above it is already rising - and
> the last one like it, only 1/3 as powerful, brought man within 2000
> souls of extinction. Or one could worry about an astroid hit like the
> one that killed all the dinosaurs. Or ..... whatever. But please excuse
> me from the fun. I got important things to think about .. like where to
> get the $$$ for a new radio ;o).

If Sept 11 had any positive consequences, one was that now at least people have something real to worry about.

Dick

3428. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 17:57:17 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C728498.97A0C1FE@worldnet.att.net>
Source record: 148416

>
> You may, however, experience difficulties when the cell tower takes a
> lightning hit. My nephew lives across the street from a 400' radio
> tower and he frequently loses his ISDN router when the tower takes a
> hit.

Probably the result of an inductive pulse. When you think of the tower as the
primary 'winding' of a huge transformer, then that makes
every conductor that is within its influence a secondary, with the
appropriate current flowing, developing whatever voltage that Ohm's
law dictates depending on the lightning strike strength, etc..

Dick

3429. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 18:05:20 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C72867B.667BE4FF@worldnet.att.net>
Source record: 148417

"J. Harvey" wrote:

> > [Lightning] suppressor installation.
>
> Isn't it possible that EM can be coupled into the house bypassing the main
> entrance ?
>

Yes.

> A few years ago, I had a good-sized lightning strike on a tree about 200'
> away from the house. The tree, a huge old pine, was split in half. Some of
> the damage in the house was more associated with direct pickup (on long
> wires runs INSIDE the house) than with anything entering through the service
> entrances.
>

When you consider the lightning bolt (flowing through a metal
tower or even a direct ground strike) as a transformer primary
then whatever voltage is induced into a conductor depends on
the same phsical features that are considered in the design of
a transformer. Spacing, conductor orientation, conductor length
and other things.
And considering the exremely high voltages and currents involved
in most any lightning strike, no iron core is necessary to induce some
pretty damaging currents and generate some quite high voltages in your house
wiring.
It then becomes clear that some of the 'strange'
effects of lightning strikes are not really so strange after all.

> I guess one should treat long wire runs as if they were antennas (since they
> are...).

More like transformer secondary windings.

Dick W0EX

3430. Line of Site Topographic Mapping Software

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 18:11:18 UTC
From: "Ken Coghill III, WB4ZOH" <gear-mountain@comcast.net>
Message-ID: <3C7142DB.9C838E02@comcast.net>
Source record: 148418

Hi Mark -
Was doing some e work for OVH and came across this site - COOL & FREE!
Someday you too might need it.

http://www.cplus.org/rmw/english1.html

--
Ken Coghill III, WB4ZOH
"Without music life would be a mistake" - - Nietzsche

This message has been scanned for viruses: NONE FOUND!

3431. FS: Hy-gain Tailtwister rotor

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 18:11:30 UTC
From: jonweiner@aol.com
Message-ID: <20020218131130.28648.00001473@mb-fi.aol.com>
Source record: 148319

FS: Very good condition Hy-gain Tailtwister rotor & control box. Complete with the original instruction manual. Works perfectly. $300., plus shippinh.

Jon,. K1VVC

3432. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 18:30:03 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C728C46.46736D1C@worldnet.att.net>
Source record: 148320

Roy Lewallen wrote:

> When my Elmer retired he moved to a place in the Ozarks where he said
> there were some extremely impressive thunderstorms. On several occasions
> he saw ball lightning come out of his wall-mounted telephone and roll
> across the bedroom floor during a storm. Made a real impression on him.

I grew up and lived in the Ozarks and can certainly agree with his
description of the severity and level of the storms.
My closest brush with a lightning strike was in the 50's
when as a 12 year old I was talking on the wall telephone (the old
style phone where you hold the receiver to your ear and talk into
the wall mounted mike). I had just finished the call and moved the receiver
away from my ear and was moving it toward its hang-up
hook when lightning struck the phone line somewhere not far
away. Fire shot from the receiver, which I still held in my hand.
It looked like the classic jagged lightning bolt, a foot long or so.
It didn't shock me electrically at all, but sure did get my attention, and
reflexes set me back against the wall.
I never experienced the "plasma ball" lightning that rolls around on
cabinets, across the floor and out the door, but I know several
co-workers who swear they did, so your friend's experience is
certainly not unknown. On the HF Police Radiotelegraph nets, prior to 1965
where I worked, that effect most often came in from
the HF transmitting antenna which was a longer that ran from the
Collins transmitter standing behind the console in the radio room
through feed through insulator out the wall then to a point well up
on the side of the tower. A real lightning magnet!
I worked a long time around 350 foot radio towers and learned
quite a lot about the effects of lightning, and eventually how to do
a lot to prevent damage to radio gear from it. Not all of its effects
come in on the power line, many are induced onto existing wiring.

Oh- don't believe the old saw that "lightning never strikes the same
place twice". It sure does!

3433. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 18:42:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C714B0F.70DF022D@eznec.com>
Source record: 148321

It's entirely possible for the currents on the two antenna legs or two conductors of an attached twinlead transmission to be equal and for there to be a common mode current on the outside of a coax line (or common mode current on the twinlead). This will always be the case, in fact, unless the two antenna or twinlead currents are exactly out of phase with each other. I don't know if Varney checked the phases of the currents, but if he didn't, he fell into a common trap of assuming that equal magnitude currents mean no common mode current.

I ran into this same situation when doing the measurements for "Baluns: What They Do and How They Do It" (ARRL Antenna Compendium, Vol. 1). More comments about the situation can be found on p. 160 of that publication.

Roy Lewallen, W7EL

Wes Stewart wrote:
>
> On Mon, 18 Feb 2002 08:07:04 -0700, Dick Hughes <rhughes33@cableone.net> wrote:
>
> |A better discussion of the G5RV is here.
> |http://www.qsl.net/aa3px/g5rv.htm
>
> I'm familiar with that 'discussion' too. Later maybe but better, I dunno.
>
> Varney says such things as:

> . . .

> Varney continues:
>
> "Recent experiments by the author to determine the importance or otherwise of
> "unbalance" effects caused by the direct connection of a coaxial feeder to the
> base of the matching section had a rather surprising result. They proved that,
> in fact, the hf currents measured at the junction of the inner conductor or
> (sic) the coaxial cable with one side of the (balanced) matching section and at
> the junction of the outer coaxial conductor (the shield) with the other side of
> this section are virtually identical on all bands up to 28mhz, where a slight
> but inconsequential difference in these currents has been observed. There is,
> therefore, no need to provide an unbalanced-to-balanced device at this junction
> when using coaxial feeder."
>
> Only to say later:
>
> "Under certain conditions, either due to the inherent "unbalanced-to-balanced"
> effect caused by the direct connection of a coaxial feeder to the base of the
> (balanced) matching section, or to pick-up of energy radiated by the antenna, a

> current may flow on the outside of the coaxial outer conductor. This effect may
> be considerably reduced, or eliminated, by winding the coaxial cable feeder into
> a coil of 8 to 10 turns about 6in in diameter immediately below the point of
> connection of the coaxial cable to the base of the matching section. the turns
> may be taped together or secured by nylon cord."
>
> So I guess it is a 'discussion,' with Varney arguing with himself <g>.
>
> Wes Stewart N7WS

3434. Re: Line of Site Topographic Mapping Software

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 18:43:52 UTC
From: "Ken Coghill III, WB4ZOH" <gear-mountain@comcast.net>
Message-ID: <3C714A7D.F9BD656B@comcast.net>
Source record: 148322

Hi Group - Whoops!! Message sent to group in error - #@!$*&#$ bi-focals -
73 - WB4ZOH

3435. Re: cord for dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 18:46:12 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a4ri3g$1o4d$1@news1.tribune.com>
Source record: 148323

I no longer use rope. It tended to wear out in the areas where it was constantly worked over the pulley.

I use "garage door" galvanized wire at the tensioned end to get over the "garage door" pulleys athat connect to the garage door spring. (7 foot of motion 35 pounds of tension)

At the "fixed" end I use the same wire the antenna is made from.

I used to use electric fence insulators, but last time I just used some plastic pipe as insulators.

Of course there is always a chance that one or the other of these wires is resonant on some ham frequency, but I don't lose any sleep over it. What would it do, change my already unknown pattern?

KA9CAR

Jerry <jerryaa@prodigy.net> wrote in message news:lLOb8.10836$Il7.1545497698@newssvr15.news.prodigy.com...
> I am looking for a strong and durable cord material. Both my dipoles came
> down yesterday we had fairly strong winds all day. Broke the poly? cords I
> had around a limb of my oak tree. This is the kind that comes with the Van
> Gorden dipoles.
>
> Any suggestions?
> 73's
>
>

3436. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 19:00:04 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C72934E.FCA2954B@worldnet.att.net>
Source record: 148324

"Ian White, G3SEK" wrote:

> Bottom line: ERP is meaningful and useful for far-field (communication)
> purposes, but it is useless for RF hazard assessment. You don't know
> whether it comes from a large antenna and low RF power (good) or a small
> antenna and high power (could be a problem). The hazard assessment
> calculations don't go anywhere near the concept because it is
> irrelevant.

This is obvious to anyone familiar with radio technology.
Unfortunately it is not at all familiar to the general public
who must face the "new" concept of RF exposure and
it's possible effects on their health. When they see a microwave
dish or directional array they see it in the context of "another sun"
that spews it's damaging rays every which way. Most are
totally unfamiliar with the fact the energy is more restricted
than a flashlight beam. The fact that it is here, close by, that it is
even present is all too often seen as a major hazard. This is what
must be countered with education.

Corporate deception as has been in the news for the past few months
surely leads to suspicions of lying to avoid responsibility in
more ways than just stock market manipulations.
Dick

3437. Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 19:45:08 UTC
From: Harry Williams <harry.w.williams@syntegra.com>
Message-ID: <3C715A40.3A6C6814@syntegra.com>
Source record: 148325

I have a 160M horizonital loop that is fed in a corner with 450 ohm ladder line. I now have an amp and would like to use if with the loop but the tuner is rated at only 300W. Is there a way to broadband the feed to the loop so I could run RG8 or whatever out of the shack and then couple it to the 450 ohm line thru a balum that would give me an swr under say 3 to 1 over a wide frequency range? I would like to eliminate the tuner all together and have a feed system that would handle a KW.

Thanks,
Harry - W0PIY

3438. Brightness Temperature -- Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 19:48:55 UTC
From: Wayne Watson <mtnviews@earthlink.net>
Message-ID: <3C715AAC.F268CFA9@earthlink.net>
Source record: 148326

I'm looking at a book on radio astronomy and the author talks about calculating the equivalent
blackbody temperature of the galactic center from the formula:

Teq = (b*l*l)/(2*k)

where Teq is the equiv temp
b is the brightness of the object in watts/meter*meter/cycle per sec/steradians
l = wave length (15 m is used)
k=Boltzman constant

His answer is 50,000K. No mention is made of what b is. I would guess this is derived by some
measurement with a radio telescope.

In fact, how does one use a radio telescope to measure the required brightness? Is this *easily*
done? I take it that such brightnesses are measured over surfaces rather than points. How does one
find the (necessary) power over the surface of an object? I would think the resolution of amateur
radio telescopes would be so low as to make it very difficult to measure the brithness of an object
like Mars or Jupiter.

--
Wayne T. Watson (121.015 Deg. W, 39.262 Deg. N, 2,701 feet), Nevada City, CA
Web Page: http://home.earthlink.net/~mtnviews
Imaginarium Museum: http://home.earthlink.net/~mtnviews/imaginarium.html

3439. Re: cord for dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 19:49:05 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <u8m27ug7n2eq96216v194k6gbef9k81t2n@4ax.com>
Source record: 148327

On Mon, 18 Feb 2002 12:46:12 -0600, "KA9CAR" <nospam@nospam.usa> wrote:

>Of course there is always a chance that one or the other of these wires is
>resonant on some ham frequency, but I don't lose any sleep over it. What
>would it do, change my already unknown pattern?

That, and introduce additional loss. If the wire really was resonant,
made of steel, and close, losses could be high.

No one makes a tank coil or loading coil out of steel, for good reason.

I'm not saying it would kill your attempt at DXCC, but every old timer
knows that sometimes "just another .1 db" can make all the difference.

<g> <<<<<<< NOTE!!

Bill, W7TI

3440. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 19:50:48 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3C715B18.E074390B@iquest.net>
Source record: 148328

The question was relating to the specific parts used in the B&W T2FD. Here is the basic details for the B&W which is available on the B&W website (when all else fails, read the manual - this case, the website). A Google search produced over a dozen sites that list construction details. I suggest anyone considering fabricating this type of antenna do a little reading. You'll quickly note variations of formula and mechanical methods used.

The overall antenna length is 90 feet, it's spreaders are 18", the terminating load resistance is 600 ohms, it uses a 12:1 balun and depending upon which model, either copper weld or SS wire, 14 or 12 gauge. All of the spreaders (0.5" tubing) and the enclosures for the load and balun are made from PVC pipe.

That should resolve the posters original questions.

As to the comments its a resistor on the end of coax, I suggest you read up on transmission lines and review termination effects on varying wavelengths. A excellent site to get you started in your education is Larry Cebik's, www.cebik.com. L.B. has a couple well written articles on the matter dealing with facts, not bias. A frequency sweep of the T2FD will quickly show that it is like most non resonant antennas in efficiency. That is, reduced efficiency where it is shorter than a half wave at the frequency of interest and a greater efficiency where it is longer than a half wave. No new physics here.

Bests,

Patrick
W9GTA

Irv Finkleman wrote:
>
> MRR wrote:
> >
> > Tom:
> >
> > You could save yourself some money by just taking a piece of coax and attaching a heavy duty 50
> > ohm resister to the end of it, submerging it in oil [commonly called a dummy load] and transmitting
> > on it.
> >
> > This antenna is a really poor performer. If you find a ham claiming they have worked 200+
> > countries with this antenna, make a bid for his QTH because he has to be located on an

island
> > surrounded by water or on top of a salt mine. In other words, any good experience with this antenna
> > is due to the QTH and not the antenna. The terminating resister in this antenna is used to give you
> > the 50 ohm match, just like the dummy load.
> >
> > Good luck.
> >
> > Ron W7MRR
>
> Baloney! You have demonstrated a high degree of ignorance
> of antennas
> with your reply. I doubt if you have ever owned one -- a
> B&W Broadband
> Dipole that is. I had one for quite some time, and used it
> at two different
> locations, and had very good results. I've also had
> inverted vees and beams,
> and although the B&W was down a bit, it provided a number or
> good years of
> fun on the bands.
>
> >
> > > Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> > > is used? What is spreader length? What kind of trap?
> > >
> > > I would like to make one for my own use.
> > >
> > > TNX
> > > Tom
>
> --
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> --------------------
> Visit my website at http://members.home.net/finkirv/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

3441. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 20:04:03 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <g1dxPODAzqq0CiM=2Qk4sE=mPTyU@4ax.com>
Source record: 148329

"Drink" <REMOVE_THISdrink@coqui.net> wrote:

> Thanks for the replies. What the specific differences between a doublet
>and a G5RV kind of confused me. Also, I confused what the ARRL Antenna Book
>quoted in the initial description. Thanks much for the links and words.
>I've a much better basic understanding of the G5RV. Of course, there is one
>last thing that might be trivial or just so simple that it eludes me. I say
>I'm running a 1/2 size G5RV but others describe it as a doublet.

In Varney's later article, he mentions that all of his dimensions can be halved
if you have space constraints, but at 67 feet, you're larger than 1/2 of a
102-ft. g5rv. So it's not really a 1/2 size g5rv. That length, however, is about
right for a 1/2-wave 40-meter dipole.

The g5rv is *one* type of dipole, but not all dipoles are g5rv's. A g5rv is
typically 102 feet long, fed with about 30 feet of twinlead, a choke, and coax;
or, strictly twinlead in an earlier version.

Look in the back-of-book index in your ARRL Antenna Book under "dipoles." The
g5rv is only of of may different kinds of this animal.

Bob
k5qwg

> What
>differentiates a doublet from the open wire fed G5RV (open wire fed dipole)?
>Or is this just a different name for the same animal?
> Cordial 73's,
> Drink, WP3JQ
>"Dick Hughes" <rhughes33@cableone.net> wrote in message
>news:73627ugaa68pvvd223cnapgieo1snhkcud@4ax.com...
>> A better discussion of the G5RV is here.
>> http://www.qsl.net/aa3px/g5rv.htm
>>
>> Dick - W6CCD
>>
>> On Mon, 18 Feb 2002 06:18:15 GMT, n7ws@yahoo.com (Wes Stewart) wrote:
>>
>> >On Sun, 17 Feb 2002 16:32:47 -0400, "Drink" <REMOVE_THISdrink@coqui.net>
>wrote:
>> >
>> >| Hi Diablo,
>> >| I hope we're not confusing antennas. I'm not using coax. Rather, I'm
>> >|using 450 Ohm "window" ladder line fed into the MFJ-949E tuner. I'm
>pretty
>> >|sure it incorporates a balun (somebody correct me if I'm wrong). The

>> >|original G5RV design didn't use coax.
>> >
>> >The "original G5RV" did have a coax option. Likewise it had an
>> >all-open-wire-feed option and it had a
>> >"short-the-transmission-line-conductors-together-and-feed-it-
>> >as-a-top-loaded-vertical-option." You can see the "original" paper at:
>> >http://users.triconet.org/wesandlinda/g5rv.pdf
>> >
>> >About the only thing 'unique' about the "G5RV' is the 102' length.
>> >
>> >| I wouldn't worry much about feedline
>> >|radiation from coaxial cable.
>> >
>> >Why not?
>> >
>> >Wes N7WS
>> >
>> >
>> >[snip]
>>
>
>

3442. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 20:07:16 UTC
From: baney <baneynospam@home.com>
Message-ID: <3C715EE2.AD458662@home.com>
Source record: 148330

You may want to check out this site
http://www.hard-core-dx.com/nordicdx/antenna/wire/index.html
George

Tom Nelson wrote:
>
> Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> is used? What is spreader length? What kind of trap?
>
> I would like to make one for my own use.
>
> TNX
> Tom

3443. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 20:20:33 UTC
From: richardharrison@webtv.net
Message-ID: <13984-3C716211-354@storefull-114.iap.bryant.webtv.net>
Source record: 148332

Uncle Peter wrote:
"I suspect most phone line devices being damaged by lightning is due to transverse voltage spikes."

That is probably right.

NEC requires telephone station grounds to be interconnected with power grounds at the customer`s premises because of shock and fire hazards.

This is also a first cut at lightning imposed equipment damage.

The telephone station protector is usually a pair of carbon or gas tube arc gaps. One for each wire. The common ground connection for these gaps is connected by a #12 or larger copper wire to the power system ground point. The phone ground wire must take the shortest and most direct path and be free of splices.

When voltage on a phone wire rises to a gap breakdown voltage level on that wire, the gap may fire. It is almost certain that both gaps won`t fire simultaneously. A common-mode surge is almost certain to be turned into a differential-mode surge at that point.

The phone set on-hook is disconnected from the line except for the bell circuit. The bell and its series capacitor can "take it".

Off-hook, there is a varistor circuit across the line in the phone instrument to control differential-mode level on the line.

On customer owned and maintained equipment, it is the customer`s responsibility to provide differential-mode protection for his equipment.

Best regards, Richard Harrison, KB5WZI

3444. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 20:43:16 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <uBdc8.154639$h31.11729303@e420r-atl1.usenetserver.com>
Source record: 148331

Hi Roy,
So, simply put, you're saying that current must be equal and phased
180degs to avoid current flowing onto the outer coax shield and causing RFI,
correct? With a tuner giving balanced output to window/ladder line,
currents will be equal on both sides. But, what about phase? Does it
exist/matter on ladder line? In simple terms, how is it measured (using
equipment that the common man can afford)?
Cordial 73's,
Drink, WP3JQ
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C714B0F.70DF022D@eznec.com...
> It's entirely possible for the currents on the two antenna legs or two
> conductors of an attached twinlead transmission to be equal and for
> there to be a common mode current on the outside of a coax line (or
> common mode current on the twinlead). This will always be the case, in
> fact, unless the two antenna or twinlead currents are exactly out of
> phase with each other. I don't know if Varney checked the phases of the
> currents, but if he didn't, he fell into a common trap of assuming that
> equal magnitude currents mean no common mode current.
>
> I ran into this same situation when doing the measurements for "Baluns:
> What They Do and How They Do It" (ARRL Antenna Compendium, Vol. 1). More
> comments about the situation can be found on p. 160 of that publication.
>
> Roy Lewallen, W7EL
>
> Wes Stewart wrote:
> >
> > On Mon, 18 Feb 2002 08:07:04 -0700, Dick Hughes <rhughes33@cableone.net>
wrote:
> >
> > |A better discussion of the G5RV is here.
> > |http://www.qsl.net/aa3px/g5rv.htm
> >
> > I'm familiar with that 'discussion' too. Later maybe but better, I
dunno.
> >
> > Varney says such things as:
>
> > . . .
>
> > Varney continues:
> >
> > "Recent experiments by the author to determine the importance or

otherwise of
> > "unbalance" effects caused by the direct connection of a coaxial feeder
to the
> > base of the matching section had a rather surprising result. They proved
that,
> > in fact, the hf currents measured at the junction of the inner conductor
or
> > (sic) the coaxial cable with one side of the (balanced) matching section
and at
> > the junction of the outer coaxial conductor (the shield) with the other
side of
> > this section are virtually identical on all bands up to 28mhz, where a
slight
> > but inconsequential difference in these currents has been observed.
There is,
> > therefore, no need to provide an unbalanced-to-balanced device at this
junction
> > when using coaxial feeder."
> >
> > Only to say later:
> >
> > "Under certain conditions, either due to the inherent
"unbalanced-to-balanced"
> > effect caused by the direct connection of a coaxial feeder to the base
of the
> > (balanced) matching section, or to pick-up of energy radiated by the
antenna, a
> > current may flow on the outside of the coaxial outer conductor. This
effect may
> > be considerably reduced, or eliminated, by winding the coaxial cable
feeder into
> > a coil of 8 to 10 turns about 6in in diameter immediately below the
point of
> > connection of the coaxial cable to the base of the matching section. the
turns
> > may be taped together or secured by nylon cord."
> >
> > So I guess it is a 'discussion,' with Varney arguing with himself <g>.
> >
> > Wes Stewart N7WS

3445. Re: eQSL's NOW ACCEPTED by ARRL for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 21:14:26 UTC
From: Walt Davidson <walt99@tiscali.co.uk>
Message-ID: <smq27u8q6vn61bk06v7j5t2i5d6ppl8bl4@4ax.com>
Source record: 148333
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.policy

On Sun, 17 Feb 2002 20:29:51 -0700, cdn <dnorris@k7no.com> wrote:

>however to trivialize their deaths is rather poor taste.

I didn't know them, so to be honest they are trivial to me.

To quote KI8AB,
"That a few DXers have died on an expedition does not make DXpeditions
more noble, nor does it make them more deserving of cash. It's simply
an unfortunate occurence, like an ice fisherman who falls through the
ice or a skier who hits a tree."

73 de G3NYY

--
Walt Davidson Email: g3nyy @freeuk.com

3446. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 21:21:54 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202181321.6ddd9526@posting.google.com>
Source record: 148334

richardharrison@webtv.net (Richard Harrison) wrote in message news:<23902-3
>
> Only resonant circuits collect and re-radiate substantial r-f. Break up
> conductors frequently enough with ground connections and the pieces all
> resonate at too high a frequency to cause problems.
>
> Try the RFI grounding with clip-leads, and you don`t invest too much
> work in RFI elimination.
>
> Best regards, Richard Harrison, KB5WZI

I've never had too many problems with rfi from the car itself. I think the most noise I've had on HF mobile was due to tire static at high speeds. I've heard of some "dust" that can help on that, but I've never tried it. Also some say to ground your wheel bearings with a spring inside the cap. MK

3447. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 21:35:14 UTC
From: Alan White <alannc44@ix.netcom.com>
Message-ID: <msec8.8316$nr.6293505@typhoon.southeast.rr.com>
Source record: 148337

This guy says he runs the coax straight into the loop:
http://www.qsl.net/wa4hwn-scars/skyloop.html

Alan
WN4HOG
--
Windsurfing Club: http://www.ibscc.org
Homepage: http://pw1.netcom.com/~alannc44/qsl.htm

"Harry Williams" <harry.w.williams@syntegra.com> wrote in message
news:3C715A40.3A6C6814@syntegra.com...
> I have a 160M horizonital loop that is fed in a corner with 450 ohm ladder
line. I now
> have an amp and would like to use if with the loop but the tuner is rated
at only 300W.
> Is there a way to broadband the feed to the loop so I could run RG8 or
whatever out
> of the shack and then couple it to the 450 ohm line thru a balum that
would give me
> an swr under say 3 to 1 over a wide frequency range? I would like to
eliminate the tuner
> all together and have a feed system that would handle a KW.
>
> Thanks,
> Harry - W0PIY
>

3448. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 21:44:34 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202181344.3a558c3@posting.google.com>
Source record: 148335

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:<Ze8b8.30264$Hv5.3461016@news20.bellglobal.com>...
> "Bill Nelson" asked the impossible:
> > > Some of the damage in the house was more associated
> > > with direct pickup (on long wires runs INSIDE the house)
> > > than with anything entering through the service entrances.
> >
> > How do you know it was picked up by the wires and did not
> > enter through the electrical service?
>
> Well, obviously I don't "know" (for sure)... ...but 'the evidence suggests'
> that it was coupled directly. One household wire (only one) got burnt and
> ended up being shorted at the outlet box. This one wire was the longest
> such wire run in the house. There was no other damage associated with the
> household wiring. The lightning hit a tree near the lake, no where near the
> power wires.
>
> I don't believe that lightning damage is necessarily confined to path taken
> by a single bolt. The lightning bolt is one side of a transformer. The
> secondary windings are everywhere else in the neighbourhood. My coworkers
> was watching lightning hit the lake in front of his house and he got a spark
> on his foot from the metal heating duct when a huge bolt hit the lake a bit
> closer to his house.

Most strikes have multiple down leaders though. You might have a
strike go to ground at many places with smaller branch strikes. I've
noticed many times with fairly nearby strikes that I can hear my
antenna connectors arc from the energy that the antennas pick up.
>
> It shouldn't be a controversial suggestion that EM can travel through walls
> made of wood and drywall and then be coupled into long conductors. After
> all, most radios that are damaged by lightning are not in the main path (and
> vaporized). Their antenna or lead-in cable just picks up sufficient EM to
> pop a few circuit elements.

Sure, it can happen, but I think a direct surge is more likely. You
can protect against these surges a good bit if you run a grounded ring
of thick wire around the house. But on the other hand, I have none of
this here, and have had strikes on my mast which is against the house,
about 5 ft from the breaker boxes, power,telco,cable tv, lead ins,
etc, and I haven't had this problem here.
I was totally unhooked from the outside world though in the shack.
Being I had no damage from a strike 15 ft from where I'm sitting, I
don't think surges from just being close do too much. I think other
things can cause more problems, such as having different ground

potentials.
>
> My point was that you might need to put suppressors elsewhere than ONLY at
> the service entrances. Unless your house is a Faraday Cage (aluminum siding
> perhaps). If you have long wires being run around inside your house, they
> will pick up energy just like an antenna. You would need to put some
> suppressor at each end of any such long wires.
>
> There is too much focus being put on protecting 'The Entrance'. Commercial
> building are often made of steel (Faraday Cage). Houses are usually not
> made of steel and are therefore transparent to directly coupled EM on
> internal wiring.
>
> That's the difference that seems to me to be often overlooked in such
> discussions.
>
> Translating the approach that works in the commercial world to the household
> world, I have never seen this obvious difference explicitly mentioned.

Oh, I have quite a few times. IE: using the wire ring around the
house. But being I've had strikes up against the house, with no
apparent problems to nearby wiring that was 10-15 ft away, I don't
worry about it too much. I'm one to say, if it ain't broke, don't fix
it..:) I do know a few that use the wire rings around the shacks. MK

3449. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 22:00:50 UTC
From: Joe O <jenjoeo@zianet.com>
Message-ID: <3c717a9c.0@oracle.zianet.com>
Source record: 148336

Harry, as in life, with RF there is no free lunch. Invest in a high Power ATU and use the lowest loss coax and open line you can afford. My 480 ft horizontal loop and ATR-30 give me a very frequency agile system. I typically run 500 watts and have enjoyed 160-10 meters with a single antenna.

Joe- KI5FJ

"Harry Williams" <harry.w.williams@syntegra.com> wrote in message news:3C715A40.3A6C6814@syntegra.com...
> I have a 160M horizonital loop that is fed in a corner with 450 ohm ladder line. I now
> have an amp and would like to use if with the loop but the tuner is rated at only 300W.
> Is there a way to broadband the feed to the loop so I could run RG8 or whatever out
> of the shack and then couple it to the 450 ohm line thru a balum that would give me
> an swr under say 3 to 1 over a wide frequency range? I would like to eliminate the tuner
> all together and have a feed system that would handle a KW.
>
> Thanks,
> Harry - W0PIY
>

3450. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 22:12:54 UTC
From: captbrian <captbrian@ukonline.co.uk>
Message-ID: <73mc8.1833$9h2.755795@monolith.news.easynet.net>
Source record: 148269

What you describe is not a G5RV. [Louis would turn in his grave }
you are describing a 67' doublet or dipole.
The impedance at the feed point will depend on rthe length of the
ladder-line.
50' would work well but ....
a far better bet is for you to reduce the top span to 51' and run 34' of
ladder-line .
The line should not radiate.
Bryan

Drink <REMOVE_THISdrink@coqui.net> wrote in message
news:BbSb8.145439$h31.11316363@e420r-atl1.usenetserver.com...
> Hi Folks,
> I'm putting up a G5RV inverted V for 40m - 10m and want to avoid TVI for
> the neighbors. The installation will be as follows:
> 67' inverted V dipole with the apex at 30'. Feedline is 450 Ohm "window"
> ladder line down through an aluminum framed window into a MFJ 949E tuner
> into my IC-730 and RigBlaster Plus/desktop PC.
> Understanding that the dipole and feedline will radiate, what are
optimum
> feedline & dipole lengths to avoid TVI to the surrounding neighborhood?
> Also, how great an impact will the ladderline to aluminum window frame
have?
> Any considerations that I haven't mentioned?
> I know this is a simple system but appreciate advice and practical
> experience tips before I put it up and draw negative attention from the
> neighbors.
> 73's,
> Drink, WP3JQ
>
>
>

3451. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 22:38:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C71826B.B05D8328@IEEE.org>
Source record: 148338

Mark Keith wrote:
> I've never had too many problems with rfi from the car itself. I think
> the most noise I've had on HF mobile was due to tire static at high
> speeds. I've heard of some "dust" that can help on that, but I've
> never tried it. Also some say to ground your wheel bearings with a
> spring inside the cap. MK

Is that the noise I hear when going over bumps - from the tires? I'm
hoping that the Clear Speech speaker system will filter it out.
--
cheers, CAM http://www.qsl.net/w5dxp

3452. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 22:44:04 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3C7183B4.B0C3DE8C@iquest.net>
Source record: 148339

Yes he says coax with a TUNER. Harry was wanting to avoid a new, full
power tuner. the answer to Harry's question of direct feeding without a
tuner is NO. Physics hasn't changed.

Alan White wrote:
>
> This guy says he runs the coax straight into the loop:
> http://www.qsl.net/wa4hwn-scars/skyloop.html
>
> Alan
> WN4HOG
> --
> Windsurfing Club: http://www.ibscc.org
> Homepage: http://pw1.netcom.com/~alannc44/qsl.htm
>
> "Harry Williams" <harry.w.williams@syntegra.com> wrote in message
> news:3C715A40.3A6C6814@syntegra.com...
> > I have a 160M horizonital loop that is fed in a corner with 450 ohm ladder
> line. I now
> > have an amp and would like to use if with the loop but the tuner is rated
> at only 300W.
> > Is there a way to broadband the feed to the loop so I could run RG8 or
> whatever out
> > of the shack and then couple it to the 450 ohm line thru a balum that
> would give me
> > an swr under say 3 to 1 over a wide frequency range? I would like to
> eliminate the tuner
> > all together and have a feed system that would handle a KW.
> >
> > Thanks,
> > Harry - W0PIY
> >

3453. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 22:44:21 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7183C5.5CE0F12@IEEE.org>
Source record: 148340

Drink wrote:
>
> Hi Roy,
> So, simply put, you're saying that current must be equal and phased
> 180degs to avoid current flowing onto the outer coax shield and causing RFI,
> correct? With a tuner giving balanced output to window/ladder line,
> currents will be equal on both sides. But, what about phase? Does it
> exist/matter on ladder line? In simple terms, how is it measured (using
> equipment that the common man can afford)?

It's fairly easily done with a 100MHz dual trace scope and pickup toroids.
Short an o'scope, one can calibrate the pickup toroids, wire them in
opposition, and rectify the vector sum to get an idea of the unbalance.
--
cheers, CAM http://www.qsl.net/w5dxp

3454. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 22:47:02 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C718466.566B2786@IEEE.org>
Source record: 148341

Harry Williams wrote:
>
> I have a 160M horizonital loop that is fed in a corner with 450 ohm ladder line. I now
> have an amp and would like to use if with the loop but the tuner is rated at only 300W.
> Is there a way to broadband the feed to the loop so I could run RG8 or whatever out
> of the shack and then couple it to the 450 ohm line thru a balum that would give me
> an swr under say 3 to 1 over a wide frequency range? I would like to eliminate the tuner
> all together and have a feed system that would handle a KW.

Check out my All-HF-band dipole on my web page to obtain the theory behind what
you want to do. I bought an amp and didn't want to have to buy a high power
antenna tuner. In general, locate the current maximum point on your ladder-
line and feed it at that point. With any luck, you won't need a tuner.
--
cheers, CAM http://www.qsl.net/w5dxp

3455. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 22:55:58 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C71867E.E734D4D1@IEEE.org>
Source record: 148342

Patrick Croft wrote:
> Yes he says coax with a TUNER. Harry was wanting to avoid a new, full
> power tuner. the answer to Harry's question of direct feeding without a
> tuner is NO. Physics hasn't changed.

Physics hasn't changed but maybe you don't know everything. Check out
my All-HF-Band-No-Tuner-Dipole on my web page to see if you think I
violate any laws of physics. If one is using 450 ohm ladder-line and
the 450 ohm SWR is between 4.5:1 and 18:1, the 50 ohm SWR when fed at
a current maximum point will be equal to or less than 2:1, i.e. a
near-perfect match.
--
cheers, CAM http://www.qsl.net/w5dxp

3456. Re: cord for dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-18 23:43:10 UTC
From: K7SAM <2smoore@nemontel.net>
Message-ID: <2igc8.154841$h31.11785015@e420r-atl1.usenetserver.com>
Source record: 148343

Try "550" Cord. The stuff is stranded nylon inside a sheath. It is what the lines on parachutes are made from. You can usually find it on sale in places like the Outdoor Sportsman cat.
Have used the stuff years. It will eventually chafe, most anything will. But it is designed not to fray from chaffing, not good on a parachute.
Comes in camo, white and black, just in case the YL has a preference.

K7SAM

3457. Re: cord for dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 00:49:50 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <Oihc8.87430$Pz4.368159@rwcrnsc53>
Source record: 148344

Only used on cargo 'chutes now. Been largely replaced by Dacron.
"K7SAM" <2smoore@nemontel.net> wrote in message
news:2igc8.154841$h31.11785015@e420r-atl1.usenetserver.com...
> It is what the
> lines on parachutes are made from. >

3458. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 01:00:33 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <lj837uc33cackel092hsjsh0mv8tn6tbvv@4ax.com>
Source record: 148345

On 18 Feb 2002 13:21:54 -0800, nm5k@wt.net (Mark Keith) wrote:

>I think
>the most noise I've had on HF mobile was due to tire static at high
>speeds. I've heard of some "dust" that can help on that, but I've
>never tried it. Also some say to ground your wheel bearings with a
>spring inside the cap.

FWIW, my '97 Escort wagon had what must have been plastic bearings on the front wheels. Absolutely zero connection measured between the wheel and body, even when rotating the wheel. I contacted the local Ford dealer and they spent a fair amount of time researching the problem, but never found a solution. The wheel static was horrendous.

I finally sold it, but before buying the next car (Dodge Spirit) I measured the wheel-body resistance. Being essentially zero, I took it and have no wheel static at all. Did get some odd looks from the dealer, though.

Bill, W7TI

3459. Re: Line of sight topographic mapping software

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 01:27:30 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3C71AA02.848FA103@ipeg.com>
Source record: 148346
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,alt.ham-radio.fm,alt.radio.amateur

Pete wrote:
>
> I'm hoping to find some topographic mapping software that will display
> all areas that are within line of sight of a given point. The principal
> idea is to use it with VHF and UHF radios to chart out signal
> propagation via line of sight to all areas around a given point.

Try Radio Mobile, a free program from VE2DBE. A quick web search will
give you the URL.

Marty...
N7MX

3460. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 01:33:03 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <bQhc8.154948$h31.11813896@e420r-atl1.usenetserver.com>
Source record: 148347

"Short an o'scope, one can calibrate the pickup toroids, wire them in
opposition, and rectify the vector sum to get an idea of the unbalance."
Oh..... Right. Okay. Yeah, I remember that now....:) Seriously, I
figured the answer would be just a tiny bit over my head but I had to ask
and do appreciate the reply. I'll have to learn how to use an oscilloscope
some day. A good friend of mine's an electronic warfare technician and
would probably be overjoyed to show me some hands-on basics. It can't be
that difficult. One thing amateur radio's shown me is that *nothing's* that
difficult. Well, maybe rectification of a vector sum but I'm gonna start
taking math courses at a local university as personal challenge :)
Thanks Cecil,
Drink, WP3JQ

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C7183C5.5CE0F12@IEEE.org...
> Drink wrote:
> >
> > Hi Roy,
> > So, simply put, you're saying that current must be equal and phased
> > 180degs to avoid current flowing onto the outer coax shield and causing
RFI,
> > correct? With a tuner giving balanced output to window/ladder line,
> > currents will be equal on both sides. But, what about phase? Does it
> > exist/matter on ladder line? In simple terms, how is it measured (using
> > equipment that the common man can afford)?
>
> It's fairly easily done with a 100MHz dual trace scope and pickup toroids.
> Short an o'scope, one can calibrate the pickup toroids, wire them in
> opposition, and rectify the vector sum to get an idea of the unbalance.
> --
> cheers, CAM http://www.qsl.net/w5dxp

3461. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 01:58:49 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0202181758.2583314c@posting.google.com>
Source record: 148348

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:<hl0c8.4075$Lc2.525376@news20.bellglobal.com>...
> ***WARNING***
>
> You may be experiencing the differing meanings of near/far field as
> understood by the US and the UK (simplified demarcation). As a Canadian
> (stuck in the middle), I get to see both sides :-).
>
> I was introduced to the UK version of "far field" by a very nice lady in
> Great Malvern, UK that writes some very nice GTD/UTD software. The UK
> version of "far field" is MUCH farther out than the US version. It is
> something like where the distance is sufficiently far away that the relative
> phases of the contributing portions of the overall signal are no longer a
> function of angle (something like that...).
>
> Perhaps we need to subscript the phase "Far Field" with (US) or (UK)...
>
> I believe that I had detected a third meaning at some point in my career,
> but I can't recall it right now.

Hi J.,
The far-field is *usually* defined to occur at distance 2D^2/lambda.
It has something to do with the wave differing from a plane wave by
pi/8 or something like that. Very close to the antenna is sometimes
called the near-field and sometimes called the reactive near-field.
The intermediate distance is sometimes called the near-field and
sometimes called the radiating near-field. Usually which region is
being referred to can be determined from the context or a quoted
distance, but not in this thread. When Ian sez near-field, I'm 99 and
44/100% sure he's talking about the radiating near-field. When Richard
H. sez near-field, he's talking about the reactive near-field.

I hadn't noticed that the UK and US have differing meanings for the
far field. If you've seen the UK use a distance other than 2D^2/lambda
for the far-field, please post it. That could explain a lot of the
confusion here. 73,
Bill N3WK

3462. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 02:02:43 UTC
From: richardharrison@webtv.net
Message-ID: <9996-3C71B243-364@storefull-112.iap.bryant.webtv.net>
Source record: 148351

John, KU6X wrote:
"This would imply that large area noise sources closest to the ground
are the most significant."

Wonder if anyone has tried adding powdered graphite to the wheel bearing
grease?. It sure wont hurt the lubrication, but it would make it look
nasty.

Best regards, Richard Harrison, KB5WZI

3463. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 02:07:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C71B37F.ABC80330@eznec.com>
Source record: 148349

Yes, you could do it with two ferrite toroids and either look at both on a two-channel scope or wire the toroid outputs in series with a phase reversal. That way, what you'd see is the vector sum of the two currents. But you can also just put both conductors of a twinlead feedline or the whole cable of a coax feedline through a single core. Then you're directly measuring the common mode current. If you put a 10 turn secondary on the toroid and put 50 ohms across the secondary, the current on a wire (or total common mode current for both wires) going through the core, in amperes, is 1/5 the voltage you measure across the 50 ohm resistor, in volts.

Roy Lewallen, W7EL

Drink wrote:
>
> "Short an o'scope, one can calibrate the pickup toroids, wire them in
> opposition, and rectify the vector sum to get an idea of the unbalance."
> Oh..... Right. Okay. Yeah, I remember that now....:) Seriously, I
> figured the answer would be just a tiny bit over my head but I had to ask
> and do appreciate the reply. I'll have to learn how to use an oscilloscope
> some day. A good friend of mine's an electronic warfare technician and
> would probably be overjoyed to show me some hands-on basics. It can't be
> that difficult. One thing amateur radio's shown me is that *nothing's* that
> difficult. Well, maybe rectification of a vector sum but I'm gonna start
> taking math courses at a local university as personal challenge :)
> Thanks Cecil,
> Drink, WP3JQ
>
> "CAM" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3C7183C5.5CE0F12@IEEE.org...
> > Drink wrote:
> > >
> > > Hi Roy,
> > > So, simply put, you're saying that current must be equal and phased
> > > 180degs to avoid current flowing onto the outer coax shield and causing
> RFI,
> > > correct? With a tuner giving balanced output to window/ladder line,
> > > currents will be equal on both sides. But, what about phase? Does it
> > > exist/matter on ladder line? In simple terms, how is it measured (using
> > > equipment that the common man can afford)?
> >
> > It's fairly easily done with a 100MHz dual trace scope and pickup toroids.
> > Short an o'scope, one can calibrate the pickup toroids, wire them in
> > opposition, and rectify the vector sum to get an idea of the unbalance.
> > --

> > cheers, CAM http://www.qsl.net/w5dxp

3464. Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 02:08:23 UTC
From: Bryan Byers <bcbyers@netusa1.net>
Message-ID: <3C71B396.FD3E57E@netusa1.net>
Source record: 148350

I have been thinking of antenna wind survival and I have been wondering
what the best thing is to ensure the the survival of ground mounted
vertical antennas? I noticed that most antenna brands list a wind
survival rating of 80 mph
and I wonder why they pick that number?

Thanks, KA9KHD

3465. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 02:30:56 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C71B8E0.3871BA0C@IEEE.org>
Source record: 148352

Drink wrote:
>
> "Short an o'scope, one can calibrate the pickup toroids, wire them in
> opposition, and rectify the vector sum to get an idea of the unbalance."
> Oh..... Right. Okay. Yeah, I remember that now....:) Seriously, I
> figured the answer would be just a tiny bit over my head but I had to ask
> and do appreciate the reply. I'll have to learn how to use an oscilloscope
> some day. A good friend of mine's an electronic warfare technician and
> would probably be overjoyed to show me some hands-on basics. It can't be
> that difficult. One thing amateur radio's shown me is that *nothing's* that
> difficult. Well, maybe rectification of a vector sum but I'm gonna start
> taking math courses at a local university as personal challenge :)

Sorry, a EE degree and 40 years engineering experience does funny things to
an otherwise normal person. :-) Run the ladder-line through two toroids, each
with maybe a ten turn secondary. These act like transformers and yield a
voltage proportional to the current in each leg of the ladder-line. Calibrating
them means getting the same voltage out of each one for the same current
through them. Once they are calibrated, the two voltages can be wired in
opposition such that if no common-mode current exists, the output is zero
volts. Any voltage output is proportional to the common-mode current. I'll
try to put something with more detail on my web page.
--
cheers, CAM http://www.qsl.net/w5dxp

3466. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 02:37:48 UTC
From: richardharrison@webtv.net
Message-ID: <710-3C71BA7C-1@storefull-113.iap.bryant.webtv.net>
Source record: 148353

Mark Keith wrote:
"Also some say to ground your wheel bearings with a spring inside the cap."

Alfred A. Ghirardi shows that method in "Modern Radio Servicing", Murry Hill Books, 1935. on page 970.

Best regards, Richard Harrison, KB5WZI

3467. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 02:51:11 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c71c22b_1@news1.prserv.net>
Source record: 148354

Bryan:

It is an industry standard rating. Obtain a copy of the latest revision of
EIA Standard RS-222, "Structural Standards for Steel Antenna Towers and
Antenna Supporting Structures" for background and test information for
outdoor antenna structures. You will find a map of expected wind velocities
in the US, and the statistics used to develop a consensus survival standard.

--
Crazy George
Remove NO and SPAM from return address
Bryan Byers <bcbyers@netusa1.net> wrote in message
news:3C71B396.FD3E57E@netusa1.net...
> I have been thinking of antenna wind survival and I have been wondering
> what the best thing is to ensure the the survival of ground mounted
> vertical antennas? I noticed that most antenna brands list a wind
> survival rating of 80 mph
> and I wonder why they pick that number?
>
> Thanks, KA9KHD
>

3468. "Far Field (UK)" - Was: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 02:56:53 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <V9jc8.42878$JZ.4610918@news20.bellglobal.com>
Source record: 148355

"Bill Klocko"
> If you've seen the UK use a distance other than 2D^2/lambda
> for the far-field, please post it. That could explain a lot of the
> confusion here. 73, Bill N3WK

The "UK" definition of "Far Field" that I met in Great Malvern, UK was something like the following:

When ray tracing from a structure (like an airplane) that is illuminated by RF (like from a low directivity antenna installed on that same airplane), the "far field" is where you are sufficiently far away that you don't have to keep track of the exact distance from the structure (airplane) to the viewer (plot surface). In other words, once the "rays" leave the structure and are heading towards infinity, then the algorithm simply adds them up immediately without concern for the intervening distance (between the structure and infinity - obviously !). Once you are sufficiently far away (in the "Far Field(UK)"), this is a reasonable mathematical approach. The distances are extreme.

On the other hand, if you ask the program to calculate the "near field", then the software will ask you for the exact (!) distance of the plot surface from the origin. The antenna gain pattern at some angles may be sensitively dependent upon the exact distance. It may also be dependent upon where in (or near) the structure (airplane) the origin just happens to be. If you want the plot at 30 meters distance, then the program will take that as exactly 30 meters and will keep track of the phases of the contributing rays and add them up (accounting for exact phase of each) on the surface of a sphere exactly 30.00000 m from the origin. Basically, you only ask for the near field plot if you are trying to reproduce (explain) actual measurements that are always made in the "Near Field (UK)". Such attempts are difficult (impossible) due to the sensitive dependencies mentioned above.

These UK are not my definitions - I'm not going to defend them. Perhaps there should be some new words made up to describe these "Far Field (UK)" / "Near Field (UK)".

How about "Flugerbooten" and "Nergerbooten" ?

3469. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 03:06:54 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <jjjc8.42881$JZ.4618021@news20.bellglobal.com>
Source record: 148356

"Bryan Byers"
> I noticed that most antenna brands list a wind
> survival rating of 80 mph and I wonder why
> they pick that number?

Most of the antennas that I have been looking at recently are rated for wind speeds fairly close to Mach 1. Airplanes you see... :-)

3470. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 03:07:41 UTC
From: pooles@ozemail.com.au
Message-ID: <3c71c17b.6914646@news.bigpond.com>
Source record: 148357

At various different times lots of people wrote heaps of stuff about radition hazards and ERP.

>> lotsa snippages

I'm a technician so, unlike engineers and other smart folks, I can only operate in the real world. So let's try a real world pretend (Keh?)

I have a transmitter putting out 10 watts being fed into a parabolic (dish) antenna of diameter, say, 1 metre. 1 kilometre away I have a reciever with an antenna of some kind and a meter indicating received signal level ('S' meter).

I also am fitted with an 'S' meter, it's glued to my forehead, and indicates the amount of power being absorbed by my body when I am illuminated by an electromagnetic field.

I now stand directly in front of the TX antenna. The 10 watts is distributed across the area in front of the antenna, my body is occupying some portion of this area, my 'S' meter indicates some level of power being absorbed by my body. This amount of power is proportionate to the ratio of my body area to the dish area ie some of the power is 'getting me' and some is 'getting past me'.

Now I replace the dish with one 5 metres in diameter. I know that I can't create or destroy power, I'm not putting in any more power anywhere, so there's just the same 10 watts but now distributed across a larger area. My body area is now less of a portion of the area of the dish so I find my 'S' meter reading is lower. Makes sense, more of the power is 'getting past me' so less is 'getting me'.

But at the same time I know that the 'S' meter on the remote receiver will read higher with the bigger dish. The bigger dish has a greater degree of gain over that of an isotropic antenna. The ERP is higher.

I start walking away from the dish and towards the receiver, and find a point after which my 'S' meter behaves like the other one. Hmm... so we have two regions, in which things happen different, like.

I GOT IT!! Of course, ERP stands for EFFECTIVE Radiated Power and the EFFECT is only true for the far field situation.

Giddy with the concept of actually thinking, I remove my 'S' meter - OUCH - I now take no further interest in the discussion. Even techies feel some pain. It's proportionate to the vector sum of the square of the remaining engineers...

Steve (Cess) Poole
DownUnder, LHS

PS: Personally the only issue I'd give a rats about if a mobile phone base station was installed 100 metres from my home would be the aesthetics.
But there's no way I'll ever use my mobile for more than 1 or 2 brief calls a day. I don't think the heating effect is the be-all and end-all of the story. I expect the mobile phone health issue will one day emulate the tobacco issue of today.

3471. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 03:42:16 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <rQjc8.42899$JZ.4643788@news20.bellglobal.com>
Source record: 148358

Everyone is beating up on Ian White, G3SEK.

A SIMPLE THOUGHT EXPERIMENT (read carefully if required):

All else being equal, if you peer into the edge of a huge (very high gain) dish, you are further away from the feed horn than you would be if you were to peer into the edge of a much smaller (very low gain) dish. Get it folks ? Bigger dish - less exposure. Okay ?

Although I don't speak for Ian, I believe that this was his 'Main Point'.

Yes, Ian's comment was slightly off the drift of the thread (at the time), but it is a counter intuitive idea isn't it. Counter intuitive concepts are precious and should be treated with a little bit more respect.

Yes, we all know that this only applies in the area adjacent to the dish (the "Nearby Field" ?). It is perhaps NOT a coincidence that this is the exact area where concerns about RF exposure might be most reasonable (in some cases). Maybe Ian is onto something here, eh ?

All this 'blah blah blah' with counter examples regarding elementary antenna gain are missing the 'Main Point'. And that, according to Martha Stewart, is a Bad Thing.

Logically yours,

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

3472. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 03:52:40 UTC
From: Gilbert Baron <gbaron@charter.net>
Message-ID: <jvi37uketgme5bad0d2sudts3erihpvou2@4ax.com>
Source record: 148359

On 18 Feb 2002 11:40:16 GMT, fractenna@aol.com (Fractenna) wrote:

>>Welcome to the horrible world of Cushcraft. They are the worst at
>>customer support in the entire Amateur Radio world. They even ignore
>>requests for help on my R7000 which IS still produced.
>>
>>DO NOT BUY CUSHCRAFT, they are going to cheat you.
>>
>
>
> They cheated no one. The fact is that you got a great value and no one was
>cheated.
>
>This issue of spare parts has come up again and again. The answers have been
>reasonable and consistent from the manufacturer.

There are many other verticals (Hy Gain for instance) available that
are just as good as and probably better than Cushcraft garbage. I
have NEVER had good luck WITH either of my Cushcraft. They did not
meet specs at all.

THE REAL SAD THING IS BEING TOTALLY IGNORED BY CUSHCRAFT WHEN I TRIED
TO GET PARTS HELP FOR THE R7000.
THAT IS CURRENT AND THERE IS no EXCUSE FOR THAT none.

three EMAILS AND NO REPLY OF ANY KIND WHATSOEVER, AND ever ANSWERED
THE TELEPHONE EITHER.

>
>Ask yourself the following question: if we hams DON'T buy Cushcraft, then what,
>exactly is your quality, cost-effective alternative?
>
>The fact that so many Cushcraft antennas STILL EXIST, in PERFECT WORKING
>CONDITION has created more than a viable inventory of used spare parts; going
>the flea market or used alternative is not only a good idea, but is a great
>value.
>
>Frankly, I am surprised that someone hasn't set up their own 'e-bay' on ham
>antenna parts. There's a small but viable market there fellows.
>
>I have an A4 waiting to go up that's outlasted three owners; 3 radios, and 3
>QTH's. How many OTHER parts of a ham station can you say that about?
>
>
>73,
>Chip N1IR

Gil Baron http://webpages.charter.net/gbaron
44:04.925 N 92:30.758 W 1055'
"Hierro candente, batir de repente"

3473. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 04:15:15 UTC
From: richardharrison@webtv.net
Message-ID: <25627-3C71D153-380@storefull-111.iap.bryant.webtv.net>
Source record: 148360

Bill Klocko wrote:
"The far-field is "ususally" defined to occur at distance 2D^2/lambda."

That`s a huge number for big dishes and small wavelengths. Death ray research may be more promising than we guessed.

I recall from looking at noise response of shielded loop antennas that one of the induction fields declines as the fifth power of the distance from the source as compared with the radiation field which declines with the second power of the distance from the source.

Suppose you were 100 wavelengths away from an antenna and you move to 200 wavelengths from the antenna. You`ve doubled your distance away. What happens to the watts per square meter?

When you double the distance away, the power per unit area in the wave is reduced by a factor of 4. That`s from double the distance squared, for the radiation field.

But the reactive volt(amps) in at least one of the inductive fields are reduced by a factor of 32. That`s the value of 2 to the fifth power (32). That is a lot of shrinkage in near-field energy and such a rapid reduction of reactive energy is consistent with FCC policy of considering the far-field to be sufficiently dominant at a distance of only 3 wavelengths for measurements in the broadcast band.

I don`t believe dish antennas are supernatural. Being powerful natural performers is good enough.

Best regards, Richard Harrison, KB5WZI

3474. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 04:51:01 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4sljlbmc4@quark.scn.rain.com>
Source record: 148361

Mark Keith <nm5k@wt.net> wrote:

> Most strikes have multiple down leaders though. You might have a
> strike go to ground at many places with smaller branch strikes. I've
> noticed many times with fairly nearby strikes that I can hear my
> antenna connectors arc from the energy that the antennas pick up.

That may not be from energy that the antennas pick up from the strike.
It most probably is due to the high potential from the earth under the
charged cloud.

A common experience of this is when your hair stands on end when there
are lightning clouds in the vicinity. The charge is from the ground not
from the clouds.

> Sure, it can happen, but I think a direct surge is more likely. You
> can protect against these surges a good bit if you run a grounded ring
> of thick wire around the house. But on the other hand, I have none of
> this here, and have had strikes on my mast which is against the house,
> about 5 ft from the breaker boxes, power,telco,cable tv, lead ins,
> etc, and I haven't had this problem here.

Exactly.

--
Bill Nelson (billn@peak.org)

3475. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 05:03:00 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4sma4bmc5@quark.scn.rain.com>
Source record: 148362

CAM <Cecil.A.Moore@ieee.org> wrote:
> -Your Friend Bill- wrote:
>> In cable tv work we use return loss exclusively for measuring match.
>> Its a very convenient unit for calculating reflections which will
>> ultimately show up as ghosting in analog pictures or raise all sorts of
>> havoc on digital signals.

> You mean, you mean, the reflections are really there? :-)

If not, how does a TDR work?

--
Bill Nelson (billn@peak.org)

3476. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 05:03:14 UTC
From: richardharrison@webtv.net
Message-ID: <25627-3C71DC92-382@storefull-111.iap.bryant.webtv.net>
Source record: 148365

J. Harvey wrote:
"Bigger dish - less exposure. Okay?"

J Harvey and the Aussie are exactly right. When you are positioned directly in front of the dish, the same power is spread more thinly on the area of the larger dish. I am grateful to Ian for pointing this out.

Another point is that in a periscope antenna system, the larger dish has lost its dis-advantage over the smaller dish in a distance less the the dish-reflector spacing at the tower. And, the tower doesn`t have to be unusually high. By the time radiation from the large dish reaches the reflector its energy makes a tighter spot than the energy from the small dish. All the gain that a dish will produce is realized at the reflector. The big dish produces the higher power density.

The point that seems ignored is that the dish is located atop a tower or tall building or some such structure where its distance to anybody who might be overexposed is enough to place them out of harm`s way. That is the argument I prevailed using with two Ohio senators, one Ohio congressman, and the FCC.

I can`t guarantee the same argument would work again because most people are dead set on believing what they want to believe regardless of the facts.

Best regards, Richard Harrison, KB5WZI

3477. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 05:05:35 UTC
From: ab528@FreeNet.Carleton.CA
Message-ID: <a4smev$sb7$1@freenet9.carleton.ca>
Source record: 148363

"J. Harvey" (JM001.Harvey@sympatico.ca) writes:
> "Bryan Byers"
>> I noticed that most antenna brands list a wind
>> survival rating of 80 mph and I wonder why
>> they pick that number?
>
> Most of the antennas that I have been looking at recently are rated for wind
> speeds fairly close to Mach 1. Airplanes you see... :-)

And do they factor in bird strikes?

3478. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 05:11:57 UTC
From: SideBand <abNO8SPAMlr@csotbs.org>
Message-ID: <3C71DE9D.4020105@csotbs.org>
Source record: 148364

If you took this attitude with them in your messages, I'm not surprised
they didn't answer.

-SSB

Gilbert Baron wrote:

> There are many other verticals (Hy Gain for instance) available that
> are just as good as and probably better than Cushcraft garbage. I
> have NEVER had good luck WITH either of my Cushcraft. They did not
> meet specs at all.
>
> THE REAL SAD THING IS BEING TOTALLY IGNORED BY CUSHCRAFT WHEN I TRIED
> TO GET PARTS HELP FOR THE R7000.
> THAT IS CURRENT AND THERE IS no EXCUSE FOR THAT none.
>
> three EMAILS AND NO REPLY OF ANY KIND WHATSOEVER, AND ever ANSWERED
> THE TELEPHONE EITHER.
>
>
>
> Gil Baron http://webpages.charter.net/gbaron
> 44:04.925 N 92:30.758 W 1055'
> "Hierro candente, batir de repente"
>

--
73 de AB8LR, Chris

http://csotbs.shopiwon.com/ for great deals on computer products.

3479. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 05:24:07 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Xjlc8.5730$lS1.1341772@news20.bellglobal.com>
Source record: 148366

I wrote:
> Most of the antennas that I have been looking at
> recently are rated for wind speeds fairly close to
> Mach 1. Airplanes you see... :-)

"Heinz W. Wiggeshoff" asked:
> And do they factor in bird strikes?

Much, much, much more common are flightline crew 'head strikes' (<KLUNK>
"Owey! Uh oh...") on the bottom mounted antennas and other protrusions.

If an airplane antenna did hit a big goose in flight (for example), it would
probably tear off the larger part of the antenna. The fuselage and doublers
should survive, but might be bent. Better the antenna than the windscreen.

3480. Re: 75/100 Ohm Impedance Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 05:27:39 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4so2m$2nvr4$1@ID-124126.news.dfncis.de>
Source record: 148367

If these two cables are coax, ie., unbalanced, just use a two-resistor, minimum-loss, L-matching pad. The loss will hardly be much more than the loss in a matching transformer and the operating bandwidth will be much wider.

For design of minimum-loss L-matching and other T and Pi pads, download program (guess what) MATCHPAD from website below. It will tell you the values of the two resistors and the actual minimum loss in dB.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

Ben Franske <bfranske@yahoo.com> wrote in message
news:ce6da1e5.0202152115.772864d7@posting.google.com...
> I'm trying to make something similar to this:
> http://www.videobalun.com/lib/videoware/cctvbalundatasheet.pdf
> Does anyone know of a place to buy 75:100 Ohm Transformers, or another
> way to do this? The idea is to run a 75 Ohm baseband video signal over
> Cat5 UTP cable.
>
> Thanks,
> Ben Franske

3481. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 05:38:11 UTC
From: richardharrison@webtv.net
Message-ID: <25628-3C71E4C3-149@storefull-111.iap.bryant.webtv.net>
Source record: 148368

Bill Nelson wrote:
"That may not be from energy that the antennas pick up from the strike."

Mark Keith had written:
"I`ve noticed my times with fairly nearby strikes that that I can hear
my antenna connectors arc from energy that the antennas pick up"

They are both right I`d say from many years listening to and watching
arcs in broadcast antenna systems.

Charged air sweeping past would cause insulators to flash over in
advance of the storm. Guy insulatore could be heard popping and seen
when the sky was darkened by the storm or time of day.

Later when the storm was closer, lightning strikes in the area would
cause sympathetic flashes across guy or base isulators.

Best regards, Richard Harrison, KB5WZI

3482. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 09:24:09 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <Ki2kBGJ5mhc8EAKg@ifwtech.com>
Source record: 148277

Richard Harrison wrote:
>J. Harvey wrote:
>"Bigger dish - less exposure. Okay?"
>
>J Harvey and the Aussie are exactly right. When you are positioned
>directly in front of the dish, the same power is spread more thinly on
>the area of the larger dish. I am grateful to Ian for pointing this out.
>

The power density from a bigger dish is smaller in the "near field", but it's larger in the far field. It's this crossover effect that makes the subject so slippery.

>The point that seems ignored is that the dish is located atop a tower or
>tall building or some such structure where its distance to anybody who
>might be overexposed is enough to place them out of harm`s way. That is
>the argument I prevailed using with two Ohio senators, one Ohio
>congressman, and the FCC.
>
>I can`t guarantee the same argument would work again because most people
>are dead set on believing what they want to believe regardless of the
>facts.
>
Yes, that's the crucial stage. You have done the technical assessment, but it sits there on the table, unopened, while you try to convince the people you know what you're talking about. What they are judging is actually *you* as a person - not based on your technical ability, but on your ability to explain it in ways they can understand.

Most people understand that if no-one can actually get into the hazard zone, then there's no risk. They may then understand that a high tower actually protects people at ground level.

Slightly more tricky is to explain that the greatest ground-level power density is generally where the edge of the main beam first touches the ground. I usually try to explain that in terms of holding a flashlight shining horizontally, and asking them which area on the ground is most brightly lit. Then compare that with the brightest area in the main beam.

You have to educate people about things they haven't previously thought about, so the most important thing is to keep their attention and interest so they follow along with you. Take a flashlight and show them!

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'

'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3483. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 09:35:38 UTC
From: "DaleJ." <dale.j2@mac.com>
Message-ID: <dale.j2-6A4F28.03353819022002@hermes-ge0.rdc-kc.rr.com>
Source record: 148270

When a company has money problems the first to go is quality assurance
and costomer service. Perhaps they are in that situation, just a guess.

BTW I am rebuilding a KT34 with the new upgrade kit from M2 complete
with new machined shorting bars and boom to ele. clamps.
dj

SideBand <abNO8SPAMlr@csotbs.org> wrote:

> > There are many other verticals (Hy Gain for instance) available that
> > are just as good as and probably better than Cushcraft garbage. I
> > have NEVER had good luck WITH either of my Cushcraft. They did not
> > meet specs at all.
> >
> > THE REAL SAD THING IS BEING TOTALLY IGNORED BY CUSHCRAFT WHEN I TRIED
> > TO GET PARTS HELP FOR THE R7000.
> > THAT IS CURRENT AND THERE IS no EXCUSE FOR THAT none.
> >
> > three EMAILS AND NO REPLY OF ANY KIND WHATSOEVER, AND ever ANSWERED
> > THE TELEPHONE EITHER.
> >
> >
> >
> > Gil Baron http://webpages.charter.net/gbaron
> > 44:04.925 N 92:30.758 W 1055'
> > "Hierro candente, batir de repente"
> >
>
>
> --
> 73 de AB8LR, Chris
>
> http://csotbs.shopiwon.com/ for great deals on computer products.

3484. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 09:47:32 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <4yVo1mL08hc8EAMk@ifwtech.com>
Source record: 148276

Bill Klocko wrote:
>>
>> Perhaps we need to subscript the phase "Far Field" with (US) or (UK)...
>>
>> I believe that I had detected a third meaning at some point in my career,
>> but I can't recall it right now.
>
>Hi J.,
>The far-field is *usually* defined to occur at distance 2D^2/lambda.
>It has something to do with the wave differing from a plane wave by
>pi/8 or something like that. Very close to the antenna is sometimes
>called the near-field and sometimes called the reactive near-field.
>The intermediate distance is sometimes called the near-field and
>sometimes called the radiating near-field. Usually which region is
>being referred to can be determined from the context or a quoted
>distance, but not in this thread. When Ian sez near-field, I'm 99 and
>44/100% sure he's talking about the radiating near-field. When Richard
>H. sez near-field, he's talking about the reactive near-field.
>
>I hadn't noticed that the UK and US have differing meanings for the
>far field. If you've seen the UK use a distance other than 2D^2/lambda
>for the far-field, please post it. That could explain a lot of the
>confusion here.

This is not a US/UK language difference. Since there is no sharp physical boundary between the near and far field, maybe it's to be expected that there are a number of alternative definitions, depending on the viewpoint.

I was using "near field" to identify the region along the axis of a dish (or other aperture antenna) that has a peak in power density at its far edge. That's where the E and H fields are starting to get their phase together. The near-side rising edge of the peak is formed by increasing phase convergence; the far-side falling edge is formed by the inverse square law taking over as we move out into the far field.

The distance of the peak is approximately 0.2D^2/lambda (that's zero point 2, not 2 as Bill wrote). With large apertures and small wavelengths this distance can become surprisingly great. At about twice that distance the power density is within a few percent of what we'd have predicted from a far-field inverse-square calculation, treating the antenna as a distant point source. But the peak is definitely a near-field effect because an inverse-square calculation doesn't predict any peak at all.

That leads us towards some kind of "definition-by-veto". There are several different viewpoints on what constitutes "near field": reactive near field, radiating near field, close-enough to a plane wave, close-enough E and H phase convergence, the radhaz approach outlined above, and so on... If any one of those viewpoints says "Hold it - I'm not in the far field yet", then they must still be in the near field!

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3485. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 12:12:30 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <44g47u4uklclcum7kh1rnl05rmt7grdaoh@4ax.com>
Source record: 148271

On Tue, 19 Feb 2002 00:11:57 -0500, SideBand <abNO8SPAMlr@csotbs.org>
wrote:

>If you took this attitude with them in your messages, I'm not surprised
>they didn't answer.

I'm not taking sides either way, but a GOOD company will respond to
customer issues regardless of the customer's "attitude". If Cushcraft
is ignoring Mr. Baron because of his supposed "attitude", they are
making a serious mistake.

So the question is, are they?

Bill, W7TI

3486. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 12:23:23 UTC
From: Gilbert Baron <gbaron@charter.net>
Message-ID: <vpg47ugvhm2q9lv3tn0ise8mboi8kkjv30@4ax.com>
Source record: 148272

I did NOT take this attitude. Also, there is no way they can tell an attitude when calling on the phone which was never answered. They had an answer machine that you put a message on and they never called back.

I am suer it is because I have had to order parts before and they are just going to stonewall any problems with the antenna or lack o parts support which is by far the worst I have ever seen.

On Tue, 19 Feb 2002 00:11:57 -0500, SideBand <abNO8SPAMlr@csotbs.org> wrote:

>If you took this attitude with them in your messages, I'm not surprised
>they didn't answer.
>
>-SSB
>
>Gilbert Baron wrote:
>
>> There are many other verticals (Hy Gain for instance) available that
>> are just as good as and probably better than Cushcraft garbage. I
>> have NEVER had good luck WITH either of my Cushcraft. They did not
>> meet specs at all.
>>
>> THE REAL SAD THING IS BEING TOTALLY IGNORED BY CUSHCRAFT WHEN I TRIED
>> TO GET PARTS HELP FOR THE R7000.
>> THAT IS CURRENT AND THERE IS no EXCUSE FOR THAT none.
>>
>> three EMAILS AND NO REPLY OF ANY KIND WHATSOEVER, AND ever ANSWERED
>> THE TELEPHONE EITHER.
>>
>>
>>
>> Gil Baron http://webpages.charter.net/gbaron
>> 44:04.925 N 92:30.758 W 1055'
>> "Hierro candente, batir de repente"
>>

Gil Baron http://webpages.charter.net/gbaron
44:04.925 N 92:30.758 W 1055'
"Hierro candente, batir de repente"

3487. Antron A99 vertical vs RS look alike

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 12:45:27 UTC
From: rons533@dejazzd.com
Message-ID: <3C72485C.6E80@dejazzd.com>
Source record: 148273

After doing research at eHam.net for many reasons I decided to purchase an Antron/Solarcon A-99 vertical antenna to use on 10, 12, 15 meters. I learned that Radio Shack used to sell the "same" antenna under their name years back. After calling several RS stores I located the antenna and since they no longer carried it they discounted the price. Guess what,, I can't get the antenna to tune better than 4:1 without a tuner anywhere. My question I guess is. Is this really the same antenna as the Antron/Solarcon? Is anyone using the RS without problems?

Thanks

3488. Re: Brightness Temperature -- Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 13:05:31 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202190505.71cd404b@posting.google.com>
Source record: 148274

Wayne Watson <mtnviews@earthlink.net> wrote in message
news:<3C715AAC.F268CFA9@earthlink.net>...
> I'm looking at a book on radio astronomy and the author talks about calculating the
equivalent
> blackbody temperature of the galactic center from the formula:
>
> Teq = (b*l*l)/(2*k)
>
> where Teq is the equiv temp
> b is the brightness of the object in watts/meter*meter/cycle per sec/steradians
> l = wave length (15 m is used)
> k=Boltzman constant
>
> His answer is 50,000K. No mention is made of what b is. I would guess this is derived by
some
> measurement with a radio telescope.
>
> In fact, how does one use a radio telescope to measure the required brightness? Is this
easily
> done? I take it that such brightnesses are measured over surfaces rather than points. How
does one
> find the (necessary) power over the surface of an object? I would think the resolution of
amateur
> radio telescopes would be so low as to make it very difficult to measure the brithness of
an object
> like Mars or Jupiter.

I replied to this from home, but don't see my answer here, so I'll do
it again [am at work now].

Lets look closer at the formula....

b = watts/(meter*meter)/Hz

and...
Hz is the bandwidth of your receiver.

watts/(meter*meter) is the signal strength in watts per square meter.

If you know what your antenna and receive gain is, you can calculate b
from the measured output of the receiver.

Multiply b times the wavelength squared and you get watts. There is
another formula, P=kTB. P is power in watts, k is Boltzman's constant
= 1.380622e-23, and B is the bandwidth. I don't know where the 2
comes from, as I don't have any of my references with me. The power

received by a radio telescope is quite small, and it is more conventient to use temperature.

What you are measuring with a radio telescope is the average signal strength that is inside the antenna beam, not the surface of the source.

Again, I don't have my books with me. They are at home, so I can't give any more details. This is all I can recall from memory.

What book are you reading? Kraus's? I worked at the Ohio State radio telescope when I was getting my Master's degree. Unfortunately, I have an aversion to starving, and am no longer working as a radio astronomer. There aren't enough jobs to go around.

Jim
N8EE

3489. Re: Line of sight topographic mapping software

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 13:06:42 UTC
From: Carl <n7kuw@dropthisnospam.attbi.com>
Message-ID: <C5sc8.87313$fK1.4223517@rwcrnsc54>
Source record: 148275
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,alt.ham-radio.fm,alt.radio.amateur

You are correct, there are very high priced professional packages that do just exactly what you want.

As to a reasonably priced consumer package - Topo USA Version 2 (or higher?) from DeLorme will allow you to select 2 points and show a side view or profile view. You can definitely see line of sight from this.

That may or may not help you accomplish what you want, but it's the closest thing I've found short of professional propagation software. Professional software takes in to account the specific frequency, power, antenna design, etc. You have to do all that in your head with anything short of that.

Carl.

Pete <news0201@toward.com> wrote in message
news:3C7112F8.93C1CCD4@toward.com...
> I'm hoping to find some topographic mapping software that will display
> all areas that are within line of sight of a given point. The principal
> idea is to use it with VHF and UHF radios to chart out signal
> propagation via line of sight to all areas around a given point. I'd
> like to use the software to help me with some "mountaintopping"
> excursions so I can see where I might reach from a given mountain top.
>
> It seems that the problem is not an overly complex one, but it requires
> elevation information and a raytracing capability.
>
> I was wondering if anyone knew of any existing software package that
> will do this -- perferably a modestly priced one. I'll bet that there
> are proprietary packages that do this and extremely high priced packages
> aimed at cell phone service providers. I need one that's aimed toward
> the amateur radio hobbiest.
>
> I have the National Geographic (formerly Wildflower Productions) Topo!
> series maps. They have all the necessary data in the form of the
> Digital Elevation Model (DEM) data. They can also plot the elevation
> profile between two points on the map (along any route). The missing
> piece is being able to plot the areas within line of sight.
>
> Thank you very much for any pointers.
>
> Best regards,
> Pete
>
>

3490. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 13:33:27 UTC
From: Alan White <alannc44@ix.netcom.com>
Message-ID: <Husc8.15806$rs6.7919687@typhoon.southeast.rr.com>
Source record: 148279

In the beginning he describes the use of a loop cut for 160 meters which he uses for higher frequencies with the aid of a tuner. His ninth paragraph:

"Directly feeding the loop antenna is obviously the simplest, however, you be your own judge and feel free to try it both ways. All 3 of my loops are directly fed with 50 ohm co-ax. My 17 and 10 meter loops are both vertically suspended and are relatively in the clear but low to the ground."

I used to use a full wave loop for 20 meters with a quarter wave section of 75 ohm coax and had an easy go at it. While this was suspended vertically, I did have a reflector. In otherwords, a quad. My understanding is that the impedance drops when you locate a reflector behind the driven element. Right now, I have a 40 meter full wave parallel to the ground at about 30 feet high stretched around the yard. My SWR is not flat across the band, but it does drop to 2:1 for at least 20 khz. Perhaps the ground acts as a reflector and lowers the impedance?

Alan
WN4HOG

--
Windsurfing Club: http://www.ibscc.org
Homepage: http://pw1.netcom.com/~alannc44/qsl.htm

"Patrick Croft" <mai@iquest.net> wrote in message
news:3C7183B4.B0C3DE8C@iquest.net...
> Yes he says coax with a TUNER. Harry was wanting to avoid a new, full
> power tuner. the answer to Harry's question of direct feeding without a
> tuner is NO. Physics hasn't changed.
>
>
>
> Alan White wrote:
> >
> > This guy says he runs the coax straight into the loop:
> > http://www.qsl.net/wa4hwn-scars/skyloop.html
> >
> > Alan
> > WN4HOG
> > --
> > Windsurfing Club: http://www.ibscc.org
> > Homepage: http://pw1.netcom.com/~alannc44/qsl.htm
> >
> > "Harry Williams" <harry.w.williams@syntegra.com> wrote in message
> > news:3C715A40.3A6C6814@syntegra.com...
> > > I have a 160M horizonital loop that is fed in a corner with 450 ohm

ladder
> > line. I now
> > > have an amp and would like to use if with the loop but the tuner is
rated
> > at only 300W.
> > > Is there a way to broadband the feed to the loop so I could run RG8 or
> > whatever out
> > > of the shack and then couple it to the 450 ohm line thru a balum that
> > would give me
> > > an swr under say 3 to 1 over a wide frequency range? I would like to
> > eliminate the tuner
> > > all together and have a feed system that would handle a KW.
> > >
> > > Thanks,
> > > Harry - W0PIY
> > >

3491. Tower setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 13:39:13 UTC
From: Andre <aswal@optusnet.com.au>
Message-ID: <3c72fd69$0$16637$afc38c87@news.optusnet.com.au>
Source record: 148225

Hi Everyone,
I have a triangular tower and I want to mount the rotator inside the tower to take the strain off it. I have been told I will need to put some bearings in the tower to support the weight of the aerials and help with the "side to side" support, but don't really know how this is done. Anyone have any suggestions/Webster/pics that might help. I would also like to add a break as well and was thinking of using an old boot opening solenoid to achieve this, again any ideas on this would be great.

Andre

3492. Re: Tower setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 13:42:12 UTC
From: Andre <aswal@optusnet.com.au>
Message-ID: <3c72fe1c$0$16635$afc38c87@news.optusnet.com.au>
Source record: 148224

errr boot as in the back part of a car where u put your gear b4 a field day
(lol)
andre
"Andre" <aswal@optusnet.com.au> wrote in message
news:3c72fd69$0$16637$afc38c87@news.optusnet.com.au...
> Hi Everyone,
> I have a triangular tower and I want to mount the rotator inside the tower
> to take the strain off it. I have been told I will need to put some
bearings
> in the tower to support the weight of the aerials and help with the "side
to
> side" support, but don't really know how this is done. Anyone have any
> suggestions/Webster/pics that might help. I would also like to add a break
> as well and was thinking of using an old boot opening solenoid to achieve
> this, again any ideas on this would be great.
>
> Andre
>
>
>
>

3493. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 13:45:12 UTC
From: "Jim Bromley, K7JEB" <j.e.bromley@worldnet.att.net>
Message-ID: <IFsc8.12060$BR3.677014@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148278

Joe O <jenjoeo@zianet.com> wrote in message news:3c717a9c.0@oracle.zianet.com...
> Harry, as in life, with RF there is no free lunch. Invest in a high Power
> ATU and use the lowest loss coax and open line you can afford. My 480 ft
> horizontal loop and ATR-30 give me a very frequency agile system. I
> typically run 500 watts and have enjoyed 160-10 meters with a single
> antenna.
>
> Joe- KI5FJ

And if you're not into "investing" in an ATU, a cheap,
homebrew, L-network can be had on a piece of plywood.
The coil would be wound of #6 copper ground wire wrapped
around a hunk of 6" ABS sewer pipe and tapped with a sturdy
clip lead. The capacitor would be an assortment of surplus
doorknob types, selected with a clip lead. If you want
a finer adjuctment on Xc, place a tappable inductor in
series with a small-valued capacitor (high Xc) and adjust
the inductor to "subtract" its reactance from that of
the capacitor to get exactly the right value. Not very
"frequency-agile", but my guess is you could map enough
inductor taps and capacitance values to get a decent
match over the 160-meter band.

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

3494. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 14:22:47 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C725FB7.54EB2FF4@IEEE.org>
Source record: 148280

captbrian wrote:
> a far better bet is for you to reduce the top span to 51' and run 34' of
> ladder-line .

Actually, a half-size G5RV should be 1.5WL long on 10m (51 ft)
and have a 1/2WL matching section (15.6 ft for VF = 0.9).
--
cheers, CAM http://www.qsl.net/w5dxp

3495. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 14:24:03 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C726003.F1384CF3@IEEE.org>
Source record: 148281

Bill Nelson wrote:
>
> CAM <Cecil.A.Moore@ieee.org> wrote:
> > -Your Friend Bill- wrote:
> >> In cable tv work we use return loss exclusively for measuring match.
> >> Its a very convenient unit for calculating reflections which will
> >> ultimately show up as ghosting in analog pictures or raise all sorts of
> >> havoc on digital signals.
>
> > You mean, you mean, the reflections are really there? :-)
>
> If not, how does a TDR work?

It was a rhetorical question, Bill. Some people on this newsgroup say
the reflected power is not really there.
--
cheers, CAM http://www.qsl.net/w5dxp

3496. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 14:46:33 UTC
From: mcduffie@xactcom.net
Message-ID: <4ap47u8l6ng4a09gh1mucd6tloe3unh729@4ax.com>
Source record: 148283

On Tue, 19 Feb 2002 13:33:27 GMT, "Alan White" <alannc44@ix.netcom.com>
wrote:

> Right now, I have a 40 meter full wave parallel to the ground at about 30
> feet high stretched around the yard. My SWR is not flat across the band, but
> it does drop to 2:1 for at least 20 khz. Perhaps the ground acts as a
> reflector and lowers the impedance?

How is it fed, and with what?

Gary
--
There is no x in my ISPs domain name.

3497. Re: 75/100 Ohm Impedance Transformer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 14:56:02 UTC
From: bfranske@yahoo.com
Message-ID: <ce6da1e5.0202190656.12df4a5a@posting.google.com>
Source record: 148282

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<a4so2m$2nvr4$1@ID-124126.news.dfncis.de>...
> If these two cables are coax, ie., unbalanced, just use a two-resistor,
> minimum-loss, L-matching pad. The loss will hardly be much more than the
> loss in a matching transformer and the operating bandwidth will be much
> wider.
The 75 Ohm cable will be coax and the 100/120 Ohm cable will be CAT5
(balanced) although I'm not opposed to running the CAT5 unbalanced if
there won't be any more signal degregation than a coax run. I want to
take advantage of the inexpensiveness and multiple conductors in the
CAT5, any anti-interferance measures is just a bonus. It'll be run
probably under 500 ft anyway.

3498. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 15:14:15 UTC
From: Alan White <alannc44@ix.netcom.com>
Message-ID: <bZtc8.10101$nr.7725536@typhoon.southeast.rr.com>
Source record: 148288

Nothing. Just RG8 straight into it like a dipole.

Alan
WN4HOG
--
Windsurfing Club: http://www.ibscc.org
Homepage: http://pw1.netcom.com/~alannc44/qsl.htm

<mcduffie@xactcom.net> wrote in message
news:4ap47u8l6ng4a09gh1mucd6tloe3unh729@4ax.com...
> On Tue, 19 Feb 2002 13:33:27 GMT, "Alan White" <alannc44@ix.netcom.com>
> wrote:
>
> > Right now, I have a 40 meter full wave parallel to the ground at about
30
> > feet high stretched around the yard. My SWR is not flat across the band,
but
> > it does drop to 2:1 for at least 20 khz. Perhaps the ground acts as a
> > reflector and lowers the impedance?
>
>
> How is it fed, and with what?
>
> Gary
> --
> There is no x in my ISPs domain name.

3499. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 16:24:10 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3C727C2A.FD9E7E8F@iquest.net>
Source record: 148284

Mr. Moore,

I've yet to notice anyone claiming total knowledge on this thread and
I'm sure I don't know everything. Your use of varoius impedance feed
points with knife switches has been well advertised by yourself on this
newsgroup and others. Certainly it offers a method of feeding in some
situations. It doesn't however broadband the antenna as Harry was
asking about; "Is there a way to broadband". It simply offers multiple
tap points to allow improved coupling at specific frequencies. This is
nothing new either, and certainly not a method of broadbanding an
antenna.

Bests,

Patrick

Thanks,
Harry - W0PIY

CAM wrote:
>
> Patrick Croft wrote:
> > Yes he says coax with a TUNER. Harry was wanting to avoid a new, full
> > power tuner. the answer to Harry's question of direct feeding without a
> > tuner is NO. Physics hasn't changed.
>
> Physics hasn't changed but maybe you don't know everything. Check out
> my All-HF-Band-No-Tuner-Dipole on my web page to see if you think I
> violate any laws of physics. If one is using 450 ohm ladder-line and
> the 450 ohm SWR is between 4.5:1 and 18:1, the 50 ohm SWR when fed at
> a current maximum point will be equal to or less than 2:1, i.e. a
> near-perfect match.
> --
> cheers, CAM http://www.qsl.net/w5dxp

3500. Re: 3905 club

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 16:52:06 UTC
From: Larry Gauthier <larryg5099@chartermi.net>
Message-ID: <u750m4b63e6ha3@corp.supernews.com>
Source record: 148285
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I'm net a "member", but have dropped in on their 20 meter RTTY net (they operate nets on 20/40/80 - so not just an 80 meter group and not just SSB) and thought it looked like a great way to further my WAS RTTY efforts... which need something better than me cruising the RTTY portions of bands looking for unworked states.

-larry
K8UT
"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c6bf84d$1@news.bnb-lp.com...
> Hello Walt,
> You'll have to excuse Derek - AA5BT..he thinks he's a comedian....
>
> Here is the website URL for the 3905 Century Club...
> http://www.3905ccn.com/
>
> This should be a good starting point to find out more about
> them.....maybe see you on the bands one of these days.....
>
> --
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

3501. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 16:55:21 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C73C799.C8ABD971@worldnet.att.net>
Source record: 148286

"Jim Bromley, K7JEB" wrote:

> Joe O <jenjoeo@zianet.com> wrote in message news:3c717a9c.0@oracle.zianet.com...
> > Harry, as in life, with RF there is no free lunch. Invest in a high Power
> > ATU and use the lowest loss coax and open line you can afford. My 480 ft
> > horizontal loop and ATR-30 give me a very frequency agile system. I
> > typically run 500 watts and have enjoyed 160-10 meters with a single
> > antenna.
> >
> > Joe- KI5FJ
>
> And if you're not into "investing" in an ATU, a cheap,
> homebrew, L-network can be had on a piece of plywood.
> The coil would be wound of #6 copper ground wire wrapped
> around a hunk of 6" ABS sewer pipe and tapped with a sturdy
> clip lead. The capacitor would be an assortment of surplus
> doorknob types, selected with a clip lead. If you want
> a finer adjuctment on Xc, place a tappable inductor in
> series with a small-valued capacitor (high Xc) and adjust
> the inductor to "subtract" its reactance from that of
> the capacitor to get exactly the right value. Not very
> "frequency-agile", but my guess is you could map enough
> inductor taps and capacitance values to get a decent
> match over the 160-meter band.

And if you haunt the hamfest fleamarket tables long enough you'll
find a suitable small value, High Voltage rated variable capacitor
to hang in parallel with the selected fixed cap to make the thing even
more flexible.

Dick

3502. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 16:58:15 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u75110qnun6gff@corp.supernews.com>
Source record: 148287

> > You mean, you mean, the reflections are really there? :-)
>
> If not, how does a TDR work?
>

Very well, thank you.

Jim

3503. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 17:23:06 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020219122306.25317.00000204@mb-cg.aol.com>
Source record: 148289

I had a terrible time with them about my R7000 also. They had a bad product and didn't know what to do with it. I was offering to PAY for a replacement trap and couldn't get anyone's attention for weeks. It took a call from my local HRO manager to get a response.

I have heard lots of these stories. Cushcraft needs to get their act together. I sure don't want to deal with them again.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

3504. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 17:27:52 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C73CF38.61E3D89@worldnet.att.net>
Source record: 148290

Roger Leone wrote:

> Third, I have yet to see it demonstrated that feedline radiation causes more
> TVI than antenna radiation. I think this is one of the "urban myths" of ham
> radio.

Not if the feedline radiation is actually occurring *at* the house
and thus radiating into the housewiring where it can easily find its
way inside a poorly protected TV causing overload.
I discourage any system that allows RF from the antenna to find its way back
inside the house.
In my own situation, at one time I had an 80 meter dipole running over the
roof of the house. Anytime I ran over 50 watts or so, I
experienced RFI of various sorts, to the extent of even having the
hallway light (resistive) flicker on and off when I ran the amp.
I moved all my antennas well away from the house, and have
since had no RFI problems whatever. It's too bad that many hams
aren't able to move their antennas far enough away from the house
to get that effect.

Dick W0EX

3505. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 17:31:26 UTC
From: "R.U. Amused?" <n6ttd@spamsuxarrl.net>
Message-ID: <OZvc8.93176$Pz4.378483@rwcrnsc53>
Source record: 148291

I got an e-mail back on a matter today; I submitted my concern last night.

James
N6TTD
"Gilbert Baron" <gbaron@charter.net> wrote in message
news:bmtv6ucsd02fbsl7de354d9pp6m0k320gc@4ax.com...
> Welcome to the horrible world of Cushcraft. They are the worst at
> customer support in the entire Amateur Radio world. They even ignore
> requests for help on my R7000 which IS still produced.
>
> DO NOT BUY CUSHCRAFT, they are going to cheat you.
>
>
>
> On Thu, 14 Feb 2002 07:34:54 -0600, daniel wright <dw73454@navix.net>
> wrote:
>
> >Greetings.....!
> >
> >I have an early version of the Cushcraft R7. After many years of
> >waving in the breeze (un guyed)(in Nebraska), the base insulator gave
> >up the ghost and broke, causing the antenna which is mounted on a ten
> >foot mast tied to my back fence, to become a "sloper"....(8-<....
> >
> >I contacted Cushcraft via the website and received a prompt reply that
> >this antenna is no longer supported (I wonder if they realized the
> >pun?) and there are no spare parts available.
> >
> >Anyone have experience with replacing the base insulator on one of
> >these antennas? Some of the top of the antenna is also bent up pretty
> >well, but I have not been able to get to the antenna to check closely
> >becaue of snow and mud and I'm a wuss....
> >
> >Any help appreciated...thanks es
> >
> >73 de Dan -- WA JRD ..
> >Lincoln, Nebraska
> >
>
> Gil Baron http://webpages.charter.net/gbaron
> 44:04.925 N 92:30.758 W 1055'
> "Hierro candente, batir de repente"

3506. Re: 18 inch cock !!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 17:33:07 UTC
From: "R.U. Amused?" <n6ttd@spamsuxarrl.net>
Message-ID: <n%vc8.93181$Pz4.378416@rwcrnsc53>
Source record: 148292

Would this be a screwdriver antenna?

<timothy@freenet.it> wrote in message
news:ZDcb8.37803$gs4.1379409960@hestia.telenet-ops.be...
> http://clik.to/freepornsites
>
> LAST DAYS !!!!
>
> Hurry up : it's now or never !
> 10 000s of pics, 1 000s of video's and lots of live shows : all 4 free for
life !
> You don't need a card, you don't have to download software. Just enter a
valid e-mail adress and that's it !!! Unbelievable, but really true !
> Amateur, Asian, Fetish, Gay, Lesbian, Mature, Hardcore and Teens : 8
topsites, all 4 free !
>
> http://clik.to/freepornsites
>
> Remember : this offer will expire in a few days...
>
>

3507. Re: Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 18:03:26 UTC
From: kg4pss@arrl.net
Message-ID: <a3866922.0202191003.41779f4c@posting.google.com>
Source record: 148293

>From this and your follow up post I guess that this wire will be only
a few >feet above ground.

Yes. Probably a "V" w/ 30-35' center, although a semi-flat top at
20-30' might be an alternative.

> I suggest that you consider a trap dipole for your three bands. Forget the
> ladderline since it is such a small part of the overall transmission line and >is way
more trouble than it's worth.

The reason the ladderline (as part of a G5RV) was attractive was that
it gave me a connection point close to the ground, since I will have
to roll out my coax to it when I want to use it. I suppose running
coax to a grounding block, or other type of coupling would serve the
same purpose.

>Traps built from coax are easily made; if you
> are interested, I can provide references.

I have looked over some of the materials at ARRL's website. If you
have other references, I would greatly appreciate your sharing them
with me.

> Use a balun at the feedpoint (ferrite if you can afford it, otherwise, a few
> turns of coax) and run the coax to the rig.

Coax would get the nod here; not only cheaper, but it would match the
traps:).

>I know you've shelled out for the tuner in anticipation of needing it
for a >multiband antenna but it will still come in handy for covering
the extreme >band edges, particularly 80 meters.

That is okay. The less the tuner has to do, the better. (If I ever get
a suitable spot to try Cecil's creation, the tuner will live in the
Jeep, anyway :)

> Welcome to the fold.

Thanks. Too bad my Elmer wasn't around to get me off my duff 25 years
ago (when time and money both seemed more abundant)! If there's a wall
of shame for those who procrastinate getting their ticket, I reckon I
ought to be on it.

3508. Re: Antron A99 vertical vs RS look alike

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 18:38:11 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a4u5ul$1d4l$1@news1.tribune.com>
Source record: 148294

I have one that I regularly use on 10 M. Have had it up for about 4 years.
While you can force feed it on 12 and 17, I don't.

As for your matching problem.
When I brought the antenna home, I had the same problem. Went back to radio
shack and had them pull another one from stock. It worked fine. The
matching section inside the first one was deffective.

As I recall, it should show DC ground on the center pin, and the one I
originally had did not.

They put a little X on the deffective one and claimed they would return it.
I think I recently saw it for sale at the "back room cleaning sale". (hope
you did not buy it In CL Illinois)

KA9CAR

<rons533@dejazzd.com> wrote in message news:3C72485C.6E80@dejazzd.com...
> After doing research at eHam.net for many reasons I decided to purchase
> an Antron/Solarcon A-99 vertical antenna to use on 10, 12, 15 meters. I
> learned that Radio Shack used to sell the "same" antenna under their
> name years back. After calling several RS stores I located the antenna
> and since they no longer carried it they discounted the price. Guess
> what,, I can't get the antenna to tune better than 4:1 without a tuner
> anywhere. My question I guess is. Is this really the same antenna as the
> Antron/Solarcon? Is anyone using the RS without problems?
>
> Thanks

3509. DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 19:18:21 UTC
From: NI4L <ni4l@charter.net>
Message-ID: <3C72A4FD.25966A4F@charter.net>
Source record: 148295

--

NI4L CUSTOM RESONANT DIPOLE
LEGAL LIMIT ++ CUSTOM MADE CENTER FED DIPOLE
Made with the same components used by our military forces today
Custom made to YOUR FREQUENCY of operation
Let me take the hassle out of making a RESONANT DIPOLE for you.
Click here for more info... <http://www.angelfire.com/nb/ni4l/>

3510. antenna question for 900Mhz and 1800Mhz

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 19:26:25 UTC
From: apostoloss@yahoo.com
Message-ID: <32be3184.0202191126.4c7dff2c@posting.google.com>
Source record: 148296

Hi,

Is there a way to build a simple antenna to provide cellural(GSM
900,1800) connectivity from open ground to a basement that now lacks
of it without the use of amplifier ?
Actually the status now is that in a basement the cellural phones have
no signal and I was wondering if there is something like a
back-to-back antenna, that I could use to "transfer" the signal to
this basement.
Maybe this is a simple task but does anybody know where should I look?
(links, books?)

TIA

3511. Ladder line and baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 19:45:28 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020219144528.04732.00002078@mb-fo.aol.com>
Source record: 148297

I have been running an inverted L antenna. It is 51 feet on each leg (old G5RV stock) and top fed with about 135 feet of ladder line. I can tune 160-10 meters with my antenna tuner using the internal 4:1 balun. This antenna works very well and you can read more about it on Mr. Cebik's excellent site.

But, it was touchy on the lower bands and a little rough on 30 so on a lark, I tried running coax from the tuner to a RadioWorks 1:1 current balun then to the ladder line instead of using the tuner's internal 4:1 balun. WOW! The antenna tunes like a dream on all bands now with FLAT SWR possible everywhere. In addition, the tuning is not as critical and I don't have to re-tune every time I move around the band.

The antenna models with a pretty low impeadance. I guess the 4:1 balun was making the match even worse at the rig? Why are 4:1 voltage baluns fairly standard in antenna tuners? Any of you experts care to comment?

Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

3512. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 19:46:51 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C72ABAA.C862782B@icok.net>
Source record: 148298

Or, if you don't want to wait around for ever, just
buy the stupid tuner and be done with it.
'Doc

3513. Re: DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 19:47:48 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C72ABE3.C9C4CD67@icok.net>
Source record: 148299

Just another over priced, ordinary dipole.
'Doc

3514. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 20:00:21 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C72AED5.16B05B13@IEEE.org>
Source record: 148300

Patrick Croft wrote:
>
> Mr. Moore,
>
> I've yet to notice anyone claiming total knowledge on this thread and
> I'm sure I don't know everything. Your use of varoius impedance feed
> points with knife switches has been well advertised by yourself on this
> newsgroup and others. Certainly it offers a method of feeding in some
> situations. It doesn't however broadband the antenna as Harry was
> asking about; "Is there a way to broadband". It simply offers multiple
> tap points to allow improved coupling at specific frequencies. This is
> nothing new either, and certainly not a method of broadbanding an
> antenna.
>
> > Patrick Croft wrote:
> > > Yes he says coax with a TUNER. Harry was wanting to avoid a new, full
> > > power tuner. the answer to Harry's question of direct feeding without a
> > > tuner is NO. Physics hasn't changed.

Is a new, full power tuner avoided with my tuning method? Yes
Do I direct feed my All-HF-Band antenna without a tuner. Yes
Your above posting didn't say anything about "broadbanding".
--
cheers, CAM http://www.qsl.net/w5dxp

3515. Re: Ladder line and baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 20:08:28 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C72B0BC.66DE9CCD@IEEE.org>
Source record: 148301

K4IA wrote:
> The antenna models with a pretty low impeadance. I guess the 4:1 balun was
> making the match even worse at the rig?

A current maximum point is a good place to feed a non-resonant antenna
system. The resistance is relatively low at a current maximum point.
A 4:1 balun can do more harm than good. They are designed to feed
200 ohm loads and work well on full-wave loops and folded dipoles.
--
cheers, CAM http://www.qsl.net/w5dxp

3516. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 20:27:08 UTC
From: Mel Martin <ve2dc@rac.ca>
Message-ID: <3C72B51C.EB0B6500@rac.ca>
Source record: 148302

It will work fine... in fact it's an excellent antenna for short haul.
DX performance will be less than optimum... but DX on 80 has often a
fairly high arrival angle. It would work better at 80 ft of course...
but life is full of compromises!!!

zulu wrote:
>
> I can only put it up that high. How well will it work?

3517. Re: How come American Hams can't use HF freqs that Canadians can?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 20:33:36 UTC
From: Mel Martin <ve2dc@rac.ca>
Message-ID: <3C72B69F.F1758B63@rac.ca>
Source record: 148303

Relax... it's that way because most Americans want it that way... leaves
some of the band relatively open for DX and such. For example, if the
opened up another 50KHz to US use on 20M, it would instantly fill up,
and you would be back where you started.

StarGazer wrote:
>
> I get so pissed off when I hear Canadian hams using phone
> on the CW part of the band. Americans should be able to
> use phone where they can.
> How come the ARRL doesn't make themselves useful and
> lobby for this. Its BS.

3518. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 20:34:23 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C72B6CF.AF3CFB0F@IEEE.org>
Source record: 148304

Mel Martin wrote:
> It will work fine... in fact it's an excellent antenna for short haul.
> DX performance will be less than optimum... but DX on 80 has often a
> fairly high arrival angle. It would work better at 80 ft of course...
> but life is full of compromises!!!

> > I can only put it up that high. How well will it work?

Halitosis is better than no breath at all.
--
cheers, CAM http://www.qsl.net/w5dxp

3519. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 20:49:34 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <a4udoe$18f0@r02n01.cac.psu.edu>
Source record: 148305

CAM as it right, mine is up 35' and I have 42 countries on 80 since August
of last year. Worse yet mine is a trapped dipole for 80/40 and 30 meters.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C72B6CF.AF3CFB0F@IEEE.org...
> Mel Martin wrote:
> > It will work fine... in fact it's an excellent antenna for short haul.
> > DX performance will be less than optimum... but DX on 80 has often a
> > fairly high arrival angle. It would work better at 80 ft of course...
> > but life is full of compromises!!!
>
> > > I can only put it up that high. How well will it work?
>
> Halitosis is better than no breath at all.
> --
> cheers, CAM http://www.qsl.net/w5dxp

3520. Re: "Far Field (UK)" - Was: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 20:53:28 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202191253.6e23248a@posting.google.com>
Source record: 148306

There has always been a bit of disagreement on the definition of 'Far Field'.

There are two of them that I prefer.

1) The distance at which there is no longer any signficant reactive component of the field. That is, the field has completely 'escaped' from the antenna and no longer collapses back into it every cycle. In the near field, some of the energy is 'stored' in the antenna and the field is defined as being reactive (like a capacitor or inductor stores energy). If there is no loss, none of the energy is lost, just 'recycled'. If you look at the typical equations for near field, you will find that there is an imaginary term.

2) The distance at which the two field components (electric and magnetic) are orthogonal with the direction of propagation. In the near field they will not be mutually at 90 degrees to each other.

For both of these, the more gain the antenna has, the larger the near field distance. I would think that, for the program you mention, that if you ask for near field and give it a distance that is too far you may get invalid results.

Both of these are still subjective, however, because you now have to decide the value of 'close enough' for the two conditions.

Jim
N8EE

3521. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 20:58:06 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202191258.76217004@posting.google.com>
Source record: 148307

Bryan Byers <bcbyers@netusa1.net> wrote in message news:<3C71B396.FD3E57E@netusa1.net>...
> I have been thinking of antenna wind survival and I have been wondering
> what the best thing is to ensure the the survival of ground mounted
> vertical antennas? I noticed that most antenna brands list a wind
> survival rating of 80 mph
> and I wonder why they pick that number?
>
> Thanks, KA9KHD

I have my guess.

In most cases if the wind was above 80 MPH you would be worrying about
other things besides your antenna, like your house.

3522. Re: DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 21:03:16 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3C72BD94.B6DBACC1@iquest.net>
Source record: 148308

Now Doc, you're missing the CUSTOM MADE part

'Doc wrote:
>
> Just another over priced, ordinary dipole.
> 'Doc

3523. Re: DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 21:13:09 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a4uf530fn8@enews4.newsguy.com>
Source record: 148309

But its RESONANT! and he used CAPS, so it must be good!

"'Doc" <w5lz@icok.net> wrote in message news:3C72ABE3.C9C4CD67@icok.net...
>
>
> Just another over priced, ordinary dipole.
> 'Doc

3524. Re: DIPOLE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 21:18:25 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <Bizc8.30$Kg5.65196@paloalto-snr1.gtei.net>
Source record: 148312

SPAM is still SPAM ... or should it be called Ham-Spam...? :>)

73 de W6DKN

"Patrick Croft" <mai@iquest.net> wrote in message
news:3C72BD94.B6DBACC1@iquest.net...
> Now Doc, you're missing the CUSTOM MADE part
>
>
>
>
> 'Doc wrote:
> >
> > Just another over priced, ordinary dipole.
> > 'Doc

3525. Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 21:45:35 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C72C77F.E3C3E821@yahoo.com>
Source record: 148310

I used to buy it a Boeing Surplus, but the last few trips down the road
(An hour drive) have yielded Nada.

Where do you guys find aluminium tubing for various projects.

Rick KF7QZ

3526. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 22:05:05 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0202191405.49ddef51@posting.google.com>
Source record: 148311

richardharrison@webtv.net (Richard Harrison) wrote in message news:<25627-3C71D153-380@storefull-111.iap.bryant.webtv.net>...
> Bill Klocko wrote:
> "The far-field is "ususally" defined to occur at distance 2D^2/lambda."
>
> That`s a huge number for big dishes and small wavelengths. Death ray
> research may be more promising than we guessed.

Yep, the radiating near-field can extend out to large distances. The 2D^2/lambda
expression is pretty much standard, although sometimes you have to dig to find it in texts or references.

> I don`t believe dish antennas are supernatural. Being powerful natural
> performers is good enough.

Well, there's nothing supernatural about it. Especially when the effective gain in the near-field is reduced from the far-field value.
73,
Bill N3WK

3527. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 22:29:21 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0202191429.662e8801@posting.google.com>
Source record: 148313

"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
news:<4yVo1mL08hc8EAMk@ifwtech.com>...
> This is not a US/UK language difference. Since there is no sharp
> physical boundary between the near and far field, maybe it's to be
> expected that there are a number of alternative definitions, depending
> on the viewpoint.
>
> I was using "near field" to identify the region along the axis of a dish
> (or other aperture antenna) that has a peak in power density at its far
> edge. That's where the E and H fields are starting to get their phase
> together. The near-side rising edge of the peak is formed by increasing
> phase convergence; the far-side falling edge is formed by the inverse
> square law taking over as we move out into the far field.

That's what I'm familiar with - I'm glad we're talking the same
language.

> The distance of the peak is approximately 0.2D^2/lambda (that's zero
> point 2, not 2 as Bill wrote). With large apertures and small
> wavelengths this distance can become surprisingly great.

Now we're talking 2 different things here. The usual definition for
the edge of the near-field region is 2D^2/lambda. As the distance
decreases from 2D^2/lambda, the power density is less than what it
would be if it was computed using the antenna's far-field gain. In
effect, the gain of the antenna is reduced. At some distance the power
density peaks, just like you say. Your distance at which this occurs
is 0.2D^2/lambda, or one-tenth of the distance to the boundary of the
far-field region. That's probably a pretty good approximation for a
circular aperture, uniform distribution, etc., etc.

> At about twice
> that distance the power density is within a few percent of what we'd
> have predicted from a far-field inverse-square calculation, treating the
> antenna as a distant point source. But the peak is definitely a
> near-field effect because an inverse-square calculation doesn't predict
> any peak at all.

I'd agree. 2D^2/lambda seems to be a very strict definition. If you're
interested only in the distance at which the near-field gain
approximately equals the far-field gain, the distance can be relaxed.
0.4D^2/lambda is also probably a pretty good approximation. 73,
Bill N3WK

3528. Re: "Far Field (UK)" - Was: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 22:31:04 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <LmAc8.11776$Lc2.1405558@news20.bellglobal.com>
Source record: 148314

"JLB" wrote:
> ...there is no longer any signficant reactive
> component of the field.

Of course there is reactive field, near field, and far field.

> I would think that, for the program you mention,
> that if you ask for near field and give it a distance
> that is too far you may get invalid results.

Since the pattern may be sensitively dependent upon relative phase from
contributing rays, the results may be different (though perhaps not
invalid - depending on the application) in certain directions with movements
of a small fraction of a wavelength.

3529. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 22:53:49 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C72D777.A7FE2601@tampabay.rr.com>
Source record: 148315

hey rick
check out texas towers at www.texastowers.com
they carry a wide range of aluminum tubing

"R. Scott" wrote:

> I used to buy it a Boeing Surplus, but the last few trips down the road
> (An hour drive) have yielded Nada.
>
> Where do you guys find aluminium tubing for various projects.
>
> Rick KF7QZ

3530. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 22:57:21 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <1EAc8.156137$h31.12142612@e420r-atl1.usenetserver.com>
Source record: 148316

Okeydoke [not sure if a ham can say that but I'll throw out a line].
Originally, what I had planned was the doublet but didn't really find too much *specific* construction details on it and kept looking at the G5RV thinking, "That's what was described". Construction for either is simple and straightforward enough for any ham. My conundrum began as antenna/feedline lengths didn't quite make sense. Hence, my misunderstanding and post. I did ask what the difference was between the two and, after becoming much more familiar with the G5RV (thanks gents), understand where the good Mr. Varney was going with his design... God rest his soul.
Either way particular bands have to be tuned through a match. If the 67' doublet top will give me operation down to 40m and the only question is feedline length, why not the 67' inverted V with a 34', 450Ohm windowline (which would make an ideal length in geographic terms? Would going with a 51' inverted V work down to 40 without shorting it as a T? What would be the benefit/tradeoff of the 1/2 size G5RV? What would be benefit/tradeoff of the doublet?
I do know this, the feed line length of the G5RV is stated and I don't know how to calculate a good feed line length for the doublet. In the middle, I've picked up a lot of good practical knowledge for both. Thanks.
Best Regards,
Drink
"captbrian" <captbrian@ukonline.co.uk> wrote in message
news:73mc8.1833$9h2.755795@monolith.news.easynet.net...
> What you describe is not a G5RV. [Louis would turn in his grave }
> you are describing a 67' doublet or dipole.
> The impedance at the feed point will depend on rthe length of the
> ladder-line.
> 50' would work well but ....
> a far better bet is for you to reduce the top span to 51' and run 34' of
> ladder-line .
> The line should not radiate.
> Bryan
>
>
>
> Drink <REMOVE_THISdrink@coqui.net> wrote in message
> news:BbSb8.145439$h31.11316363@e420r-atl1.usenetserver.com...
> > Hi Folks,
> > I'm putting up a G5RV inverted V for 40m - 10m and want to avoid TVI
for
> > the neighbors. The installation will be as follows:
> > 67' inverted V dipole with the apex at 30'. Feedline is 450 Ohm
"window"

> > ladder line down through an aluminum framed window into a MFJ 949E tuner
> > into my IC-730 and RigBlaster Plus/desktop PC.
> > Understanding that the dipole and feedline will radiate, what are
> optimum
> > feedline & dipole lengths to avoid TVI to the surrounding neighborhood?
> > Also, how great an impact will the ladderline to aluminum window frame
> have?
> > Any considerations that I haven't mentioned?
> > I know this is a simple system but appreciate advice and practical
> > experience tips before I put it up and draw negative attention from the
> > neighbors.
> > 73's,
> > Drink, WP3JQ
> >
> >
> >
>
>

3531. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 23:01:34 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a4ul7s$g3v$1@bob.news.rcn.net>
Source record: 148317

"R. Scott" <kf7qz@yahoo.com> wrote:

> I used to buy it a Boeing Surplus, but the last few trips down
> the road (An hour drive) have yielded Nada.

> Where do you guys find aluminium tubing for various projects.

Is this a question? If so, are you talking HF, VHF, or UHF here?
I've enjoyed using the tubing from the "Toy & Model" chain for
various UHF projects. It is cheap, and is available in aluminum
or brass.

3532. Re: antenna question for 900Mhz and 1800Mhz

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-19 23:08:31 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <TVAc8.11916$Lc2.1423141@news20.bellglobal.com>
Source record: 148318

"Apostolos"
> Hi,
>
> Is there a way to build a simple antenna to provide
> cellural(GSM 900,1800) connectivity from open
> ground to a basement that now lacks of it without
> the use of amplifier ?
> Actually the status now is that in a basement the
> cellural phones have no signal and I was wondering
> if there is something like a back-to-back antenna,
> that I could use to "transfer" the signal to this basement.
> Maybe this is a simple task but does anybody know
> where should I look? (links, books?)
>
> TIA

http://www.motortraders.com/antenna's.htm
11th item down. Act now - this offer may expire at any time.

More generally:
http://www.google.ca/search?q=cell+phone+booster+antenna+passive+-internal
You may have to reassemble the above link.
The "-internal" gets rid of those even-sillier internal thingies.

3533. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 00:05:17 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <p%Bc8.126902$TI5.7056056@e3500-atl2.usenetserver.com>
Source record: 148221

About 80% of the time when I hear of or see noise issues, it involves Ford vehicles. I don't know why, but it just seems that way. It was that way back in the 60s when I first started put-
ting radios in cars. We used to be sitting at home listening to the AM radio (FM was just com-
ing into vogue) when ignition noise would appear and rise in crescendo. One of us would remark, "There goes a Ford", and sho' nuff, you could look out the window and there'd be a
Ford driving by! No kidding! <<g>> Now, I know there's bound to be diehard Ford fans
reading this, but I went away from Ford in the early 70's not only because of the noise problems, but on account of reliability issues as well. Ford gave me strong legs and a spelling
lesson--all in one; I learned to spell F O R D backwards. Driver Returning On Foot! LMAO!
To this day, I refuse to own a Ford and opt, instead, to buy vehicles that always "dress for dinner"; they always have a "bowtie" on! And the only "noise" I hear is the sound of the radio!

Jerry
K4KWH
35 year Chevy driver (snicker)

Bill Turner <w7ti@dslextreme.com> wrote in message
news:lj837uc33cackel092hsjsh0mv8tn6tbvv@4ax.com...
> On 18 Feb 2002 13:21:54 -0800, nm5k@wt.net (Mark Keith) wrote:
>
> >I think
> >the most noise I've had on HF mobile was due to tire static at high
> >speeds. I've heard of some "dust" that can help on that, but I've
> >never tried it. Also some say to ground your wheel bearings with a
> >spring inside the cap.
>
> _____
>
> FWIW, my '97 Escort wagon had what must have been plastic bearings on
> the front wheels. Absolutely zero connection measured between the wheel
> and body, even when rotating the wheel. I contacted the local Ford
> dealer and they spent a fair amount of time researching the problem, but
> never found a solution. The wheel static was horrendous.
>
> I finally sold it, but before buying the next car (Dodge Spirit) I
> measured the wheel-body resistance. Being essentially zero, I took it
> and have no wheel static at all. Did get some odd looks from the
> dealer, though.

>
> Bill, W7TI

3534. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 00:14:19 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C72EA5B.88B6E627@IEEE.org>
Source record: 148219

Drink wrote:
> I do know this, the feed line length of the G5RV is stated and I don't
> know how to calculate a good feed line length for the doublet.

On my web page is a BASIC program that will give you the optimum feedline lengths for any dipole. I believe Reg has a similar program but I have misplaced his web page URL.
--
cheers, CAM http://www.qsl.net/w5dxp

3535. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 00:16:53 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C72EAF5.68E0705B@IEEE.org>
Source record: 148220

"R. Scott" wrote:
> Where do you guys find aluminium tubing for various projects.

http://www.texastowers.com has telescoping aluminum tubing available
in 6 ft and 12 ft lengths.
--
cheers, CAM http://www.qsl.net/w5dxp

3536. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 00:17:51 UTC
From: RaOuL <russ@bit-net.nospam.com>
Message-ID: <I_Bc8.399$_T4.3853@news.bit-net.com>
Source record: 148222

I have a friend who does alot of driving around town. He sees alot of unused CB antennas in various states of dis-repair on rooftops in his travels. You would be surprised with how many homeowners are happy to give their old CB antennas to a guy who offers to take it down safely for them. He has developed such a surplus of various tubing sizes that he has given me and a few other friends large supplies of aluminum tubing to work with. I'm not sure of his exact approach but whatever it is, it sure works!
73,
Russ - KB1GKN

"R. Scott" <kf7qz@yahoo.com> wrote in message
news:3C72C77F.E3C3E821@yahoo.com...
> I used to buy it a Boeing Surplus, but the last few trips down the road
> (An hour drive) have yielded Nada.
>
> Where do you guys find aluminium tubing for various projects.
>
>
> Rick KF7QZ

3537. Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 01:35:51 UTC
From: Marty <marty1225@earthlink.net>
Message-ID: <X3Dc8.1631$0C1.142100@newsread1.prod.itd.earthlink.net>
Source record: 148223

I need to cobble up a dummy load for some quick xmitter tests. The only resistors I have are 10 ohm 20 watt wire wound resistors which I can connect in series to yield 50 ohms.

What would be the effect of the inductance of these resistors on a measurement of swr, and is there some way to compensate for it?

Any suggestions would be appreciated.

3538. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 01:52:54 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a4uvv2$3es22$1@ID-124126.news.dfncis.de>
Source record: 148228

Hi Drink,

Click URL below to download program DIPOLE2 for any dipole, any height, any balanced pair feedline Zo, length, velocity, any balun, any coax feedline Zo, length, velocity, and any L-tuner. But, as the program will show, a long length of coax rapidly decreases overall efficiency on a mult-band antenna system at the higher frequencies. Keep it as short as possible or you may have peculiar values of L-network components or L-network loss.

If you are that way inclined, you can use coax all the way from from Tx to antenna just by setting the length of twin-line to zero. Or vice-versa.

DIPOLE2, to cater for any type of feedline, asks the user to enter all wire diameters. The program needs wire diameters to compute transmission loss on the line and take SWR into account. For example, the user is more likely to know the approximate value of coax inner conductor diameter than the resulting dB. If you know the dB per 100 feet then vary wire diameter until the calculated dB/100 feet equals what you have in mind. Same applies to ladder line, or open wire line, or antenna wire diameter. But wire diameter is a non-critical dimension. A sensible guess is usually good enough.

The majority of users will use metric measurement units. It may be useful to know dB per 100 feet is as near to dB per 30 metres as dammit is to swearing.

Hit one key for a G5RV already set up for the user to experiment with modifications to see what happens to performance. Most likely you will improve it.

But see CAM, W5DXP, http://www.qsl.net/w5dxp for how to replace a tuner with a variable-length 450-ohm ladderline. Flimsy 300-ohm line is not recommended.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****
CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C72EA5B.88B6E627@IEEE.org...
> Drink wrote:
> > I do know this, the feed line length of the G5RV is stated and I don't
> > know how to calculate a good feed line length for the doublet.
>
> On my web page is a BASIC program that will give you the optimum feedline
> lengths for any dipole. I believe Reg has a similar program but I have

> misplaced his web page URL.
> --
> cheers, CAM http://www.qsl.net/w5dxp

3539. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 01:52:59 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <pvv57u09vsvg6mb740c15sarbuvp2gmi96@4ax.com>
Source record: 148226

On Wed, 20 Feb 2002 01:35:51 GMT, "Marty" <marty1225@earthlink.net>
wrote:

>What would be the effect of the inductance of these resistors on a
>measurement of swr, and is there some way to compensate for it?

I tried the same thing once. You can tune out the inductive reactance
with a variable capacitor in series, but in my case, the voltage
developed across the capacitor was very high - too high to run more than
just a few watts with the capacitor I had.

The more inductance in the resistors, the less capacitance required.
The less capacitance, the more reactance, and for a given power level,
the more voltage developed across that reactance.

Somewhat counter-intuitive, but true. Go ahead and try it anyway. It's
not too often one has a chance to observe something like this.

Bill, W7TI

3540. Re: antenna question for 900Mhz and 1800Mhz

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 01:57:01 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4uvpd$11q$14@quark.scn.rain.com>
Source record: 148227

Apostolos <apostoloss@yahoo.com> wrote:

> Is there a way to build a simple antenna to provide cellural(GSM
> 900,1800) connectivity from open ground to a basement that now lacks
> of it without the use of amplifier ?
> Actually the status now is that in a basement the cellural phones have
> no signal and I was wondering if there is something like a
> back-to-back antenna, that I could use to "transfer" the signal to
> this basement.

Yes, back to back antennas work - sometimes. Use a high gain antenna
pointed at the cell site and and either an omnidirectional or a
panel antenna in the basement.

> Maybe this is a simple task but does anybody know where should I look?
> (links, books?)

Whether it will work or not depends on the signal strength available at
the roof, the antenna gains and the losses in your coax, arrester,
connectors etc.

I have used the technique a couple of times. Don't expect miracles.

--
Bill Nelson (billn@peak.org)

3541. kevlar core antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 02:17:28 UTC
From: David Panek <dpanek@mindspring.com>
Message-ID: <a4v0r6$r1u$1@slb0.atl.mindspring.net>
Source record: 148229

Does anyone know of a source for kevlar cored antenna wire such as that used
by the military?
It is similar to litz wire.
It may have another synthetic core other than kevlar.
Thanks
David Panek
dpanek@mindspring.com
KE4MLV

3542. Re: "Far Field (UK)" - Was: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 02:56:01 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0202191856.73778fb9@posting.google.com>
Source record: 148230

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:<V9jc8.42878$JZ.4610918@news20.bellglobal.com>...
> The "UK" definition of "Far Field" that I met in Great Malvern, UK was
> something like the following:
>
> When ray tracing from a structure (like an airplane) that is illuminated by
> RF (like from a low directivity antenna installed on that same airplane),
> the "far field" is where you are sufficiently far away that you don't have
> to keep track of the exact distance from the structure (airplane) to the
> viewer (plot surface). In other words, once the "rays" leave the structure
> and are heading towards infinity, then the algorithm simply adds them up
> immediately without concern for the intervening distance (between the
> structure and infinity - obviously !). Once you are sufficiently far away
> (in the "Far Field(UK)"), this is a reasonable mathematical approach. The
> distances are extreme.
>
> On the other hand, if you ask the program to calculate the "near field",
> then the software will ask you for the exact (!) distance of the plot
> surface from the origin. The antenna gain pattern at some angles may be
> sensitively dependent upon the exact distance. It may also be dependent
> upon where in (or near) the structure (airplane) the origin just happens to
> be. If you want the plot at 30 meters distance, then the program will take
> that as exactly 30 meters and will keep track of the phases of the
> contributing rays and add them up (accounting for exact phase of each) on
> the surface of a sphere exactly 30.00000 m from the origin. Basically, you
> only ask for the near field plot if you are trying to reproduce (explain)
> actual measurements that are always made in the "Near Field (UK)". Such
> attempts are difficult (impossible) due to the sensitive dependencies
> mentioned above.
>
> These UK are not my definitions - I'm not going to defend them. Perhaps
> there should be some new words made up to describe these "Far Field (UK)" /
> "Near Field (UK)".

What you describe doesn't sound that much different than the question
in the other thread. If the far-field pattern of the cell base antenna
is to be computed, all the rays from the antenna are basically
parallel and the contributions are added up. For a near-field pattern,
the vector sum of the rays is computed.

If the algorithm is well done, a near-field pattern computed at a
far-field distance *should* be pretty much like the far-field pattern
computed at the same far-field distance. OTOH, a far-field pattern
computed at a near-field distance should be nothing like the
near-field pattern computed at the same near-field distance.

> How about "Flugerbooten" and "Nergerbooten" ?

Nah. Makes it too simple. 73,
Bill N3WK

3543. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 03:01:53 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7311A1.140FC181@IEEE.org>
Source record: 148231

Marty wrote:
>
> I need to cobble up a dummy load for some quick xmitter tests. The only
> resistors I have are 10 ohm 20 watt wire wound resistors which I can
> connect in series to yield 50 ohms.
>
> What would be the effect of the inductance of these resistors on a
> measurement of swr, and is there some way to compensate for it?
>
> Any suggestions would be appreciated.

What Dale does is to wind another resistive wire winding on top of the
first one with the curl opposite to the first winding.
--
cheers, CAM http://www.qsl.net/w5dxp

3544. Re: Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 03:18:46 UTC
From: aa1ll@email.com
Message-ID: <e85be400.0202191918.6294e97b@posting.google.com>
Source record: 148232

kg4pss@arrl.net (kg4pss) wrote in message
news:<a3866922.0202191003.41779f4c@posting.google.com>...
> >From this and your follow up post I guess that this wire will be only
> a few >feet above ground.
>
> Yes. Probably a "V" w/ 30-35' center, although a semi-flat top at
> 20-30' might be an alternative.
>
> > I suggest that you consider a trap dipole for your three bands. Forget the
> > ladderline since it is such a small part of the overall transmission line and >is way
more trouble than ....
>
>
...
.
.....(snip)
.
...

.....the tuner has to do, the better. (If I ever get
> a suitable spot to try Cecil's creation, the tuner will live in the
> Jeep, anyway :)
>
> > Welcome to the fold.
>
> Thanks. Too bad my Elmer wasn't around to get me off my duff 25 years
> ago (when time and money both seemed more abundant)! If there's a wall
> of shame for those who procrastinate getting their ticket, I reckon I
> ought to be on it.

You have not considered the additional feedline loss from the coax
when it is not matched nor the loss in radiation efficiency due to the
finite Q traps acting as resistors at resonance. But really the
simple way out especially if you're temporary, is to put up a piece of
#16 copper wire as long and high as you can get it and feed it exactly
in the center with low loss open wire transmission line of length
determined by the location, even 300 ohm TV twin lead. You really
don't need a balun but you do need a tuner. (If you're a normal ham
you always will need something to tune, to make you believe you're
optimizing something.) Quick, simple, light, and satisfying-- believe
me, I've done it since 1957.

73, Paul, AA1LL
Mason, NH
http://www.qsl.net/aa1ll

3545. All HF Bands Radiation Patterns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 03:44:47 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C731BAF.1CEC9862@IEEE.org>
Source record: 148233

I have put the horizontal and vertical radiation patterns for my 130 ft
All-HF-Band antenna on my web page along with the Smith Charts showing
the matching method I am using. Just click on the URL below.

The radiation patterns are the same for any 130 ft dipole, 40 ft high,
used as an all HF band antenna.
--
cheers, CAM http://www.qsl.net/w5dxp/notuner.htm

3546. Re: All HF Bands Radiation Patterns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 04:03:14 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <9eFc8.44525$JZ.5178167@news20.bellglobal.com>
Source record: 148235

"CAM" mentioned:
> I have put the horizontal and vertical radiation patterns
> for my 130 ft All-HF-Band antenna on my web page...

I was all excited there for a minute. I thought that I might have some material to enter into MS Excel to double check your patterns (make sure the overall average gain hasn't wandered up past 0.0 dBi) and to estimate the overall efficiency. Then I realized that these plots were *predicted* radiation patterns from EZNEC and not measurements. Oh well - saves me a couple of hours work...

3547. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 04:04:38 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <u7681a5i425k0f@corp.supernews.com>
Source record: 148234

Use care in using wind survival ratings. The standard contains a factor to account for gusts. (this is good) Some manufacturers use no such factor.(this gives you a number that is unrealistically too high - bad) In other words, the peak pressure, which is approximately proportional to the square of the wind velocity, that an antenna element can withstand without permanent deformation is the number you want, but will not get. At least one good antenna that is for sale has elements that all will bend at about the same pressure (good design), however the wind velocity stated corresponds to the theoretical pressure of a smooth flow of air. Without ice, it will hold together 'till about 55 mph (as measured by the weather people), but will be long gone before reaching the specified 80 mph.
Survival specifications of yagi/LPA type antennas should be given in terms of pressure to cause deformation of the most weak part when the wind is head on and again when normal to the boom. (It would also be nice to have the same pair of numbers when the elements are encased in 0.5 inches of ice and to have the effective area in both directions) One could then apply a safety factor appropriate to the material and to the gustiness of the wind. The SF should also have a height factor and a roughness factor. (Flat, rural, treeless land has quite a different wind characteristic than that of a residential tract.) It is a pain to have to calculate these numbers in order to know when an antenna is likely to fail and in order to know the force loads on the supporting tower.
So.... ask what equation is used to relate the specified wind velocity to pressure.
<rant mode off.> 73 Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net
Office: JCM@McLMcL.Com
"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message news:3c71c22b_1@news1.prserv.net...
> Bryan:
>
> It is an industry standard rating. Obtain a copy of the latest revision of
> EIA Standard RS-222, "Structural Standards for Steel Antenna Towers and
> Antenna Supporting Structures" for background and test information for
> outdoor antenna structures. You will find a map of expected wind velocities
> in the US, and the statistics used to develop a consensus survival standard.

>
> --
> Crazy George

3548. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 04:23:10 UTC
From: MRR <PacificCommonwealth@SecuritiesDealer.com>
Message-ID: <3C7324A7.B5038CF8@SecuritiesDealer.com>
Source record: 148236

Dear Pat:

Even reading Larry Cebik's articles, my statement is still stands. The B&W dipole is simply a very
ineffective antenna. This is the collective experience of many hams. I would refer you to eHam for the
ratings of and experiences with the antenna. For the average ham, this is a better place to start when
trying to make some initial and relative comparisons of antenna effectiveness . . . bias' nothwithstanding.

Ron W7MRR

Patrick Croft wrote:

> The question was relating to the specific parts used in the B&W T2FD.
> Here is the basic details for the B&W which is available on the B&W
> website (when all else fails, read the manual - this case, the
> website). A Google search produced over a dozen sites that list
> construction details. I suggest anyone considering fabricating this
> type of antenna do a little reading. You'll quickly note variations of
> formula and mechanical methods used.
>
> The overall antenna length is 90 feet, it's spreaders are 18", the
> terminating load resistance is 600 ohms, it uses a 12:1 balun and
> depending upon which model, either copper weld or SS wire, 14 or 12
> gauge. All of the spreaders (0.5" tubing) and the enclosures for the
> load and balun are made from PVC pipe.
>
> That should resolve the posters original questions.
>
> As to the comments its a resistor on the end of coax, I suggest you read
> up on transmission lines and review termination effects on varying
> wavelengths. A excellent site to get you started in your education is
> Larry Cebik's, www.cebik.com. L.B. has a couple well written articles
> on the matter dealing with facts, not bias. A frequency sweep of the
> T2FD will quickly show that it is like most non resonant antennas in
> efficiency. That is, reduced efficiency where it is shorter than a half
> wave at the frequency of interest and a greater efficiency where it is
> longer than a half wave. No new physics here.
>
> Bests,
>
> Patrick
> W9GTA

>
> Irv Finkleman wrote:
> >
> > MRR wrote:
> > >
> > > Tom:
> > >
> > > You could save yourself some money by just taking a piece of coax and attaching a heavy duty 50
> > > ohm resister to the end of it, submerging it in oil [commonly called a dummy load] and transmitting
> > > on it.
> > >
> > > This antenna is a really poor performer. If you find a ham claiming they have worked 200+
> > > countries with this antenna, make a bid for his QTH because he has to be located on an island
> > > surrounded by water or on top of a salt mine. In other words, any good experience with this antenna
> > > is due to the QTH and not the antenna. The terminating resister in this antenna is used to give you
> > > the 50 ohm match, just like the dummy load.
> > >
> > > Good luck.
> > >
> > > Ron W7MRR
> >
> > Baloney! You have demonstrated a high degree of ignorance
> > of antennas
> > with your reply. I doubt if you have ever owned one -- a
> > B&W Broadband
> > Dipole that is. I had one for quite some time, and used it
> > at two different
> > locations, and had very good results. I've also had
> > inverted vees and beams,
> > and although the B&W was down a bit, it provided a number or
> > good years of
> > fun on the bands.
> >
> > >
> > > > Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> > > > is used? What is spreader length? What kind of trap?
> > > >
> > > > I would like to make one for my own use.
> > > >
> > > > TNX
> > > > Tom
> >
> > --
> > Diagnosed Type II Diabetes March 5 2001

> > Beating it with diet and exercise!
> > 297/215/210 (to be revised lower)
> > 58"/43"(!)/44" (already lower too!)
> > --------------------
> > Visit my website at http://members.home.net/finkirv/
> > --------------------
> > Irv Finkleman,
> > Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> > Calgary, Alberta, Canada

3549. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 04:29:25 UTC
From: MRR <PacificCommonwealth@SecuritiesDealer.com>
Message-ID: <3C732625.1B28A136@SecuritiesDealer.com>
Source record: 148237

Hi All!

Irv just made it clear that his experience with the antenna was "down from other antennas" which is
what I would call poor, but for what I must assume are sentimental reasons, he thinks it is a good
antenna. So, for those of you who want an antenna that is "down a bit," here's your chance to get an
under performer. Just tell them Irv sent you!

For those hams who are interested in relative performance, I would suggest you check eHam (http://www.eham.com/) for a review of this antenna by your contemporaries. You will see that it doesn't
do very well with most hams that have purchased it. It is rated 3 out of 5 (5 being very good) and to
quote one ham, it is a "high priced dummy load."

Ron W7MRR

Irv Finkleman wrote:

> MRR wrote:
> >
> > Tom:
> >
> > You could save yourself some money by just taking a piece of coax and attaching a heavy duty 50
> > ohm resister to the end of it, submerging it in oil [commonly called a dummy load] and transmitting
> > on it.
> >
> > This antenna is a really poor performer. If you find a ham claiming they have worked 200+
> > countries with this antenna, make a bid for his QTH because he has to be located on an island
> > surrounded by water or on top of a salt mine. In other words, any good experience with this antenna
> > is due to the QTH and not the antenna. The terminating resister in this antenna is used to give you
> > the 50 ohm match, just like the dummy load.
> >
> > Good luck.
> >
> > Ron W7MRR
>
> Baloney! You have demonstrated a high degree of ignorance

> of antennas
> with your reply. I doubt if you have ever owned one -- a
> B&W Broadband
> Dipole that is. I had one for quite some time, and used it
> at two different
> locations, and had very good results. I've also had
> inverted vees and beams,
> and although the B&W was down a bit, it provided a number or
> good years of
> fun on the bands.
>
> >
> > > Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> > > is used? What is spreader length? What kind of trap?
> > >
> > > I would like to make one for my own use.
> > >
> > > TNX
> > > Tom
>
> --
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> --------------------
> Visit my website at http://members.home.net/finkirv/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

3550. WANTED: Optolinx, CT17, CT-17, CIV, CI-V, ICOM MANUALS IC-R7100,ICR7100, IC7100, R7100, 7100

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 05:45:15 UTC
From: ddmga@yahoo.com
Message-ID: <296ea75a.0202192145.118730c@posting.google.com>
Source record: 148238
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,it.hobby.radioamatori,rec.radio.swap

WANTED: Optolinx, CT17, CT-17, CIV, CI-V, ICOM MANUALS IC-R7100, ICR7100, IC7100, R7100, 7100

DDMGA@YAHOO.COM

3551. Re: CC&R's - If the South had won The War ....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 05:53:56 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C747E16.BFC825A3@worldnet.att.net>
Source record: 148239

Bill Nelson wrote:

> It does not deal with CC&Rs, which are not ordinances. They are contract
> clauses made between the buyer and the homeowner's association having
> enforcement rights.
>

Are they not an integral part of the deed, clauses written into
the title to the land which restrict the use of the land? There doesn't
have to be a HOA involved, although sometimes there is.

Dick

3552. Re: G5RV Window Line Length vs. TVI

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 06:06:45 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <a3Hc8.415$1f2.119284760@news.inreach.com>
Source record: 148241

Dick:

Moving the antennas away from the house is not quite the same thing as curing TVI by eliminating feedline radiation, but you are correct--getting the radiation as far away from sensitive devices is always recommended.

Roger

3553. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 06:24:43 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C74854E.48BCCAE4@worldnet.att.net>
Source record: 148240

Richard Harrison wrote:

> John, KU6X wrote:
> "This would imply that large area noise sources closest to the ground
> are the most significant."
>
> Wonder if anyone has tried adding powdered graphite to the wheel bearing
> grease?. It sure wont hurt the lubrication, but it would make it look
> nasty.

I've seen wheel bearing grease that looked like it had graphite
powder in it, tho I'm not certain it did.

Dick

3554. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 06:38:02 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C74886E.3D2FC8E@worldnet.att.net>
Source record: 148242

"R. Scott" wrote:

> I used to buy it a Boeing Surplus, but the last few trips down the road
> (An hour drive) have yielded Nada.
>
> Where do you guys find aluminium tubing for various projects.

Check the yellow pages for "metal products". Every city has some, and they
sell tubing among other useful metal things.

Dick

3555. Re: CC&R's - If the South had won The War ....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 07:54:52 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4vkochro6@quark.scn.rain.com>
Source record: 148243

Dick Carroll <dickc58@worldnet.att.net> wrote:

>> It does not deal with CC&Rs, which are not ordinances. They are contract
>> clauses made between the buyer and the homeowner's association having
>> enforcement rights.

> Are they not an integral part of the deed, clauses written into
> the title to the land which restrict the use of the land? There doesn't
> have to be a HOA involved, although sometimes there is.

They are often not in the deed itself, but are referenced as a separate
document.

If there is not any body to enforce CC&Rs - you will not find any
city or county enforcing them.

--
Bill Nelson (billn@peak.org)

3556. Re: Tower setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 07:59:08 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a4vl0chro7@quark.scn.rain.com>
Source record: 148244

Andre <aswal@optusnet.com.au> wrote:
> I have a triangular tower and I want to mount the rotator inside the tower
> to take the strain off it. I have been told I will need to put some bearings
> in the tower to support the weight of the aerials and help with the "side to
> side" support, but don't really know how this is done. Anyone have any
> suggestions/Webster/pics that might help. I would also like to add a break
> as well and was thinking of using an old boot opening solenoid to achieve
> this, again any ideas on this would be great.

What you want is a "thrust bearing" at the top of the tower. This can
be as simple as a sleeve inside which the antenna mast rotates, but better
is an actual bearing. Best is a bearing that clamps to the mast itself, so
the bearing can take the weight of the mast and antennas - instead of the
rotator having to do so.

--
Bill Nelson (billn@peak.org)

3557. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 08:07:55 UTC
From: Hairy Harry <harmsharry-@dingoblue.net.au>
Message-ID: <3c7358c1$0$1368$afc38c87@news.optusnet.com.au>
Source record: 148245

When we owned a fleet of big rigs each one equipped with commercial HF,
tyre static in dry weather was a problem, we cured it with putting graphite
powder in the outer bearing assembly, and dusting the inner of the inner
tyre with graphite powder.. 20 plus over noise was reduced to a very
acceptable noise level.
HH
"Dick Carroll" <dickc58@worldnet.att.net> wrote in message
news:3C74854E.48BCCAE4@worldnet.att.net...
>
>
> Richard Harrison wrote:
>
> > John, KU6X wrote:
> > "This would imply that large area noise sources closest to the ground
> > are the most significant."
> >
> > Wonder if anyone has tried adding powdered graphite to the wheel bearing
> > grease?. It sure wont hurt the lubrication, but it would make it look
> > nasty.
>
> I've seen wheel bearing grease that looked like it had graphite
> powder in it, tho I'm not certain it did.
>
> Dick
>

3558. Yaesu ATAS-100 documentation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 09:29:23 UTC
From: Gilberto Campos <gilberto.campos@portugalmail.pt>
Message-ID: <e28a0145b0aed27741abdeb9ed593247.14968@mygate.mailgate.org>
Source record: 148246
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Hi!

Does anyone have any in-depth documentation for the Yaesu Atas-100
antenna (meaning schematics, service manual or similar, accessories), or
pointers to such?
I've searched the net but found very few references, most of which are
reviews. Only wa8lmf has something to homebrew a DC-coupler. Yaesu site
itself has nothing on this antenna.

Thanks to whoever may help me.

73 de iz2dhn/ct2dac,
Gilberto

--
Posted via Mailgate.ORG Server - http://www.Mailgate.ORG

3559. WTB Tower and Rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 12:36:58 UTC
From: Harry Brown <harryhbrown@earthlink.net>
Message-ID: <KLMc8.2427$0C1.244179@newsread1.prod.itd.earthlink.net>
Source record: 148247
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

I'm looking for a 30 to 40 ft Aluminum Crankup tower and a ham-m or Yaesu Rotator. Please state price, condition and location. My location is the central east coast of Florida.

thanks and 73,

Harry, W3IIT/4
EL98QE

3560. WTB 30 to 40 ft Aluminum Tower and Rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 12:36:59 UTC
From: Harry Brown <harryhbrown@earthlink.net>
Message-ID: <LLMc8.2428$0C1.244179@newsread1.prod.itd.earthlink.net>
Source record: 148248
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

WTB 30 to 40 ft Aluminum Crankup Tower and Ham M or Yaesu Rotator. Location central east coast of Florida.

Please state price and conmdition.

73, Harry, W3IIT
EL98QE
w3iit@arrl.net

3561. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 12:49:28 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C739A36.AEEF82E6@bellatlantic.net>
Source record: 148249

You could probably use a tuner to achieve a conjugate match.

Marty wrote:

> I need to cobble up a dummy load for some quick xmitter tests. The only
> resistors I have are 10 ohm 20 watt wire wound resistors which I can
> connect in series to yield 50 ohms.
>
> What would be the effect of the inductance of these resistors on a
> measurement of swr, and is there some way to compensate for it?
>
> Any suggestions would be appreciated.

3562. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 13:18:07 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <vbr9fpBPI6c8EA9r@ifwtech.com>
Source record: 148250

Bill Klocko wrote:
>"Ian White, G3SEK" <G3SEK@ifwtech.com> wrote in message
>news:<4yVo1mL08hc8EAMk@ifwtech.com>...
>> This is not a US/UK language difference. Since there is no sharp
>> physical boundary between the near and far field, maybe it's to be
>> expected that there are a number of alternative definitions, depending
>> on the viewpoint.
>>
>> I was using "near field" to identify the region along the axis of a dish
>> (or other aperture antenna) that has a peak in power density at its far
>> edge. That's where the E and H fields are starting to get their phase
>> together. The near-side rising edge of the peak is formed by increasing
>> phase convergence; the far-side falling edge is formed by the inverse
>> square law taking over as we move out into the far field.
>
>That's what I'm familiar with - I'm glad we're talking the same
>language.
>
>> The distance of the peak is approximately 0.2D^2/lambda (that's zero
>> point 2, not 2 as Bill wrote). With large apertures and small
>> wavelengths this distance can become surprisingly great.
>
>Now we're talking 2 different things here. The usual definition for
>the edge of the near-field region is 2D^2/lambda. As the distance
>decreases from 2D^2/lambda, the power density is less than what it
>would be if it was computed using the antenna's far-field gain. In
>effect, the gain of the antenna is reduced. At some distance the power
>density peaks, just like you say. Your distance at which this occurs
>is 0.2D^2/lambda, or one-tenth of the distance to the boundary of the
>far-field region. That's probably a pretty good approximation for a
>circular aperture, uniform distribution, etc., etc.
>
>> At about twice
>> that distance the power density is within a few percent of what we'd
>> have predicted from a far-field inverse-square calculation, treating the
>> antenna as a distant point source. But the peak is definitely a
>> near-field effect because an inverse-square calculation doesn't predict
>> any peak at all.
>
>I'd agree. 2D^2/lambda seems to be a very strict definition. If you're
>interested only in the distance at which the near-field gain
>approximately equals the far-field gain, the distance can be relaxed.
>0.4D^2/lambda is also probably a pretty good approximation.

Looks good to me - only a few days ago I was having to defend
0.2D^2/lambda as being in the near field at all!

What it does mark is "the beginning of the end," the point where the
power density peaks before it drops off to converge with the far-field
value. As you say, 0.4D^2/lambda may be OK for some applications, but
2D^2/lambda is widely used as the minimum acceptable length of an
antenna range for accurate gain measurement.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

3563. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 13:34:28 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C73A5E4.EF923E8A@yahoo.com>
Source record: 148252

> Is this a question? If so, are you talking HF, VHF, or UHF here?
> I've enjoyed using the tubing from the "Toy & Model" chain for
> various UHF projects. It is cheap, and is available in aluminum
> or brass.

Yes it was :)

Vhf/Uhf mostly, I use wire antennas or my A3 for HF work :)

I like to build different 2m and 70cm antennas just to see how they work
and if they are decent. Usually give them to friends who need beams.

Built several 3 ele 2 meter beams on PVC with Aluminium rod, using a
split driven elem for feed. Cant find the rod anymore.

Toy and Model chain huh, well Ill ahve to go find some of that.

Rick KF7QZ

3564. TV signal vert. or horiz....?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 13:38:58 UTC
From: carkenord@juno.com
Message-ID: <4346b55e.0202200538.15e374e1@posting.google.com>
Source record: 148251

The signal transmitted (the video part) from a television station (channels 2 thru 12).....is that signal vertically or horizontally polarized?

Lee Carkenord KA0FPJ

3565. Re: Yaesu ATAS-100 documentation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 14:14:18 UTC
From: "KMA Antennas"
Message-ID: <slb77us848qfpi7qrlco3vdibga7mf2tol@4ax.com>
Source record: 148253

I found some information on the internet some time ago and placed it
on my web site for storage. The quality is not the greatest. The url
is http://www.kmaantennas.com/ATAS/ATAS-100_Info.html

73
Ed

On Wed, 20 Feb 2002 09:29:23 +0000 (UTC), "Gilberto Campos"
<gilberto.campos@portugalmail.pt> wrote:

>Hi!
>
>Does anyone have any in-depth documentation for the Yaesu Atas-100
>antenna (meaning schematics, service manual or similar, accessories), or
>pointers to such?
>I've searched the net but found very few references, most of which are
>reviews. Only wa8lmf has something to homebrew a DC-coupler. Yaesu site
>itself has nothing on this antenna.
>
>Thanks to whoever may help me.
>
>73 de iz2dhn/ct2dac,
>Gilberto

KMA Antennas
VHF - UHF - HF log periodics
http://www.kmaantennas.com

Dayton fleamarket spaces 2828 - 2831

help support qsl.net with a donation
https://proxy.qsl.net/donation

3566. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 14:19:48 UTC
From: Larry <larry_culp@nospam.com>
Message-ID: <3C73B07F.3A9391C4@nospam.com>
Source record: 148254

I have used mcmaster-carr for all my tubing and aluminum rod needs.

Fast shipping, order on web or phone. their online catalog is also a
wealth
of information with technical specs on many products.

http://www.mcmaster.com/

73 larry

"R. Scott" wrote:

> I used to buy it a Boeing Surplus, but the last few trips down the road
> (An hour drive) have yielded Nada.
>
> Where do you guys find aluminium tubing for various projects.
>
> Rick KF7QZ

3567. Re: Where do you find aluminium tubing - Arrows!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 14:23:10 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C73B14E.25222697@crosslink.net>
Source record: 148255

"R. Scott" wrote:
>
> > ... are you talking HF, VHF, or UHF here?
>
> Vhf/Uhf mostly, I use wire antennas or my A3 for HF work :)
>
> I like to build different 2m and 70cm antennas just to see how they work
> and if they are decent. Usually give them to friends who need beams.
>
> Built several 3 ele 2 meter beams on PVC with Aluminium rod, using a
> split driven elem for feed. Cant find the rod anymore.

Check your local sporting goods store for aluminum arrow shafts: Very sturdy, about 1/4 - 3/8" diameter. I just picked up several on sale for $2 each. Good luck on your experiments & pls keep us posted on how they turn out.
KA3DWW

3568. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 14:29:16 UTC
From: richardharrison@webtv.net
Message-ID: <20262-3C73B2BC-4@storefull-113.iap.bryant.webtv.net>
Source record: 148257

Marty wrote:
"What would be the effect of the inductance of these resistors on a measurement of swr, and is there some way to compensate for it?"

Besides tuning out unwanted inductance, there is another problem to be taken into account. A wirewound resistor of 10 ohms at d-c has more than 10 ohms resisance at r-f de to skin effect.

Skin depth penetration in resistance wire at r-f is inversely proportional to the square root of the frequency. So, the higher the frequency, the higher the resistance. The r-f resistance of a wire-wound dummy load resistance will be higher for VHF than for HF.

For copper, penetration depth is 0.0026 inch at 1 MHz. Penetration depth is proportional to the square root of resistivity. So, r-f current will run deeper in resistance wire than in copper.

Find some real non-inductive resistors for your dummy load.

Best regards, Richard Harrison, KB5WZI

3569. Re: All HF Bands Radiation Patterns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 14:41:58 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C73B5B6.379147B0@crosslink.net>
Source record: 148256

CAM wrote:
>
> cheers, CAM http://www.qsl.net/w5dxp/notuner.htm

Cam, you are a *true* ham. 31' of ladder line, 5 4PDT relays plus a dozen or so ferrite beads instead of a store-bought tuner. Makes sense to me ... :o) I'll start scrounging for the parts ...
73, KA3DWW

3570. Re: TV signal vert. or horiz....?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 14:49:29 UTC
From: mcduffie@xactcom.net
Message-ID: <0qd77ugfi6o0qr94vej5agnve289r40str@4ax.com>
Source record: 148259

On 20 Feb 2002 05:38:58 -0800, carkenord@juno.com (Lee Carkenord) wrote:

> ...is that signal vertically or horizontally
> polarized?

Horizontal, sometimes circular. Hi Lee. Very long time no see!

Gary
--
There is no x in my ISPs domain name.

3571. Re: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:02:54 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <yUOc8.14220$BR3.847084@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148258

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:25627-3C71D153-380@storefull-111.iap.bryant.webtv.net...
> Bill Klocko wrote:
> "The far-field is "ususally" defined to occur at distance 2D^2/lambda."
>
> That`s a huge number for big dishes and small wavelengths. Death ray
> research may be more promising than we guessed.
>

Hi Richard:

That's one point many people don't understand. Many people assume that at high frequencies you don't need to be physically far away from the antenna to be in the far-field because the wavelength is small. At HF through UHF frequencies, you can be relatively close to the antenna in terms of wavelengths because the antennas are not usually large wrt the wavelength and the far-field develops at a physically closer distance. Typically, 50 - 200 feet is a reasonable distance to measure the far-field patterns for many of these antennas.

Dishes are another issue. They are usually large wrt the wavelength and the far-field develops at a farther distance. This is true of all higher gain antennas. We (former employer) used to measure far-field patterns on large dishes on a 4000 ft range and sometimes that was not long enough if the dish was really large. In that case, we had to probe the near-field and translate that into a far-field pattern.

Steve VE9SRB

3572. Re: More on Mobile Ignition Noise

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:10:44 UTC
From: richardharrison@webtv.net
Message-ID: <18929-3C73BC74-14@storefull-112.iap.bryant.webtv.net>
Source record: 148265

Hairy Harry wrote:
"When we owned a fleet of big rigs, each one equipped with commercial HF, tyre static in dry weather was a problem. We cured it with putting graphite powder in the outer bearing assembly and dusting of the inner tyre with graphite."

60 years ago, I worked as an auto mechanic. Yes, I was fixing radios on the side. We added graphite powder to speedometer cable grease to avoid clicks and ticks.

Graphite is a marvelous lubricant. It was my secret for the kids` pinewood derby winners. It only looks like a contaminating element in axle grease.

Best regards, Richard Harrison, KB5WZI

3573. Re: TV signal vert. or horiz....?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:11:16 UTC
From: SAM <xxscottm@xxnetcommander.comxx>
Message-ID: <o0Pc8.123190$Re2.10204195@bin6.nnrp.aus1.giganews.com>
Source record: 148260

Sometimes horizontal, sometimes circular, almost never vertical.

Scott M.

"Lee Carkenord" <carkenord@juno.com> wrote in message
news:4346b55e.0202200538.15e374e1@posting.google.com...
> The signal transmitted (the video part) from a television station
> (channels 2 thru 12).....is that signal vertically or horizontally
> polarized?
>
> Lee Carkenord KA0FPJ
>

3574. Re: Where do you find aluminium tubing - Arrows!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:26:44 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C73C034.DAFA3221@yahoo.com>
Source record: 148262

> Check your local sporting goods store for aluminum arrow shafts: Very
> sturdy, about 1/4 - 3/8" diameter. I just picked up several on sale for
> $2 each. Good luck on your experiments & pls keep us posted on how they
> turn out.
> KA3DWW

I have had others mention that, but, the ones Ive called so far for bare shafts want 25 bucks for 6 (Easton). Went to Kmart and Wally World and they dont carry them (Graphite only).

Such is life,

There is a place in Spokane called White Elephant. Next time Im over there Ill go check it out. I has a lot of Surplus Sporting goods.

I also have a psudo surplus sports store here that may have them

Thanks for the tip

Rick KF7QZ

3575. Re: TV signal vert. or horiz....?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:27:58 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C73C07E.3E7B742@coqui.net>
Source record: 148261

SAM wrote:
>
> Sometimes horizontal, sometimes circular, almost never vertical.
>
> Scott M.

Before circular became in vogue, some stations did use a bit of vertical
polarization but at a considerably lower ERP...presumably for better
saturation of the nearby rabbit ear market. I imagine there may be a
few remaining ones..."almost never" is accurate and even if it were
encountered it would probably be considerably weaker.
-Bill

>
> "Lee Carkenord" <carkenord@juno.com> wrote in message
> news:4346b55e.0202200538.15e374e1@posting.google.com...
> > The signal transmitted (the video part) from a television station
> > (channels 2 thru 12).....is that signal vertically or horizontally
> > polarized?
> >
> > Lee Carkenord KA0FPJ
> >

3576. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:40:27 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C73C36B.BC6275F@IEEE.org>
Source record: 148264

MRR wrote:
> For those hams who are interested in relative performance, I would suggest you check eHam
> (http://www.eham.com/) for a review of this antenna by your contemporaries. You will see
that it doesn't
> do very well with most hams that have purchased it. It is rated 3 out of 5 (5 being very
good) and to
> quote one ham, it is a "high priced dummy load."

I am amazed at hams who don't put two and two together. What do resistors do?
Dissipate power. What is the purpose of the T2FD resistor? To dissipate power.
Why does the resistor need to be able to dissipate half the transmitted power?
Because, on some frequencies, the resistor dissipates half the transmitted
power. That resistor costs money. They would not put it in the antenna if
it wasn't doing exactly what resistors do.
--
cheers, CAM http://www.qsl.net/w5dxp

3577. Re: Tower setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:44:45 UTC
From: John O'Flaherty <wewelcomespam@blackhole.net>
Message-ID: <3C73C46D.C79925B@blackhole.net>
Source record: 148263

Andre wrote:
>
> errr boot as in the back part of a car where u put your gear b4 a field day
> (lol)
> andre
> "Andre" <aswal@optusnet.com.au> wrote in message
> news:3c72fd69$0$16637$afc38c87@news.optusnet.com.au...
> > Hi Everyone,
> > I have a triangular tower and I want to mount the rotator inside the tower
> > to take the strain off it. I have been told I will need to put some
> bearings
> > in the tower to support the weight of the aerials and help with the "side
> to
> > side" support, but don't really know how this is done. Anyone have any
> > suggestions/Webster/pics that might help. I would also like to add a break
> > as well and was thinking of using an old boot opening solenoid to achieve
> > this, again any ideas on this would be great.

And break as in brake?

--
john

3578. Re: Tower setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:46:43 UTC
From: Andre <aswal@optusnet.com.au>
Message-ID: <3c746cc3$0$19659$afc38c87@news.optusnet.com.au>
Source record: 148207

mmm where did i get this spel cheker from anyway?
Andre
> And break as in brake?
>
> --
> john

3579. Re: Tower setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:48:51 UTC
From: Andre <aswal@optusnet.com.au>
Message-ID: <3c746d45$0$19661$afc38c87@news.optusnet.com.au>
Source record: 148208

Thanks gives me a few points to ponder
Andre
"KA9CAR" <nospam@nospam.usa> wrote in message
news:a50orc$t83$1@news1.tribune.com...
> My antennas tend to be under 10 sq feet.
> Rotors can take downward forces over 150 pounds for even the cheap rotor,
> what you want to control is the side force. In the case of my rotors the
> allowable antenna size is doubled by putting the rotator inside the tower.
>
> I have used two types of sleeves in the last 25 years.
>
> 1, I use standard electrical conduit as a mast. It is lighter than water
> pipe but
> seems to be just as strong. Nowhere near as strong as a real antenna mast
> though.
>
> when I had "flat top" towers, I bought a coupling, made to join two pieces
> of the conduit together and filed the rib out of the middle so the mast
> could pass through. I mounted the coupling in the top of the tower.
>
> I greased this point, and used car axel boots, or rubber plumbing adapters
> to create an umbrella to keep the water out of the bearing.
>
> Currently I have a "pointy top" tower, with a plain sleeve that is around
> 1.9" ID. My 1.75" mast just runs through the sleeve, (as the prior owner
> of this tower did for 30 years). I kept the umbrella arrangement.
>
> Having a little slop in the mast to tower bearing point, makes the
alignment
> of the rotator and the tower much less critical.
>
> KA9CAR
>
>
> Andre <aswal@optusnet.com.au> wrote in message
> news:3c72fd69$0$16637$afc38c87@news.optusnet.com.au...
> > Hi Everyone,
> > I have a triangular tower and I want to mount the rotator inside the
tower
> > to take the strain off it. I have been told I will need to put some
> bearings
> > in the tower to support the weight of the aerials and help with the
"side
> to

> > side" support, but don't really know how this is done. Anyone have any
> > suggestions/Webster/pics that might help. I would also like to add a
break
> > as well and was thinking of using an old boot opening solenoid to
achieve
> > this, again any ideas on this would be great.
> >
> > Andre
> >
> >
> >
> >
>
>

3580. Re: All HF Bands Radiation Patterns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:49:38 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C73C592.AE5DE450@IEEE.org>
Source record: 148266

"J. Harvey" wrote:
>
> "CAM" mentioned:
> > I have put the horizontal and vertical radiation patterns
> > for my 130 ft All-HF-Band antenna on my web page...
>
> I was all excited there for a minute. I thought that I might have some
> material to enter into MS Excel to double check your patterns (make sure the
> overall average gain hasn't wandered up past 0.0 dBi) and to estimate the
> overall efficiency. Then I realized that these plots were *predicted*
> radiation patterns from EZNEC and not measurements. Oh well - saves me a
> couple of hours work...

Sorry, my helicopter is grounded. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

3581. Re: All HF Bands Radiation Patterns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 15:52:34 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C73C642.4176B46@IEEE.org>
Source record: 148267

Vito wrote:
> Cam, you are a *true* ham. 31' of ladder line, 5 4PDT relays plus a
> dozen or so ferrite beads instead of a store-bought tuner. Makes sense
> to me ... :o) I'll start scrounging for the parts ...

That's 31' of ladder-line in addition to the 80' of ladder-line
that goes to the antenna. The 0-31' Ladder-Line Length Selector
allows one to fine the current maximum point (the sweet spot) on
the transmission line.
--
cheers, CAM http://www.qsl.net/w5dxp

3582. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 16:09:35 UTC
From: richardharrison@webtv.net
Message-ID: <20260-3C73CA3F-10@storefull-113.iap.bryant.webtv.net>
Source record: 148268

Bryan, KA9KHD wrote:
"I noticed that most antenna brands list wind survival rating of 80 mph and wonder why they pick that number?"

They need a standard for comparison. Winds exceeding 80 mph are uncommon. The pounds per square inch produced by 80 mph depend on surface shape and orientation.

Crazy George gave you a good answer by referring you to RS-222. Towers are often built for higher wind velocities than 80 mph for areas subject to higher winds.

Best regards, Richard Harrison, KB5WZI

3583. Opinion:Diamond X700HNA or Hustler G7-144

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 16:18:08 UTC
From: ibn_najed@hotmail.com
Message-ID: <49534383.0202200818.327d24e1@posting.google.com>
Source record: 148169

Hi ,

anyone has experience with the X700HNA or G7-144 also need u r

opinion what kind of coaxil cable for excellent results for run

up 40 meters.

All suggestions are very much appreciated

Bob

3584. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 16:23:16 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C73CD75.DDFEE905@umich.edu>
Source record: 148170

John Passaneau wrote:
>
> CAM as it right, mine is up 35' and I have 42 countries on 80 since August
> of last year. Worse yet mine is a trapped dipole for 80/40 and 30 meters.

Weird. Mine is up 30', and I have *never* heard DX on it. I've long-since
given up.

3585. FLASH!! AND ATTN REG EDWARDS!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 17:07:44 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <l6Rc8.144939$Tl5.7438185@e3500-atl2.usenetserver.com>
Source record: 148173

DO NOT OPEN EMAILS FROM REG. REG SENT ME A VIRUS THIS MORNING
AND I JUST FINISHED CLEANING IT OFF. REG, YOU NEED TO RUN YOUR VIRUS
PROGRAM..AND, YES, I KNOW I AM "SHOUTING" LOL!

73

Jerry
K4KWH

3586. Mast grounded-help with coax

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 17:21:31 UTC
From: gchsbrown@HOTMAIL.COM
Message-ID: <484583c6.0202200921.5a0fe1bf@posting.google.com>
Source record: 148171

Hi,
I am concerned about protecting my house against a lightening strike to my crossbow antenna. I have the antenna on a 10 ft mast with a clamp at the bottom from which I run copper wire #8 to an 8ft 1/2 in ground rod. The rod is buried beneath the antenna so a direct strike has a nice straight chase to ground(bout 25ft).

My base(second floor of house), service panel ground rod, and antenna are all on the East side of the house. The service ground is about 17 ft from my antenna ground. My base is about 12 feet from the antenna ground and on the second floor.

Questions:
1) How do I ground my coax? If the lightning strikes the antenna, couldn't it run into my house via the coax?
2) Can I bury the coax in the ground beneath the base before I run it into the house for protection?
3) Should I connect the service ground and antenna ground?
4)Is another ground rod advisable?

If I should ground the coax, could someone give me details such as how to ground it and with what type of hardware.

Since my base isn't worth much, my first two priorities are to reasonably protect my dwelling and the second is to not break the bank.

Help and suggestions are appreciated.
PS- Im still confused after reading the tech polyphaser material.

Jason
gchsbrown@hotmail.com

3587. Re: Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 17:31:05 UTC
From: kg4pss@arrl.net
Message-ID: <a3866922.0202200931.3bf8944d@posting.google.com>
Source record: 148172

>...feed it exactly in the center with low loss open wire transmission
line of length determined by the location, even 300 ohm TV twin lead.

> 73, Paul, AA1LL
> Mason, NH
> http://www.qsl.net/aa1ll

Paul,

The reason for using coax is that the line will be laying on the
ground when in use, and will be directly contacting metal when
entering the house. Am I correct that this would preclude the use of
twin-lead?

BTW- Nice website!

Thanks,

Allen

3588. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 17:34:08 UTC
From: richardharrison@webtv.net
Message-ID: <4534-3C73DE10-44@storefull-118.iap.bryant.webtv.net>
Source record: 148174

I wrote:
"The pounds per square inch produced by 80 mph depend on surface shape
and orientation."

I`ve found the "conventional figures" used by some antenna manufacturers
for "normal" antenna installations:
60 mph---11 lbs/sq ft of antenna
70 mph---15 lbs/sq ft
80 mph---20 lbs/sq ft
90 mph---25 lbs/sq ft
100 mph--30 lbs/sq ft

Antenna manufacturers should give the effective area of their antennas
for windloading calculations and estimates.

Best regards, Richard Harrison, KB5WZI

3589. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 17:43:54 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C73E05A.BB644EE@crosslink.net>
Source record: 148175

Robert Lyons wrote:
>
> John Passaneau wrote:
> >
> > CAM as it right, mine is up 35' and I have 42 countries on 80 since August
> > of last year. Worse yet mine is a trapped dipole for 80/40 and 30 meters.
>
> Weird. Mine is up 30', and I have *never* heard DX on it. I've long-since
> given up.

Could it be aimed in the wrong directions? I used a dipole cut for 40m
on 40 & 80 last field day. It was up only 30 feet, drooping to 10 but
worked OK as far away as the other (West) coast albiet no DX. To my
chagrin it went deaf when I installed it at home. Turned out the lobes
were pointing at the Yukon and So. Central Africa! Not many Hams either
place. Naturally YMMV.
73, KA3DWW

3590. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 17:51:07 UTC
From: richardharrison@webtv.net
Message-ID: <4534-3C73E20B-47@storefull-118.iap.bryant.webtv.net>
Source record: 148176

J. Harvey wrote:
"Better the antenna than the windscreen."

Reminds me of the storied loan by NASA of their "Chicken Cannon" to British Aerospace for windscreen testing.

The Brits asked: "What`s wrong with this thing? It takes out the windscreen, the pilot`s headrest, and knocks a hole in the bulkhead behind!"

NASA replied: "Thaw the chicken."

Best regards, Richard Harrison, KB5WZI

3591. Re: Tower setup

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 18:12:54 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a50orc$t83$1@news1.tribune.com>
Source record: 148177

My antennas tend to be under 10 sq feet.
Rotors can take downward forces over 150 pounds for even the cheap rotor,
what you want to control is the side force. In the case of my rotors the
allowable antenna size is doubled by putting the rotator inside the tower.

I have used two types of sleeves in the last 25 years.

1, I use standard electrical conduit as a mast. It is lighter than water
pipe but
seems to be just as strong. Nowhere near as strong as a real antenna mast
though.

when I had "flat top" towers, I bought a coupling, made to join two pieces
of the conduit together and filed the rib out of the middle so the mast
could pass through. I mounted the coupling in the top of the tower.

I greased this point, and used car axel boots, or rubber plumbing adapters
to create an umbrella to keep the water out of the bearing.

Currently I have a "pointy top" tower, with a plain sleeve that is around
1.9" ID. My 1.75" mast just runs through the sleeve, (as the prior owner
of this tower did for 30 years). I kept the umbrella arrangement.

Having a little slop in the mast to tower bearing point, makes the alignment
of the rotator and the tower much less critical.

KA9CAR

Andre <aswal@optusnet.com.au> wrote in message
news:3c72fd69$0$16637$afc38c87@news.optusnet.com.au...
> Hi Everyone,
> I have a triangular tower and I want to mount the rotator inside the tower
> to take the strain off it. I have been told I will need to put some
bearings
> in the tower to support the weight of the aerials and help with the "side
to
> side" support, but don't really know how this is done. Anyone have any
> suggestions/Webster/pics that might help. I would also like to add a break
> as well and was thinking of using an old boot opening solenoid to achieve
> this, again any ideas on this would be great.
>
> Andre
>
>
>
>

3592. Re: Where do you find aluminium tubing - Arrows!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 18:39:15 UTC
From: Martin Hibbs <mhibbs@ipeg.com>
Message-ID: <3C73ED53.A3B3B963@ipeg.com>
Source record: 148178

"R. Scott" wrote:

> There is a place in Spokane called White Elephant. Next time Im over
> there Ill go check it out. I has a lot of Surplus Sporting goods.
>
> I also have a psudo surplus sports store here that may have them
>
> Thanks for the tip
>
> Rick KF7QZ

Rick,

In Spokane try Alcobra located off Francis Ave. in Hillyard. They have a good selection of tubing of various sizes and don't require a minimum purchase. Pacific Metals on Dollar Rd. (not Pacific Hide and Fur which 'sometimes' has tubing) also carries tubing and solid rod of various sizes. You might be able to talk them into a less than minimium purchase.

marty...
N7MX

3593. Re: Homebrew G5RV question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 18:44:11 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C73EE7B.8623A93E@IEEE.org>
Source record: 148180

kg4pss wrote:
> The reason for using coax is that the line will be laying on the
> ground when in use, and will be directly contacting metal when
> entering the house. Am I correct that this would preclude the use of
> twin-lead?

Twin-lead needs to be kept at least a couple of diameters away from
anything conductive. If you are unlucky enough to have a voltage
maximum located at a window's metal flashing, you may indeed see
flashing.
--
cheers, CAM http://www.qsl.net/w5dxp

3594. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 18:45:28 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C73EEC8.6B3E1EF2@IEEE.org>
Source record: 148181

Robert Lyons wrote:
>
> John Passaneau wrote:
> >
> > CAM as it right, mine is up 35' and I have 42 countries on 80 since August
> > of last year. Worse yet mine is a trapped dipole for 80/40 and 30 meters.
>
> Weird. Mine is up 30', and I have *never* heard DX on it. I've long-since
> given up.

Have you tried CW or PACTOR II?
--
cheers, CAM http://www.qsl.net/w5dxp

3595. Re: Mast grounded-help with coax

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 18:46:34 UTC
From: Jeff Farrar <jeff@farrar.com>
Message-ID: <eaSc8.98654$Pz4.394394@rwcrnsc53>
Source record: 148179

> Hi,
> I am concerned about protecting my house against a lightening strike to my
> crossbow antenna. I have the antenna on a 10 ft mast with a clamp at the
> bottom from which I run copper wire #8 to an 8ft 1/2 in ground rod. The
rod
> is buried beneath the antenna so a direct strike has a nice straight
chase
> to ground(bout 25ft).

Good.

> My base(second floor of house), service panel ground rod, and antenna are
> all on the East side of the house. The service ground is about 17 ft from
my
> antenna ground. My base is about 12 feet from the antenna ground and on
the
> second floor.
>
> Questions:
> 1) How do I ground my coax? If the lightning strikes the antenna, couldn't
> it run into my house via the coax?

You sould try to ground it right before it enters the structure.

> 2) Can I bury the coax in the ground beneath the base before I run it into
> the house for protection?

Yep. But, you still should ground the coax.

> 3) Should I connect the service ground and antenna ground?

NEC advises all ground rods to be tied together. Use at lest a #4 solid
copper.

> 4)Is another ground rod advisable?

Not if you can ground you coax to one of the other ground rods.

For more info. Check out the ARRL Handbook on grounding.

>
> If I should ground the coax, could someone give me details such as how to
> ground it and with what type of hardware.
>
> Since my base isn't worth much, my first two priorities are to reasonably
> protect my dwelling and the second is to not break the bank.
>
> Help and suggestions are appreciated.

> PS- Im still confused after reading the tech polyphaser material.
>
> Jason
> gchsbrown@hotmail.com

3596. OUTLOOK EXPRESS strikes again, was FLASH!! AND ATTN REG EDWARDS!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 18:54:32 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <jjq77u0jborb9sst6gd48rqd0kq07iv9cd@4ax.com>
Source record: 148182

On Wed, 20 Feb 2002 12:07:44 -0500, "Jerry Oxendine"
<joxendi@bellsouth.net> wrote:

>DO NOT OPEN EMAILS FROM REG. REG SENT ME A VIRUS THIS MORNING
>AND I JUST FINISHED CLEANING IT OFF. REG, YOU NEED TO RUN YOUR VIRUS
>PROGRAM..AND, YES, I KNOW I AM "SHOUTING" LOL!
>
>73
>
>Jerry
>K4KWH
>
>

Hi Jerry,

On review of both the source and sink of this dissipative transmission
I find:
X-Newsreader: Microsoft Outlook Express 5.00.2615.200
X-MIMEOLE: Produced By Microsoft MimeOLE V5.00.2615.200
In other words - NO SURPRISE!

Outlook Express is the world's worst vector of infection today. A
regular Typhoid Mary of the Internet.

If you must use it (both of you), learn to disable the "features" that
the "agents of evil" so admire about Microsoft products. This is the
Microsoft commitment to security through autopsy.

If you think your problem was annoying, just hand over your credit
card and financials' data to their Passport. You can't read the
source code for Windows because Microsoft is secure only to their
proprietary data, yours is another matter. Identity theft is the
hallmark of this problem beyond canceling your credit cards weeks
after your numbers were made publicly available. Yes publicly.
Hackers had only to browse to find them. Microsoft immediately blamed
a system admin - not the problem of software. Never is, hence the
continued exposure. Unfortunately they never designed the software
with so simple a source of risk in mind (the human component is ALWAYS
the source of security breach).

News headline today has yet another suit being brought against
Microsoft from BE Corp. for $2*10^9. EVERY week similar headlines
bring warning....

73's
Richard Clark, KB7QHC

3597. Re: FLASH!! AND ATTN REG EDWARDS!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 19:10:12 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C73F494.B500153C@IEEE.org>
Source record: 148183

Jerry Oxendine wrote:
>
> DO NOT OPEN EMAILS FROM REG. REG SENT ME A VIRUS THIS MORNING
> AND I JUST FINISHED CLEANING IT OFF. REG, YOU NEED TO RUN YOUR VIRUS
> PROGRAM..AND, YES, I KNOW I AM "SHOUTING" LOL!

Reg sent me an email also. Here's what the IEEE mail forwarding service
said about it.

InterScan has detected a virus WORM_BADTRANS.B in the file (New_Napster_Site.MP3.pif)
in the mail traffic sent to you by g4fgq.regp@btinternet.com
--
cheers, CAM http://www.qsl.net/w5dxp

3598. Help with TS-440 no RX problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 19:31:28 UTC
From: krish <vu2vku@aol.com>
Message-ID: <3C73F990.837982F8@aol.com>
Source record: 148184

Hi,
I have a TS-440 which was perfectly working until i messed with it.
I bought a 7 pin DIN connector from Radio shack.
I soldered a couple of wires to pin 2 and 4.
I soldered a couple of wires for the ALC and ground.
To the end of the wires, i soldered 2 phono plugs.

The 440 instruction manual instructs one to plug the jumper to
enable the auxillary relay to key an amp.

All i did was, set the jumper and then plugged in the 7pin connector,
powered up,
put the radio in CW and keyed to a dummy.

The radio clicked and all was fine and i saw no voltages on the relay
key line. After doing this a few times, the radio seems to be
stuck in the transmit mode. NO AMP was involved.

The "ON AIR" led is lit when i power the rig on. There is no audio from
the receiver since it is cut off.

If i transmit either SSB or CW, there is no relay click and the rig puts

out full power.

I reset the processor and found that the amp keying relay is
in transmit mode all the time as soon as i power the rig.

So i am wondering if someone could help me locate the component ,
probably
in the IF or Control module , that is responsible for switching the
radio from
the RX to TX modes. It could be an open transistor ????

My guess is that it simply cannot be the relay .Its gotta be the
control signal,
putting the rig in the xmit mode, the "ON AIR" led is also on.

I have done a processor reset. Not murphys playing around. What am i
missing
in short of selling the rig, sending it to kenwood ????

I will have a service manual on hand by the end of this week.

I appreciate any tips.
thanks

73's
krish
w4/vu2vku

3599. Re: Help with TS-440 no RX problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 19:35:12 UTC
From: krish <vu2vku@aol.com>
Message-ID: <3C73FA6F.1203B78B@aol.com>
Source record: 148185

Sorry posted by mistake to the antenna forum.

krish wrote:

> Hi,
> I have a TS-440 which was perfectly working until i messed with it.
> I bought a 7 pin DIN connector from Radio shack.
> I soldered a couple of wires to pin 2 and 4.
> I soldered a couple of wires for the ALC and ground.
> To the end of the wires, i soldered 2 phono plugs.
>
> The 440 instruction manual instructs one to plug the jumper to
> enable the auxillary relay to key an amp.
>
> All i did was, set the jumper and then plugged in the 7pin connector,
> powered up,
> put the radio in CW and keyed to a dummy.
>
> The radio clicked and all was fine and i saw no voltages on the relay
> key line. After doing this a few times, the radio seems to be
> stuck in the transmit mode. NO AMP was involved.
>
> The "ON AIR" led is lit when i power the rig on. There is no audio from
> the receiver since it is cut off.
>
> If i transmit either SSB or CW, there is no relay click and the rig puts
>
> out full power.
>
> I reset the processor and found that the amp keying relay is
> in transmit mode all the time as soon as i power the rig.
>
> So i am wondering if someone could help me locate the component ,
> probably
> in the IF or Control module , that is responsible for switching the
> radio from
> the RX to TX modes. It could be an open transistor ????
>
> My guess is that it simply cannot be the relay .Its gotta be the
> control signal,
> putting the rig in the xmit mode, the "ON AIR" led is also on.
>
> I have done a processor reset. Not murphys playing around. What am i
> missing
> in short of selling the rig, sending it to kenwood ????

>
> I will have a service manual on hand by the end of this week.
>
> I appreciate any tips.
> thanks
>
> 73's
> krish
> w4/vu2vku

3600. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 20:29:48 UTC
From: Mel Martin <ve2dc@rac.ca>
Message-ID: <3C74073C.49B89C7D@rac.ca>
Source record: 148186

I fail to see what this has to do with antennas...

StarGazer wrote:
>
> .

3601. Re: NO SUPPORT FROM CUSHCRAFT!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 20:41:03 UTC
From: Gilbert Baron <gbaron@myrealbox.com>
Message-ID: <25287u4mja0sup3m9hqe78f9gvt1acs4nj@4ax.com>
Source record: 148187

On Sun, 17 Feb 2002 12:32:50 -0600, Gilbert Baron <gbaron@charter.net>
wrote:

>Welcome to the horrible world of Cushcraft. They are the worst at
>customer support in the entire Amateur Radio world. They even ignore
>requests for help on my R7000 which IS still produced.
>
>DO NOT BUY CUSHCRAFT, they are going to cheat you.
>
>
>
>On Thu, 14 Feb 2002 07:34:54 -0600, daniel wright <dw73454@navix.net>
>wrote:
>
>>Greetings.....!
>>
>>I have an early version of the Cushcraft R7. After many years of
>>waving in the breeze (un guyed)(in Nebraska), the base insulator gave
>>up the ghost and broke, causing the antenna which is mounted on a ten
>>foot mast tied to my back fence, to become a "sloper"....(8-<....
>>
>>I contacted Cushcraft via the website and received a prompt reply that
>>this antenna is no longer supported (I wonder if they realized the
>>pun?) and there are no spare parts available.
>>
>>Anyone have experience with replacing the base insulator on one of
>>these antennas? Some of the top of the antenna is also bent up pretty
>>well, but I have not been able to get to the antenna to check closely
>>becaue of snow and mud and I'm a wuss....
>>
>>Any help appreciated...thanks es
>>
>>73 de Dan -- WAï¿½JRD ..
>>Lincoln, Nebraska
>>
>
>Gil Baron http://webpages.charter.net/gbaron
>44:04.925 N 92:30.758 W 1055'
>"Hierro candente, batir de repente"

I may have been given a pleasant surprise. Perhaps Cushcraft was busy,
perhaps the voice mail system was not working correctly? I do not
know.
Today I got an Email from the President of Cushcraft. He asked what my
problem was and then he had a technician call me. The result is that

they are sending me everything above Trap CT1 and it is the new model. This is very likely to correct my problems and of course it will make me a very happy camper and force a compete reevaluation of my opinions of Cushcraft. I will let you know how it turns out.

It may have taken a long time but perhaps it was an unavoidable set of conditions. In any case I thank them for the effort shown today.

Gil Baron http://webpages.charter.net/gbaron
44:04.925 N 92:30.758 W 1055'
"Hierro candente, batir de repente"

3602. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 20:50:57 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <a51271$1gjc@r02n01.cac.psu.edu>
Source record: 148189

Hi all:

Well I guess I was surprised too. But I find it easy to work most DX. I've even worked Australia, which is as far away as one can get from my QTH. I run about 700 watts PEP out and I often get 20 over S-9 reports out of europe. I do have a fairly quite location as my noise runs about S-6 to 7. Have you looked in the right place for the DX. The DX window is 3.790 to 3.8MHz. These days I'm seeing 2 to 3 DX stations each night.
As to pointing in the right direction, a dipole at 30' has a pattern that is almost circular. My wire runs almost east/west and if it had a "dipole" pattern it would be aimed at europe, but I hear south america very well. So go figure, it works better than it should and I'm enjoying 80m DX, and now its 43 countries.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"Robert Lyons" <boblyons@umich.edu> wrote in message
news:3C73CD75.DDFEE905@umich.edu...
> John Passaneau wrote:
> >
> > CAM as it right, mine is up 35' and I have 42 countries on 80 since
August
> > of last year. Worse yet mine is a trapped dipole for 80/40 and 30
meters.
>
>
> Weird. Mine is up 30', and I have *never* heard DX on it. I've long-since
> given up.

3603. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 20:51:06 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C740C37.CB5A9E57@icok.net>
Source record: 148188

Vito,
At 30 feet, or so, an 80 meter dipole has very
little, if any, directional properties. The 40 meter
antenna will have some, but not the 80.
'Doc

3604. Re: FLASH!! AND ATTN REG EDWARDS!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 20:59:09 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <SoUc8.147572$Tl5.7487039@e3500-atl2.usenetserver.com>
Source record: 148190

Exactly what I got.

jerry
CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C73F494.B500153C@IEEE.org...
> Jerry Oxendine wrote:
> >
> > DO NOT OPEN EMAILS FROM REG. REG SENT ME A VIRUS THIS MORNING
> > AND I JUST FINISHED CLEANING IT OFF. REG, YOU NEED TO RUN YOUR VIRUS
> > PROGRAM..AND, YES, I KNOW I AM "SHOUTING" LOL!
>
> Reg sent me an email also. Here's what the IEEE mail forwarding service
> said about it.
>
> InterScan has detected a virus WORM_BADTRANS.B in the file
(New_Napster_Site.MP3.pif)
> in the mail traffic sent to you by g4fgq.regp@btinternet.com
> --
> cheers, CAM http://www.qsl.net/w5dxp

3605. All-HF-Band-Notuner_Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 21:17:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C74126F.4B74EDC1@IEEE.org>
Source record: 148191

Some people are having trouble understanding the Smith Charts that I
posted to my web page so I have installed a table just before the graphs
that should make the information more understandable. Just click on
the URL below and scroll down to the new table.
--
cheers, CAM http://www.qsl.net/w5dxp/notuner.htm

3606. Re: Brightness Temperature -- Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 21:48:53 UTC
From: astroman <me@nowhere.net>
Message-ID: <u786bgcf51qcc5@corp.supernews.com>
Source record: 148192

Wayne,
Jim gave you a good answer. You may also want to hang out on sci.astro or sci.astro.amateur. They have a lot of knowledgeable folks there also.

"Wayne Watson" <mtnviews@earthlink.net> wrote in message news:3C715AAC.F268CFA9@earthlink.net...
> I'm looking at a book on radio astronomy and the author talks about calculating the equivalent
> blackbody temperature of the galactic center from the formula:
>
> Teq = (b*l*l)/(2*k)
>
> where Teq is the equiv temp
> b is the brightness of the object in watts/meter*meter/cycle per sec/steradians
> l = wave length (15 m is used)
> k=Boltzman constant
>
> His answer is 50,000K. No mention is made of what b is. I would guess this is derived by some
> measurement with a radio telescope.
>
> In fact, how does one use a radio telescope to measure the required brightness? Is this *easily*
> done? I take it that such brightnesses are measured over surfaces rather than points. How does one
> find the (necessary) power over the surface of an object? I would think the resolution of amateur
> radio telescopes would be so low as to make it very difficult to measure the brithness of an object
> like Mars or Jupiter.
>
> --
> Wayne T. Watson (121.015 Deg. W, 39.262 Deg. N, 2,701 feet), Nevada City, CA
> Web Page: http://home.earthlink.net/~mtnviews
> Imaginarium Museum: http://home.earthlink.net/~mtnviews/imaginarium.html
>
>

3607. Re: Help with TS-440 no RX problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 22:16:45 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C742049.44B507CD@icok.net>
Source record: 148193

Krish,
Sounds like you may have the 'ALC' line shorted, got
the keying line and ALC backwards...
'Doc

3608. Re: Help with TS-440 no RX problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-20 22:42:27 UTC
From: gerard <pa3hgg@hotmail.com>
Message-ID: <nDVc8.214$dz4.468@pollux.casema.net>
Source record: 148194

http://www.mods.dk
73'gerard

"krish" <vu2vku@aol.com> schreef in bericht
news:3C73F990.837982F8@aol.com...
> Hi,
> I have a TS-440 which was perfectly working until i messed with it.
> I bought a 7 pin DIN connector from Radio shack.
> I soldered a couple of wires to pin 2 and 4.
> I soldered a couple of wires for the ALC and ground.
> To the end of the wires, i soldered 2 phono plugs.
>
> The 440 instruction manual instructs one to plug the jumper to
> enable the auxillary relay to key an amp.
>
> All i did was, set the jumper and then plugged in the 7pin connector,
> powered up,
> put the radio in CW and keyed to a dummy.
>
> The radio clicked and all was fine and i saw no voltages on the relay
> key line. After doing this a few times, the radio seems to be
> stuck in the transmit mode. NO AMP was involved.
>
> The "ON AIR" led is lit when i power the rig on. There is no audio from
> the receiver since it is cut off.
>
> If i transmit either SSB or CW, there is no relay click and the rig puts
>
> out full power.
>
> I reset the processor and found that the amp keying relay is
> in transmit mode all the time as soon as i power the rig.
>
> So i am wondering if someone could help me locate the component ,
> probably
> in the IF or Control module , that is responsible for switching the
> radio from
> the RX to TX modes. It could be an open transistor ????
>
> My guess is that it simply cannot be the relay .Its gotta be the
> control signal,
> putting the rig in the xmit mode, the "ON AIR" led is also on.
>
> I have done a processor reset. Not murphys playing around. What am i

> missing
> in short of selling the rig, sending it to kenwood ????
>
> I will have a service manual on hand by the end of this week.
>
> I appreciate any tips.
> thanks
>
> 73's
> krish
> w4/vu2vku
>

3609. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 00:19:33 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C743CCC.FDC42C3C@shaw.ca>
Source record: 148195

MRR wrote:
>
> Hi All!
>
> Irv just made it clear (snipped here for brevity)

Ron, W7MRR,

You stated " You could save yourself some money by just
taking a piece of coax and attaching a heavy duty 50 ohm
resister to the end of it, submerging it in oil
[commonly called a dummy load] and transmitting on it."

Wrong! Baloney! (My reply -- and it still stands). It may
have been tongue in cheek to you, but to some of the less
'antenna wise' hams reading this news group it may have been
taken as gospel. Fortunately, the rest of your post
indicates
that you speak from emotion rather than knowledge and that
your opinions should be taken very lightly.

You further stated
"This antenna is a really poor performer."

On what do you base your statements? It is an adequate
performer to say the least. I was more
than happy with it. You don't get something for nothing,
and a compromise antenna always
has some drawbacks. The ability to go from band to
band or frequency to frequency without
the need for retuning was great. A few comments
on e-ham does not reflect the hundreds
which B&W sold.

Further, you stated
"If you find a ham claiming they have worked 200+
countries with this antenna, make a bid for his QTH
because he has to be located on an island
surrounded by water or on top of a salt mine.
In other words, any good experience with this
antenna is due to the QTH and not the antenna."

I worked over 200 and lived in two different
locations neither of which provided me with a
good ground.

You continued
"The terminating resister in this antenna is used to
give you the 50 ohm match, just like the dummy load."

I must agreee that the resistor (600 Ohms) was part of
the matching system, but not as a dummy load even if
it did dissipate part of the power.

In your second message you said
"Irv just made it clear that his experience with the
antenna was "down from other antennas"
which is what I would call poor, but for what I must
assume are sentimental reasons, he thinks it is a
good antenna. So, for those of you who want an antenna
that is "down a bit," here's your chance to
get an under performer. Just tell them Irv sent you!"

I said 'down a bit' -- but quite tolerable considering the
saving in space and tuning time. You can call it poor if
you wish, but after your previous statements I doubt if
anyone will take your opinions on antennas seriously.
Even the best antennas can be underperformers due to
various factors. The B&W performed as stated by the
manufacturer and did well for me.

Referring to e-ham reviews you said that it "doesn't
do very well with most hams that have purchased it.
It is rated 3 out of 5 (5 being very good)"

e-ham reflects only a few of the hams that purchased it,
-- not 'most hams that have purchased it.",
and 3 out of 5 isn't bad. A number of good antennas have
been panned on that site.

The pro's and con's of this antenna have been well discussed
on this site. When a ham asks for advice, he does not need
biased opinions from someone who has only read about the
antenna (as I suspect of you), and gross exaggerations (like
a 50 ohm resistor on the end of a piece of coax submerged
in oil)!

Enough Already!!!

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3610. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 00:28:53 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <a51enr$b44@nntpa.cb.lucent.com>
Source record: 148196

Having heard an A/B comparison of this antenna I concluded it was a very poor performer. It was at least 5 and maybe as much as 10db down from a dipole. So yes you do get quite a bit of frequency agility and don't have to use a tuner but it's like a dummy load with a wire attached. So if you plan on getting one then buy a 1KW amp to go with it to overcome it's lack of gain vs a dipole. I think the military proably liked it because they could change frequency without a tuner.

"baney" <baneynospam@home.com> wrote in message
news:3C715EE2.AD458662@home.com...
> You may want to check out this site
> http://www.hard-core-dx.com/nordicdx/antenna/wire/index.html
> George
>
> Tom Nelson wrote:
> >
> > Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> > is used? What is spreader length? What kind of trap?
> >
> > I would like to make one for my own use.
> >
> > TNX
> > Tom

3611. Re: Mast grounded-help with coax

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 00:45:57 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <9rXc8.3535$XT1.97431@news1.east.cox.net>
Source record: 148197

The coax is probably a lower impedance for a lightning return path than the
#8 copper ground wire. You should bring the coax down to the ground rod,
and ground the coax to the ground rod as well. All of your ground rods
(service
entrance, radio antenna ground rod) should be bonded together. You can
use a coaxial lightning arrestor to provide the ground termination for the
coax
to the ground rod.

Peter

"JASON" <gchsbrown@HOTMAIL.COM> wrote in message
news:484583c6.0202200921.5a0fe1bf@posting.google.com...
> Hi,
> I am concerned about protecting my house against a lightening strike to my
> crossbow antenna. I have the antenna on a 10 ft mast with a clamp at the
> bottom from which I run copper wire #8 to an 8ft 1/2 in ground rod. The
rod
> is buried beneath the antenna so a direct strike has a nice straight
chase
> to ground(bout 25ft).
>
> My base(second floor of house), service panel ground rod, and antenna are
> all on the East side of the house. The service ground is about 17 ft from
my
> antenna ground. My base is about 12 feet from the antenna ground and on
the
> second floor.
>
> Questions:
> 1) How do I ground my coax? If the lightning strikes the antenna, couldn't
> it run into my house via the coax?
> 2) Can I bury the coax in the ground beneath the base before I run it into
> the house for protection?
> 3) Should I connect the service ground and antenna ground?
> 4)Is another ground rod advisable?
>
> If I should ground the coax, could someone give me details such as how to
> ground it and with what type of hardware.
>
> Since my base isn't worth much, my first two priorities are to reasonably
> protect my dwelling and the second is to not break the bank.
>
> Help and suggestions are appreciated.
> PS- Im still confused after reading the tech polyphaser material.

>
> Jason
> gchsbrown@hotmail.com

3612. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 00:47:36 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202201647.5a4ee434@posting.google.com>
Source record: 148198

Vito <vito@crosslink.net> wrote in message news:<3C73E05A.BB644EE@crosslink.net>...
> Robert Lyons wrote:
> >
> > John Passaneau wrote:
> > >
> > > CAM as it right, mine is up 35' and I have 42 countries on 80 since August
> > > of last year. Worse yet mine is a trapped dipole for 80/40 and 30 meters.
> >
> > Weird. Mine is up 30', and I have *never* heard DX on it. I've long-since
> > given up.
>
> Could it be aimed in the wrong directions? I used a dipole cut for 40m
> on 40 & 80 last field day. It was up only 30 feet, drooping to 10 but
> worked OK as far away as the other (West) coast albiet no DX. To my
> chagrin it went deaf when I installed it at home. Turned out the lobes
> were pointing at the Yukon and So. Central Africa! Not many Hams either
> place. Naturally YMMV.
> 73, KA3DWW

80/40 dipoles at that height really don't show too much directivity.
The one at home should have worked just as well. Maybe the band cdx
were worse or you had a problem with coupling to other wires, etc..
I've used 80m dipoles as low as 6-10 ft off the ground with good
results to regional stuff. With the average 35-40 ft dipoles here at
the house,I've worked dx many times. I once was talking to a guy in VK
on 40m, and we switched to 80m as a test. We still had no problems,
although the strength may have dropped a bit. I was only using 100w
and a parallel 80/40 dipole on one coax feed. I've worked many dx
stations on 40m with fairly low dipoles. Usually CW in the low end of
40m. I've found you can do it on 80m also, but an amp helps. Depends
on the noise. I've worked into the Caribbean and South/Central America
with a 160m Z dipole at 40 ft with 100w. The ends of it were probably
20 ft. Thats like a 20/10 ft dipole on 80m. In the end, for hi angle
stuff, like 40 day/ 80 night, the low dipoles almost always work
pretty well. Even real low to the ground like under 10 ft. That just
happens to fit my usual time sked, bands, etc...:) My average camping
dipole is about 10-15 ft off the ground. I usually don't have the
trees around to do much better than that. MK

3613. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 00:59:40 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202201659.2266e5e2@posting.google.com>
Source record: 148199

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:<Xjlc8.5730$lS1.1341772@news20.bellglobal.com>...
> I wrote:
> > Most of the antennas that I have been looking at
> > recently are rated for wind speeds fairly close to
> > Mach 1. Airplanes you see... :-)
>
> "Heinz W. Wiggeshoff" asked:
> > And do they factor in bird strikes?
>
> Much, much, much more common are flightline crew 'head strikes' (<KLUNK>
> "Owey! Uh oh...") on the bottom mounted antennas and other protrusions.
>
> If an airplane antenna did hit a big goose in flight (for example), it would
> probably tear off the larger part of the antenna. The fuselage and doublers
> should survive, but might be bent. Better the antenna than the windscreen.

No doubt. A bird can do a lot of damage to a plane that is really
moving. Most airlines have speed skeds to reduce damage from possible
bird strikes. IE: Below 20,000, stay under 300 IAS. By the time they
get down to 14,000 or so, they slow quite a bit. Some is ATC induced
of course, but also partly is birdstrike damage avoidance. You have to
be down to 250 knots when passing through 10,000 anyway. MK

3614. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 01:19:30 UTC
From: Jurek P <jurekpp@attbi.com>
Message-ID: <CWXc8.29032$UT6.55806@rwcrnsc52.ops.asp.att.net>
Source record: 148200

Try to build your own. Take small metal can (that's one of your electrodes),
fill with sand and graphite powder mixture, push in second electrode, flat
or round and that's it. You will have to play with sand/graphite ratio a
little, fine tuning by position of the second electrode.
I used this method for few kW applications as a "quick and dirty" field
solution.
Have fun,

Jurek, KJ7OV
ex SP2BNL
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:20262-3C73B2BC-4@storefull-113.iap.bryant.webtv.net...
>
> Marty wrote:
> "What would be the effect of the inductance of these resistors on a
> measurement of swr, and is there some way to compensate for it?"
>
> Besides tuning out unwanted inductance, there is another problem to be
> taken into account. A wirewound resistor of 10 ohms at d-c has more than
> 10 ohms resisance at r-f de to skin effect.
>
> Skin depth penetration in resistance wire at r-f is inversely
> proportional to the square root of the frequency. So, the higher the
> frequency, the higher the resistance. The r-f resistance of a wire-wound
> dummy load resistance will be higher for VHF than for HF.
>
> For copper, penetration depth is 0.0026 inch at 1 MHz. Penetration depth
> is proportional to the square root of resistivity. So, r-f current will
> run deeper in resistance wire than in copper.
>
> Find some real non-inductive resistors for your dummy load.
>
> Best regards, Richard Harrison, KB5WZI
>

3615. VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 02:06:21 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a51l76$4154g$1@ID-124126.news.dfncis.de>
Source record: 148201

I am grateful to all who gave me a fast warning.

Got rid of it within 10 minutes. Ran the program a second time to obtain a second all clear. But I still feel dirty.

The final proof remains to be seen when I pluck up enough courage to send an e-mail to a guinea pig.

My sincere apologies to the unknown number of people who contracted it via me.

In addition I have erased everything from my address book plus a lot of other stuff which included messages waiting for replies. Again my apologies to those expecting a reply.

99.5% of my incoming mail is spam. 70 percent of it comes from the far east, Taiwan etc., in Chinese characters or really wierd indecipherable stuff. I get 20 or 30 spams per day.

For months I have automatically deleted all e-mails with attachments. But but before final dumping I inspect in case there's one which I am certain is OK to at least read the message. So far as I can remember I have not opened a non-OK attachment for months and months. And I have opened only 1 attachment of any sort in months.

To a knowledgable person only -

Off-topic Question 1. Is it possible to contract a virus other than by opening an attachment ? I have IE and OE.

Off-topic Question 2. If I have contracted a virus is it possible for me to infect my own website when I upload files to it ?

There may be others interested.

I have not uploaded anything to my website for 3 weeks.
Regards, Reg G4FGQ

3616. Re: kevlar core antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 02:18:34 UTC
From: KAZeringue <kazeringue@aol.com>
Message-ID: <3C745ACD.1080300@aol.com>
Source record: 148202

I'm not sure if this is what you are looking for, but try "the RF Connection"

website is "http://www.therfc.com/antenna.htm", they call the product "KevWeave". I've seen the stuff(they are a vendor at many local hamfests).

The easiest way to describe it is a kevlar rope with a copper braid wrapping, similar to the braid on coax.

I considered getting some of this stuff for a quad project. It's fatter than "litz" wire. Its also a bit pricy.

73
W4KAZ

3617. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 02:28:16 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <4XYc8.2560$lm1.174245@bgtnsc05-news.ops.worldnet.att.net>
Source record: 148203

REG!!! besides having nortons anti virus i also have a free anti virus
download called"AVG"... they provide you with free updates & will also
automatically scan your computer at your designated time..they also scan on
boot up. also any in/outgoing e-mail is scanned..hope this helps others in
the group
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a51l76$4154g$1@ID-124126.news.dfncis.de...
> I am grateful to all who gave me a fast warning.
>
> Got rid of it within 10 minutes. Ran the program a second time to obtain a
> second all clear. But I still feel dirty.
>
> The final proof remains to be seen when I pluck up enough courage to send
an
> e-mail to a guinea pig.
>
> My sincere apologies to the unknown number of people who contracted it via
> me.
>
> In addition I have erased everything from my address book plus a lot of
> other stuff which included messages waiting for replies. Again my
apologies
> to those expecting a reply.
>
> 99.5% of my incoming mail is spam. 70 percent of it comes from the far
east,
> Taiwan etc., in Chinese characters or really wierd indecipherable stuff.
I
> get 20 or 30 spams per day.
>
> For months I have automatically deleted all e-mails with attachments. But
> but before final dumping I inspect in case there's one which I am certain
is
> OK to at least read the message. So far as I can remember I have not
opened
> a non-OK attachment for months and months. And I have opened only 1
> attachment of any sort in months.
>
> To a knowledgable person only -
>
> Off-topic Question 1. Is it possible to contract a virus other than by
> opening an attachment ? I have IE and OE.
>
> Off-topic Question 2. If I have contracted a virus is it possible for me

to
> infect my own website when I upload files to it ?
>
> There may be others interested.
>
> I have not uploaded anything to my website for 3 weeks.
> Regards, Reg G4FGQ
>
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

3618. Re: Return Loss ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 03:05:55 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C7463D8.755196FD@bellatlantic.net>
Source record: 148204

CAM wrote:

> Bill Nelson wrote:
> >
> > CAM <Cecil.A.Moore@ieee.org> wrote:
> > > -Your Friend Bill- wrote:
> > >> In cable tv work we use return loss exclusively for measuring match.
> > >> Its a very convenient unit for calculating reflections which will
> > >> ultimately show up as ghosting in analog pictures or raise all sorts of
> > >> havoc on digital signals.
> > >
> > > You mean, you mean, the reflections are really there? :-)
> > >
> > If not, how does a TDR work?
> >
> It was a rhetorical question, Bill. Some people on this newsgroup say
> the reflected power is not really there.

Well, I don't see how the reflected power could be there. After the last
disaster of an antenna I built, I think all reflected power has to be *here*.
Grumble.

>
> --
> cheers, CAM http://www.qsl.net/w5dxp

3619. Re: OUTLOOK EXPRESS strikes again, was FLASH!! AND ATTN REG EDWARDS!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 03:42:07 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <gtq87u8iuoc5ecv2ceom6n6adigj2kc0jf@4ax.com>
Source record: 148205

On Wed, 20 Feb 2002 18:54:32 GMT, Richard Clark <kb7qhc@attbi.com>
wrote:

>Outlook Express is the world's worst vector of infection today. A
>regular Typhoid Mary of the Internet.

Amen. Try either Agent or the free version, Free Agent. Neither one will spawn viruses because they print only plain ASCII text - no HTML, no Java, no whatever the latest craze is. Been using it for about seven years and no problems at all.

I have Outlook Express on my computer and every now and then I download the latest upgrade and fire it up to see if I'm missing something. The answer is always no.

73, Bill W7TI

3620. Re: How come American Hams can't use the Phone part of the bands like Canada?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 03:43:53 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <65r87uktf6d15gkdclj5i3qogrskvju33k@4ax.com>
Source record: 148206

On Wed, 20 Feb 2002 15:29:48 -0500, Mel Martin <ve2dc@rac.ca> wrote:

>I fail to see what this has to do with antennas...

It may affect the choice of resonance point. I use SSB, CW and RTTY and
have to make that decision every time I put up a new antenna.

Bill, W7TI

3621. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 04:11:18 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C747301.4A4655A2@bellatlantic.net>
Source record: 148209

"R. Scott" wrote:

> I used to buy it a Boeing Surplus, but the last few trips down the road
> (An hour drive) have yielded Nada.
>
> Where do you guys find aluminium tubing for various projects.
>
> Rick KF7QZ

In case you haven't done so already, check under "scrap metal"
in the yellow pages. I went to a scrap metal dealer near me for
tubing, and came home with a Gonset GSB 101 linear amp for
20 bucks. Needed 4 811A's and the rectifier tubes, but I replaced
them with 12 1N5408's & the thing works fine. But I digress.
That place has all kinds of tubing - maybe you'll get lucky and
find something near you.

3622. Re: Mast grounded-help with coax

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 04:37:49 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C74792F.5D7150A2@bellatlantic.net>
Source record: 148210

JASON wrote:

>
> Questions:
>
> 3) Should I connect the service ground and antenna ground?

Emphasizing what others said: the NEC does not give you any
choice on this - it *requires* that the ground rod you installed for
the antenna be bonded to the service grounding system.

3623. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 04:49:09 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <9%_c8.11843$9H5.4989@nwrddc01.gnilink.net>
Source record: 148211

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a51l76$4154g$1@ID-124126.news.dfncis.de...
> I am grateful to all who gave me a fast warning.
>
> Got rid of it within 10 minutes. Ran the program a second time to obtain
a
> second all clear. But I still feel dirty.
>
> The final proof remains to be seen when I pluck up enough courage to send
an
> e-mail to a guinea pig.
>
> My sincere apologies to the unknown number of people who contracted it
via
> me.
>
> In addition I have erased everything from my address book plus a lot of
> other stuff which included messages waiting for replies. Again my
apologies
> to those expecting a reply.
>
> 99.5% of my incoming mail is spam. 70 percent of it comes from the far
east,
> Taiwan etc., in Chinese characters or really wierd indecipherable stuff.
I
> get 20 or 30 spams per day.
>
> For months I have automatically deleted all e-mails with attachments. But
> but before final dumping I inspect in case there's one which I am certain
is
> OK to at least read the message. So far as I can remember I have not
opened
> a non-OK attachment for months and months. And I have opened only 1
> attachment of any sort in months.
>
> To a knowledgable person only -
>
> Off-topic Question 1. Is it possible to contract a virus other than by
> opening an attachment ? I have IE and OE.

Yes. Depending on your email reader config, scripts can be embedded in the
email that will run when the mail is read. These scripts could access
files, run apps, change system configuration, etc.

>
> Off-topic Question 2. If I have contracted a virus is it possible for me
to
> infect my own website when I upload files to it ?

Yes. If you have a cold, does it go away when you go to your friends house?

However, most web hosting sites have professional Admins who are a lot more knowlegable than the typical end user and usually have tools in place to contain/eliminate any threat to their systems.

73 de W6DKN

3624. HELP: need Wilson 3 el tribander instructions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 05:29:23 UTC
From: Ray <solderingPUTATSIGNHEREhome.com>
Message-ID: <u791dgakas9679@corp.supernews.com>
Source record: 148212

I am in need of instructions for a Wilson 3 element tribander (System 3 I think is the model).
Thanks in advance for any help.
Ray

3625. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 05:50:21 UTC
From: Rick Karlquist <richard@karlquist.removethis.com>
Message-ID: <xU%c8.10190$S01.534504@sccrnsc02>
Source record: 148213

I build a lot of stuff from aluminum irrigation tubing. Besides
buying it used from farmers, you can buy it new from the
national chain "Rain for Rent". I just called them today
coincidentally to get their latest prices. The smallest they
have is 1 1/2 inch for 0.84/foot. The biggest I got a price
for was 5 inch, .078 wall for $4/foot. It is 3004-H26 with
a yield strength of 24,000 PSI. Available in lengths to 40 feet.
I use Texas towers for smaller stuff.

Rick N6RK

"R. Scott" <kf7qz@yahoo.com> wrote in message
news:3C72C77F.E3C3E821@yahoo.com...
> I used to buy it a Boeing Surplus, but the last few trips down the road
> (An hour drive) have yielded Nada.
>
> Where do you guys find aluminium tubing for various projects.
>
>
> Rick KF7QZ

3626. where can i source for triangular patch antenna inofrmation online?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 06:05:39 UTC
From: lesuvve@hotmail.com
Message-ID: <c9f61b01.0202202205.79e4746b@posting.google.com>
Source record: 148214

Hi everybody,

I am a student currently doing a project on triangular patch antenna.
I used Ensoft Ensemble to simulate my design. I have came up with two
design on triangular patch antennas which are single band (bluetooth
freq) and dual bands (suppose to meet IMT2000 standard, but can't).

Realised that my knowledge on this type of antenna are too little,
just want to know more about its theory. So wandering anyone of u know
any website/URL do have the information i want?

Thank you.

3627. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 06:36:33 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a5248tdqr1@bob.news.rcn.net>
Source record: 148215

"Rick Karlquist" <richard@karlquist.removethis.com> wrote:

> I build a lot of stuff from aluminum irrigation tubing. Besides
> buying it used from farmers, you can buy it new from the
> national chain "Rain for Rent". I just called them today
> coincidentally to get their latest prices. The smallest they
> have is 1 1/2 inch for 0.84/foot. The biggest I got a price
> for was 5 inch, .078 wall for $4/foot.

You can get it much cheaper if you buy it used.
I built a quarter-wave for 3.900 MHz, and the tubing
cost almost nothing compared to all of the other stuff
(guy anchors, guy cable, insulators, cable clamps, etc.).

Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com

3628. open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 07:29:46 UTC
From: AB Brown <abbrown@nospammail.com>
Message-ID: <a527k7$hq5$1@slb1.atl.mindspring.net>
Source record: 148216

I've read a lot about the low loss of open wire feeders and I am thinking of running it from a G5RV or similar dipole back to my house. The length of the feeders would be anywhere from 50 to 75 feet to the house entry point. I have a couple of questions:

1) How are open wire feeders affected by objects, such as aluminum rain gutters, shingles, and antenna mast, which it will run near? How should I position it to avoid these?

2) If I use the open feeders to continue beyond the house entry point, the lines would have to run through the attic and then drop down through a hole into the radio room. Total distance from house entry point is 35 feet and it would pass many objects in the attic. However, I am thinking of using RG 8 coax from the house entry point to the radio room. What is the best solution here?

3) I've read that a tuner is used to match the feeders to the radio. What type of matching system would be best for the conversion of the open wire to coax at the house entry point?

I hope to be able to use this system as an all band dipole from 80-10 meters. I have always used standard RG 8 coax for my feedlines and I am a novice when dealing with open wire feedlines. Appreciate any advice given.

Thanks,
AB

3629. Re: All HF Bands Radiation Patterns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 09:12:27 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a52dlr$4ia$12@quark.scn.rain.com>
Source record: 148217

Vito <vito@crosslink.net> wrote:

> Cam, you are a *true* ham. 31' of ladder line, 5 4PDT relays plus a
> dozen or so ferrite beads instead of a store-bought tuner. Makes sense
> to me ... :o) I'll start scrounging for the parts ...

Now all Cam needs to do is set up some basic stamp logic and some drivers
for the relays. The input to the stamp would be output from a SWR sensor.
Using good make-before-break logic, he could have autoadjusst of the
relays - on the fly while changing frequencies.

--
Bill Nelson (billn@peak.org)

3630. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 09:59:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C74C511.A98832@eznec.com>
Source record: 148218

W6DKN wrote:
> . . .

> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:a51l76$4154g$1@ID-124126.news.dfncis.de...
> > To a knowledgable person only -
> >
> > Off-topic Question 1. Is it possible to contract a virus other than by
> > opening an attachment ? I have IE and OE.
>
> Yes. Depending on your email reader config, scripts can be embedded in the
> email that will run when the mail is read. These scripts could access
> files, run apps, change system configuration, etc.
> . . .

I use Netscape, and it has the ability to turn off JavaScript for email messages. (Careful people also leave it off when visiting web sites.) I'm sure IE has the same capability, and I highly recommend leaving JavaScript off for email. While some web sites depend on JavaScript to function properly, I know of no reason for an email message to contain JavaScript -- except to spread a virus.

I highly recommend ZoneAlarm, a firewall by Zone Labs (http://www.zonelabs.com). It can be set to detect all outgoing communications. This will alert you if a virus, or sleeper program like Back Orifice, tries to contact the Internet from your machine. This will at least let you know you're infected, and will prevent you from unknowingly sending infected messages to others. There's a free version that's very capable.

Incidentally, my ISP recently adopted the practice of deleting any incoming email containing exe or some other attachments, before it even gets to me. I don't like this very much, but it's an increasingly common practice. Consequently, when I email an exe file to someone I either zip it or change the extension in case the recipient's ISP does this. But I no longer see the virus-containing emails that I used to get with great frequency.

Roy Lewallen, W7EL

3631. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 10:15:22 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0202210215.21db1160@posting.google.com>
Source record: 148119

Hi,
my humble answers to your questions are:

> 1) How are open wire feeders affected by objects, such as aluminum rain
> gutters, shingles, and antenna mast, which it will run near? How should I
> position it to avoid these?
Quite much. Twinleads and open wire feeders should run at a distance
from any objects (the more from conductive objects) given as at least
five times the distance of the two wires. Ten times the distance will
be certainly better...

> 2) If I use the open feeders to continue beyond the house entry point, the
> lines would have to run through the attic and then drop down through a hole
> into the radio room. Total distance from house entry point is 35 feet and
> it would pass many objects in the attic. However, I am thinking of using RG
> 8 coax from the house entry point to the radio room. What is the best
> solution here?
I recommend you to convert to a coax before the house entry point.

> 3) I've read that a tuner is used to match the feeders to the radio. What
> type of matching system would be best for the conversion of the open wire to
> coax at the house entry point?
Connect the coax at a low-impedance point, i.e. at the current maximum
of the twinlead. Do not forget a current balun (set of ferrite rings
on the coax or a "coax coil") to prevent currents on the outer surface
of the coax braid. See http://www.qsl.net/w5dxp/notuner.htm for more
info.

BR from Ivan

>
> I hope to be able to use this system as an all band dipole from 80-10
> meters. I have always used standard RG 8 coax for my feedlines and I am a
> novice when dealing with open wire feedlines. Appreciate any advice given.
>
> Thanks,
> AB

3632. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 10:32:40 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C74CBA7.D3A2FA4E@bellatlantic.net>
Source record: 148120

You can always try the Old Timer's Light Bulb Technique for a quick "dummy" for HF. The filament in a light bulb has very little inductance. For high power, just put a bunch in series parallel. Another "Trick" similar to the graphite "Can of Sand", is to use Salt Water. When it starts steaming, it's time to QRT. I wonder if you can add Salt to brake fluid or mineral Oil directly? Another "Trick" good for fishing expeditions is to bury two rods in the earth separated so that you get 50 ohms. An SWR analyzer will help.

'73 KI4Z

Jurek P wrote:

> Try to build your own. Take small metal can (that's one of your electrodes),
> fill with sand and graphite powder mixture, push in second electrode, flat
> or round and that's it. You will have to play with sand/graphite ratio a
> little, fine tuning by position of the second electrode.
> I used this method for few kW applications as a "quick and dirty" field
> solution.
> Have fun,
>
> Jurek, KJ7OV
> ex SP2BNL
> "Richard Harrison" <richardharrison@webtv.net> wrote in message
> news:20262-3C73B2BC-4@storefull-113.iap.bryant.webtv.net...
> >
> > Marty wrote:
> > "What would be the effect of the inductance of these resistors on a
> > measurement of swr, and is there some way to compensate for it?"
> >
> > Besides tuning out unwanted inductance, there is another problem to be
> > taken into account. A wirewound resistor of 10 ohms at d-c has more than
> > 10 ohms resisance at r-f de to skin effect.
> >
> > Skin depth penetration in resistance wire at r-f is inversely
> > proportional to the square root of the frequency. So, the higher the
> > frequency, the higher the resistance. The r-f resistance of a wire-wound
> > dummy load resistance will be higher for VHF than for HF.
> >
> > For copper, penetration depth is 0.0026 inch at 1 MHz. Penetration depth
> > is proportional to the square root of resistivity. So, r-f current will
> > run deeper in resistance wire than in copper.
> >
> > Find some real non-inductive resistors for your dummy load.
> >
> > Best regards, Richard Harrison, KB5WZI

> >

3633. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 10:41:55 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C74CDD3.A9B83114@bellatlantic.net>
Source record: 148121

Another thing to consider is that winds isn't always horizontally polarized, as evidenced by a MicroBurst in my back yard that left 5 huge Oak trees felled in random directions on top of each other, but 100' away no damage at all. Vertically polarized wind spells death to Yagi's, although Circularly polarized winds probably cause the most damage.

'73 KI4Z

Bryan Byers wrote:

> I have been thinking of antenna wind survival and I have been wondering
> what the best thing is to ensure the the survival of ground mounted
> vertical antennas? I noticed that most antenna brands list a wind
> survival rating of 80 mph
> and I wonder why they pick that number?
>
> Thanks, KA9KHD

3634. Re: need plans for

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 10:45:44 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C74CEB9.5A77570F@bellatlantic.net>
Source record: 148122

On Two meters, I'd think a yagi would be way more effective, and less far hassle
than a phased vertical array. Turn it on it's side for vertical polarization,
and put it up on top of your house.

'73 KI4Z

mike beauchamp wrote:

> hello all i need a set of instructions for a 4 element vertical phased array
> for 140 mhz can anyone help or direct me to a good web site? thanks ve3 tya
> 73 and 88

3635. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 10:58:33 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202210258.25786b9e@posting.google.com>
Source record: 148123

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<a51l76$4154g$1@ID-124126.news.dfncis.de>...
> I am grateful to all who gave me a fast warning.
>
> Got rid of it within 10 minutes. Ran the program a second time to obtain a
> second all clear. But I still feel dirty.
>
> The final proof remains to be seen when I pluck up enough courage to send an
> e-mail to a guinea pig.

You can use me as a test. I'm fairly virus proof. My ISP catches most
of them anyway.
>
> My sincere apologies to the unknown number of people who contracted it via
> me.
>
> In addition I have erased everything from my address book plus a lot of
> other stuff which included messages waiting for replies. Again my apologies
> to those expecting a reply.

You didn't really need to do that if indeed you flushed the virus.
>
> 99.5% of my incoming mail is spam. 70 percent of it comes from the far east,
> Taiwan etc., in Chinese characters or really wierd indecipherable stuff. I
> get 20 or 30 spams per day.

I've had viruses sent to me in the last week or so. One was:
A message you recently received from "<tlendrickmotors@cleanweb.net>"
with the
subject "the sound barrier in "
contained one or more viruses that could be disinfected.

Another one was:
A message you recently received from "<x8dp@PRODIGY.NET>" with the
subject "Now when our land is troubled,"
contained one or more viruses that could be disinfected.

The viruses have been removed, and the disinfected files are attached
to this message.
--
World Trade Network
Postmaster@wt.net

I don't open attachments and I use old netscape 3.1 for news feeding
off my own server. It's fairly bullet proof as far as macro viruses.
Stay away from Outlook.

>
> For months I have automatically deleted all e-mails with attachments. But
> but before final dumping I inspect in case there's one which I am certain is
> OK to at least read the message. So far as I can remember I have not opened
> a non-OK attachment for months and months. And I have opened only 1
> attachment of any sort in months.
>
> To a knowledgable person only -
>
> Off-topic Question 1. Is it possible to contract a virus other than by
> opening an attachment ? I have IE and OE.

Yes, but doesn't happen too often. I hear some of the newer ones can
do that.
>
> Off-topic Question 2. If I have contracted a virus is it possible for me to
> infect my own website when I upload files to it ?

Only if the files uploaded are infected. Likely are not. The virus you
have is a macro virus. It's mainly raiding your address list and
playing e-mail gremlin behind your back.
It's not a file virus per say..
>
> There may be others interested.
>
> I have not uploaded anything to my website for 3 weeks.
> Regards, Reg G4FGQ

I would think it's ok, even if you did upload to it. MK

3636. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 12:04:02 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c74dfb8_3@corp.newsgroups.com>
Source record: 148124

"AB Brown" <abbrown@nospammail.com> wrote in message
news:a527k7$hq5$1@slb1.atl.mindspring.net...
> I've read a lot about the low loss of open wire feeders and I am thinking
of
> running it from a G5RV or similar dipole back to my house. The length of
> the feeders would be anywhere from 50 to 75 feet to the house entry point.
> I have a couple of questions:
>
> 1) How are open wire feeders affected by objects, such as aluminum rain
> gutters, shingles, and antenna mast, which it will run near? How should I
> position it to avoid these?
>
> 2) If I use the open feeders to continue beyond the house entry point, the
> lines would have to run through the attic and then drop down through a
hole
> into the radio room. Total distance from house entry point is 35 feet and
> it would pass many objects in the attic. However, I am thinking of using
RG
> 8 coax from the house entry point to the radio room. What is the best
> solution here?
>
> 3) I've read that a tuner is used to match the feeders to the radio.
What
> type of matching system would be best for the conversion of the open wire
to
> coax at the house entry point?
>
> I hope to be able to use this system as an all band dipole from 80-10
> meters. I have always used standard RG 8 coax for my feedlines and I am a
> novice when dealing with open wire feedlines. Appreciate any advice
given.
>
> Thanks,
> AB
>
>

HI AB,

1. You Will have to keep it away from any metal 3 times the distance of the
spacing of the Line.. IE: if it 450 ohm line you'd need to keep it a minimum
of about 3.5 inches. away from conductive materials.

2. Run the coax to just outside the house and use a 1:1Current balun to
make the transistion. 35ft is allot of coax in this type of setup and may

degrade the performance some . but should still work on most bands.
I'd use the best coax I could afford for this , Hardline or flexiable 9913
stuff.

3.Most good T networks will work for what your Proposing.

Good Luck,
73 Dave Kc1di // always qrp.

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

3637. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 12:04:22 UTC
From: 2aa7ya@remove4spam.nemontel.net
Message-ID: <3c74e00b.4649111@isp-west.usenetserver.com>
Source record: 148125

On Thu, 21 Feb 2002 02:06:21 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>I am grateful to all who gave me a fast warning.
>
>Got rid of it within 10 minutes. Ran the program a second time to obtain a
>second all clear. But I still feel dirty.
>
>The final proof remains to be seen when I pluck up enough courage to send an
>e-mail to a guinea pig.
>
>My sincere apologies to the unknown number of people who contracted it via
>me.
>
>In addition I have erased everything from my address book plus a lot of
>other stuff which included messages waiting for replies. Again my apologies
>to those expecting a reply.
>
>99.5% of my incoming mail is spam. 70 percent of it comes from the far east,
>Taiwan etc., in Chinese characters or really wierd indecipherable stuff. I
>get 20 or 30 spams per day.
>
>For months I have automatically deleted all e-mails with attachments. But
>but before final dumping I inspect in case there's one which I am certain is
>OK to at least read the message. So far as I can remember I have not opened
>a non-OK attachment for months and months. And I have opened only 1
>attachment of any sort in months.
>
>To a knowledgable person only -
>
>Off-topic Question 1. Is it possible to contract a virus other than by
>opening an attachment ? I have IE and OE.

There are some viruses that don't need human interaction. The last
couple of years have centered on "exploits" of OE, and it took
Microsoft 2 years to finally get their shit together and give the user
the option to turn off "e-mail preview".

OE is the reason I've been a fan of text-only e-mail clients.

Any e-mail sent as an HTML document appears as HTML source code to me,
which I just toss in the Trash.

>
>Off-topic Question 2. If I have contracted a virus is it possible for me to
>infect my own website when I upload files to it ?

No, unless you embed an ActiveX control that's a virus. That too can be thwarted, turn off ActiveX in IE. Thought the downside is, you won't be able to immediately go to Microsoft Windows Update, but they do have an option to download the ActiveX control, if it's your first visit there.

>
>There may be others interested.
>
>I have not uploaded anything to my website for 3 weeks.
>Regards, Reg G4FGQ

AA7YA

3638. Re: Yaesu ATAS-100 documentation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 12:33:53 UTC
From: Gilberto Campos <gilberto.campos@portugalmail.pt>
Message-ID: <814e271c41dbffa6b832c93b6ba8bb47.14968@mygate.mailgate.org>
Source record: 148126

Thanks Ed, good information.
Someone suggested to check tyhe us Patents Office. I think it's a good
hint, but haven't checked yet.

Thanks again.

73 de iz2dhn/ct2dac,
Gilberto

Ps - Nice site, simple, easy to navigate!
Boy, what a beauty, your KMA1330... you sure got me dreaming!!!!!

"KMA Antennas" <@_.com> wrote in message
news:slb77us848qfpi7qrlco3vdibga7mf2tol@4ax.com...

> I found some information on the internet some time ago and placed it
> on my web site for storage. The quality is not the greatest. The url
> is http://www.kmaantennas.com/ATAS/ATAS-100_Info.html
>
> 73
> Ed
>
>
> KMA Antennas
> VHF - UHF - HF log periodics
> http://www.kmaantennas.com
>
> Dayton fleamarket spaces 2828 - 2831
>
>
> help support qsl.net with a donation
> https://proxy.qsl.net/donation

--
Posted via Mailgate.ORG Server - http://www.Mailgate.ORG

3639. Re: "Far Field (UK)" - Was: Cell Tower Effects Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 12:53:00 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0202210453.3f49bfe2@posting.google.com>
Source record: 148127

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:<LmAc8.11776$Lc2.1405558@news20.bellglobal.com>...
> "JLB" wrote:
> > ...there is no longer any signficant reactive
> > component of the field.
>
> Of course there is reactive field, near field, and far field.
>
> > I would think that, for the program you mention,
> > that if you ask for near field and give it a distance
> > that is too far you may get invalid results.
>
> Since the pattern may be sensitively dependent upon relative phase from
> contributing rays, the results may be different (though perhaps not
> invalid - depending on the application) in certain directions with movements
> of a small fraction of a wavelength.

Of course. That is obvious (to those who know antennas). That is how
the far field radiation pattern is constructed. Different rays from
different parts of the antenna add up with different phases.

The professional experts can't agree on a definition, so how can the
amateur experts?

Jim
N8EE

3640. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 13:03:29 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C74F021.EC1D6DEA@crosslink.net>
Source record: 148128

Mark Keith wrote:
>
> Vito <vito@crosslink.net> wrote
> >
> > Could it be aimed in the wrong directions?...
>
> 80/40 dipoles at that height really don't show too much directivity....

Thanks, both to you & Doc too. I'd taken it down to make radials for my
vertical but will try it again when weather permits.
73, KA3DWW

3641. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 13:27:29 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C74F5C1.EA5D3F18@yahoo.com>
Source record: 148129

There is a scrap metal resale place in Seattle but if I remember last time I stopped in he was almost as much new for used :(, cannot find any here in Everett. Will check it out in Seattle again if I get down there.

Going down to Boeing Surplus Saturday, maybe they are getting it in again :)

Thanks ever so much for all your kind comments and suggestions, it really came in handy.

Rick KF7QZ

3642. Re: All HF Bands Radiation Patterns

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 14:13:38 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C750092.EF5B8AF7@IEEE.org>
Source record: 148130

Bill Nelson wrote:
>
> Vito <vito@crosslink.net> wrote:
>
> > Cam, you are a *true* ham. 31' of ladder line, 5 4PDT relays plus a
> > dozen or so ferrite beads instead of a store-bought tuner. Makes sense
> > to me ... :o) I'll start scrounging for the parts ...
>
> Now all Cam needs to do is set up some basic stamp logic and some drivers
> for the relays. The input to the stamp would be output from a SWR sensor.
> Using good make-before-break logic, he could have autoadjusst of the
> relays - on the fly while changing frequencies.

If I could find some good latching RF relays, I would do that. The problem with nonlatching relays is that they must be kept powered which is hard to do when power goes down. If I power them from my backup battery system, my emergency power time decreases. I am happy with the knife switches mounted in my window. I can throw the switches faster than I can operate an antenna tuner.
--
cheers, CAM http://www.qsl.net/w5dxp

3643. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 14:20:42 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C75023A.D58BEA3B@IEEE.org>
Source record: 148132

AB Brown wrote:
> 1) How are open wire feeders affected by objects, such as aluminum rain
> gutters, shingles, and antenna mast, which it will run near? How should I
> position it to avoid these?

Open-wire feeders should be kept at least a couple of diameters away from
anything conductive.

> I hope to be able to use this system as an all band dipole from 80-10
> meters. I have always used standard RG 8 coax for my feedlines and I am a
> novice when dealing with open wire feedlines. Appreciate any advice given.

Check out my All-HF-Band-Notuner-Antenna on my web page.
--
cheers, CAM http://www.qsl.net/w5dxp

3644. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 14:23:24 UTC
From: Harry Williams <harry.w.williams@syntegra.com>
Message-ID: <3C75035C.3385B23F@syntegra.com>
Source record: 148131

Thanks to all who contributed to this thread. The main issue here was not that I'm cheap :-)...its
more of an issue with space at the operating position for a large tuner and secondary to that I guess would be convenience. I did get some recommendations on some tuners that are fairly small that might fit in ok so I guess I will look into that. Cecil your approach is interesting...

Thanks again,
Harry
W0PIY

Harry Williams wrote:

> I have a 160M horizonital loop that is fed in a corner with 450 ohm ladder line. I now
> have an amp and would like to use if with the loop but the tuner is rated at only 300W.
> Is there a way to broadband the feed to the loop so I could run RG8 or whatever out
> of the shack and then couple it to the 450 ohm line thru a balum that would give me
> an swr under say 3 to 1 over a wide frequency range? I would like to eliminate the tuner
> all together and have a feed system that would handle a KW.
>
> Thanks,
> Harry - W0PIY

3645. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 14:28:08 UTC
From: richardharrison@webtv.net
Message-ID: <333-3C7503F8-113@storefull-114.iap.bryant.webtv.net>
Source record: 148134

AB Brown wrote:
"How are open wire lines affected by objects---?"

Adversely.

"I am thinking of using RG 8---."

Good idea

"What type of matching system would be best ---?"

The 19th edition of the ARRL Antenna Book has suggestions in chapter 25.

Belden 9913 has a matched loss per 100 feet of 0.1 db at 1 MHz, 0.4 db at 10 MHz, 1.3 db at 100 MHz, and 4.5 db loss at 1000 MHz. Below 30 MHz, the loss isn`t bad.

A G5RV or similar dipole with a flat 100-ft line has less than 1 db line loss. You won`t often have a flat line, but the increased SWR won`t often kill your operation.

If you want to avoid coax radiation, use a balun at the antenna.

Best regards, Richard Harrison, KB5WZI

3646. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 14:29:29 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <umv97uslroncu0fjl9n3pprvm1cif2a15o@4ax.com>
Source record: 148135

I use IE version 6 combined with a shareware program called
AdSubtract. AdSubtract allows me to filter several items
(Advertisements, Animations, Auto refresh, Pop-up windows, Background
images, Background music, Cookies, Referrers, Java applets and Java
script). I can set up different sites with all or any the above items
filtered. This is handy for going to some sites where cookies, for
example, are required.

Having a slower ISP connection it also speeds things up quite a bit
because you aren't loading all that stuff.

There is a freeware version and a shareware version. Originally I had
tried the freeware version and after using a short time decided to buy
the better version.

The learning curve is small. If interested you can check out their
site at: www.adsubtract.com

For email my ISP has incorporated email filtering with Postini. Any
messages which appear dangerous are held at the Postini site and a
message is sent to you advising you that there are there. You may then
go to the postini site and review them without downloading then on
your computer. The drawback is Postini only filters message coming
from out side your ISP. Any messages coming from someone on the same
server are not filtered. For that I have Norton Anti-Virus which I
check for up dates every other day.

Now and then something has slipped through, but for the most part I
have found this to be effective.

73
Danny, K6MHE

On Thu, 21 Feb 2002 01:59:45 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I use Netscape, and it has the ability to turn off JavaScript for email
>messages. (Careful people also leave it off when visiting web sites.)
>I'm sure IE has the same capability, and I highly recommend leaving
>JavaScript off for email. While some web sites depend on JavaScript to
>function properly, I know of no reason for an email message to contain
>JavaScript -- except to spread a virus.
>
>I highly recommend ZoneAlarm, a firewall by Zone Labs
>(http://www.zonelabs.com). It can be set to detect all outgoing
>communications. This will alert you if a virus, or sleeper program like
>Back Orifice, tries to contact the Internet from your machine. This will

>at least let you know you're infected, and will prevent you from
>unknowingly sending infected messages to others. There's a free version
>that's very capable.
>
>Incidentally, my ISP recently adopted the practice of deleting any
>incoming email containing exe or some other attachments, before it even
>gets to me. I don't like this very much, but it's an increasingly common
>practice. Consequently, when I email an exe file to someone I either zip
>it or change the extension in case the recipient's ISP does this. But I
>no longer see the virus-containing emails that I used to get with great
>frequency.
>
>Roy Lewallen, W7EL

3647. Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 14:36:36 UTC
From: Barrett Richardson <barrett@phoenix.aye.net>
Message-ID: <20020221143636.75574.qmail@phoenix.aye.net>
Source record: 148133

Anybody have experience using small(ish) rhombics for broadcast
tv reception? I've spent a couple of weeks searching at google
for information about the same and haven't found much. The few
reports that say they work great really didn't give much
detailed information. I've put up a small one (10' by 5'10")
and it works, but not fantastic. I'm considering a larger
one, 1 wl on a side for channel 2 -- about 28' total length,
but if I can't get better performance than a consumer grade
Deep Fringe antenna I could probably find a cause more worthy
of the effort. I have a Wineguard pr-9032 which is the best
consumer grade UHF I could find (16 dbd on channel 30) and it
outperforms my scaled down rhombic, and my small rhombic outperforms
the low end VHF/UHF combos (on UHF but not VHF).

-

Barrett

3648. Re: Homebrew G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 14:58:11 UTC
From: KG4PSS@ARRL.NET
Message-ID: <3f1b4122.0202210658.6ad0a58d@posting.google.com>
Source record: 148136

> If you are unlucky enough to have a voltage
> maximum located at a window's metal flashing, you may indeed see
> flashing.

Not exactly what you mean by sending "spark" :O)

Thanks

3649. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 15:03:01 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C750C25.30F13F43@IEEE.org>
Source record: 148137

Richard Harrison wrote:
> A G5RV or similar dipole with a flat 100-ft line has less than 1 db line
> loss. You won`t often have a flat line, but the increased SWR won`t
> often kill your operation.
>
> If you want to avoid coax radiation, use a balun at the antenna.

I know what you meant, Richard, but to be precise:
If you want to avoid coax radiation, use a balun at the coax
to ladder-line transition point in a G5RV type antenna.
--
cheers, CAM http://www.qsl.net/w5dxp

3650. Re: Feeding Horiz. Loop without Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 15:06:34 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C750CFA.D4B1D970@IEEE.org>
Source record: 148138

Harry Williams wrote:
>
> Thanks to all who contributed to this thread. The main issue here was not that I'm cheap :-)...its
> more of an issue with space at the operating position for a large tuner and secondary to
> that I guess would be convenience. I did get some recommendations on some tuners that are
> fairly small that might fit in ok so I guess I will look into that. Cecil your approach is interesting...

If you are using 450 ohm ladder-line and you feed the system at a current maximum point on the ladder-line, any ladder-line SWR between 4.5:1 and 18:1 will translate into a 50 ohm SWR of 2:1 or less which, IMO, is a good enough match and requires no antenna tuner.
--
cheers, CAM http://www.qsl.net/w5dxp

3651. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 15:17:37 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C750F91.62A2A4CE@IEEE.org>
Source record: 148139

Roy Lewallen wrote:
> I highly recommend ZoneAlarm, a firewall by Zone Labs
> (http://www.zonelabs.com). It can be set to detect all outgoing
> communications. This will alert you if a virus, or sleeper program like
> Back Orifice, tries to contact the Internet from your machine. This will
> at least let you know you're infected, and will prevent you from
> unknowingly sending infected messages to others. There's a free version
> that's very capable.

Roy, the free version is only free for 60 days according to their web
page. Do you know how much they charge after 60 days?
--
cheers, CAM http://www.qsl.net/w5dxp

3652. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 15:37:25 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C751435.4A663AAB@umich.edu>
Source record: 148140

CAM wrote:
>
> Robert Lyons wrote:
> >
> > John Passaneau wrote:
> > >
> > > CAM as it right, mine is up 35' and I have 42 countries on 80 since August
> > > of last year. Worse yet mine is a trapped dipole for 80/40 and 30 meters.
> >
> > Weird. Mine is up 30', and I have *never* heard DX on it. I've long-since
> > given up.
>
> Have you tried CW or PACTOR II?

Nope. I'm not equipped for PACTOR, and my CW is too rusty to do much.

- KI8AB

3653. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 15:39:35 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C7514B6.D1B521D5@umich.edu>
Source record: 148143

John Passaneau wrote:
>
> Have you looked in the right place for the DX. The DX window is 3.790 to
> 3.8MHz. These days I'm seeing 2 to 3 DX stations each night.

Yes, I've looked there, and at what should be ideal greyline times. Nothing from outside US borders. Well, it's been quite a while since I tried, so maybe I'll try again. I've been getting more serious about DXing in the last few months.

73 - Bob, KI8AB

3654. Hybrid Quad MQ2 decision

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 15:46:31 UTC
From: rons533@dejazzd.com
Message-ID: <3C7515CA.6FAA@dejazzd.com>
Source record: 148142

Finally got the A99 vertical running and now I am going to try the MQ2 Hybrid Quad since I am limited on space. I remember these antennas from years back when I though they looked like they wouldn't work. After research I find that they do work very well. I have not been able to find anyone who can say anything bad about this antenna in the reviews. Thought I would see what all here know about this antenna before I purchase it. Anyone dissatisfied?

Thanks

3655. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 15:46:51 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a536gr$450pg$1@ID-124126.news.dfncis.de>
Source record: 148145

Ideally, open wire and other twin lines should be kept more than three times wire-spacing away from ANYTHING.

Beyond three times there's no detectable improvement. And for a feet of line it hardly matters what the spacing is between the line and its surroundings.

There's nothing special about conductive materials. Materials such as non-conductive timber also have DIELECRIC loss.

Here's some food for thought -

Run the feeder nearly touching a copper sheet and there will be no significant extra loss.

Run the feeder nearly touching a very thick polyethylene sheet and there will be no significant extra loss.

There will be only a decrease in Zo which may necessitate moderately different tuner settings.

Reg, G4FGQ

3656. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 15:48:45 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7516DD.A1CACA2C@IEEE.org>
Source record: 148141

```
CAM wrote:
>
> Roy Lewallen wrote:
> > I highly recommend ZoneAlarm, a firewall by Zone Labs
> > (http://www.zonelabs.com). It can be set to detect all outgoing
> > communications. This will alert you if a virus, or sleeper program like
> > Back Orifice, tries to contact the Internet from your machine. This will
> > at least let you know you're infected, and will prevent you from
> > unknowingly sending infected messages to others. There's a free version
> > that's very capable.
>
> Roy, the free version is only free for 60 days according to their web
> page. Do you know how much they charge after 60 days?

Sorry, I misread it. It is free for 60 days for for-profit applications.
--
cheers, CAM http://www.qsl.net/w5dxp
```

3657. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 15:52:09 UTC
From: richardharrison@webtv.net
Message-ID: <18928-3C7517A9-167@storefull-112.iap.bryant.webtv.net>
Source record: 148144

Barrett Richardson wrote:
"I`ve put up a small one (rhombic) (10` by 5` 10") and it works, but not fantastic."

It`s too small, Arnold B. Bailey in "TV and Other Receiving Antennas" has a design I posted here. An Aussie built it and reported it worked as advertised.

"Description: Four straight horizontal conductors forming a diamond"

"Size at 200 MHz: Two #10 wires each 36 feet long, separated 18 feet at midpoint, overall length 31 feet"

"Transmission Line: 300 ohms balanced"

"Resistance at Center Frequency: 600 ohms"

Antenna Average Surge Impedance: 600 ohms"

Physical and Patterns: Can`t reproduce here

"Gain at Center Frequency 14.5 db (or less)"

"Frequency Bandwidth: 1 db down, 30%,
3 db down, 100%"

Rhombics are usually 4 or 5 wavelengths on a side at the design frequency. Bailey`s rhombic is 4.5 wavelengths on a side at 246 MHz. You could expect more than 14.5 db gain at higher frequencied and less at lower frequencies. The sides are about one wavelength at channel 2.

Best regards, Richard Harrison, KB5WZI

3658. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 16:18:37 UTC
From: richardharrison@webtv.net
Message-ID: <18928-3C751DDD-168@storefull-112.iap.bryant.webtv.net>
Source record: 148148

Cecil, W5DXP wrote:
"---to be precise: if you want to avoid coax radiation, use a balun at the coax to ladder-line transition point in a G5RV type antenna."

Exactly. I did say as the questioner said, "or similar dipole".

We have a different mindset and mine included avoiding a transition, regardless of the G5RV benefits, between balanced and unbalanced line.

I assumed an unbalanced coax connector on the radio, an unbalanced tuner, and an unbalanced coax line all the way to the dipole. A balun might be inserted there if the user felt so inclined.

Cecil`s system is superior. Some, though, may find it more trouble to implement. Avoiding a tuner may be a big plus with the CAM System.

Best regards, Richard Harrison, KB5WZI

3659. Re: Hybrid Quad MQ2 decision

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 16:35:22 UTC
From: Nick G4FAL <ntotterdell@nospam.riverauto.co.uk>
Message-ID: <Oj9d8.181$PE2.18946@stones>
Source record: 148146

Ron

I have an MQ2 on the roof of my house. It doesn't work as well as a bigger aerial and is probably only marginally better than a dipole. It has disadvantages as any compact, loaded aerial does. I have had plenty of contacts with mine however including all continents on 20m, 17m and 15m.

It has a fairly narrow bandwidth but my autotuner can match the feeder OK across the bands - works best at resonance as you would expect.

If your expectation are slightly above a wire dipole you will be happy. If you expect the thing to function as well as a full sized two element you will be disappointed. The MQ2 is however a LOT smaller than a full sized two element. I also have a Force 12 C-3SS and this is more than two times bigger in length and width than the MQ2 - the Force 12 works great but I couldn't put it on top of my house!! If the MQ2 is the biggest thing you can have then it will probably be fine for you.

Oh and by the way, I worked a fellow in the states (I'm in England) who also had an MQ2 except his was only 12 feet off the ground on a temporary pole and mine at about 45 feet! So they do work.

Good luck with your decision.

Nick G4FAL

<rons533@dejazzd.com> wrote in message news:3C7515CA.6FAA@dejazzd.com...
> Finally got the A99 vertical running and now I am going to try the MQ2
> Hybrid Quad since I am limited on space. I remember these antennas from
> years back when I though they looked like they wouldn't work. After
> research I find that they do work very well. I have not been able to
> find anyone who can say anything bad about this antenna in the reviews.
> Thought I would see what all here know about this antenna before I
> purchase it. Anyone dissatisfied?
>
> Thanks

3660. Re: Help with TS-440 no RX problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 16:39:20 UTC
From: krishna kanakasapapathi <kkanakas@cisco.com>
Message-ID: <3C7522B7.A17B5E9B@cisco.com>
Source record: 148147

Hi Doc,
I have subsequently unplugged the 7pin DIN and also did a processor
reset. The rig still seems to think its in the xmit mode.

73's
krish

'Doc wrote:

> Krish,
> Sounds like you may have the 'ALC' line shorted, got
> the keying line and ALC backwards...
> 'Doc

3661. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 17:12:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C752A9B.437D6215@eznec.com>
Source record: 148149

According to the Zone Labs web site:

"ZoneAlarm is free for individual and not-for-profit charitable entity use (excluding governmental entities and educational institutions). For-profit business entities, governmental entities, or educational institutions, your license will be free for an introductory sixty (60) day period but you must purchase a valid end-user license after 60 days in order to continue using the software."

and

"Our original product, ZoneAlarm, is still FREE for personal and non-profit use."

So it's free for an unlimited time unless used for commercial purposes. Their Zone Alarm Pro is $39.95, a bargain at the price. You can get more information from their web site.

Roy Lewallen, W7EL

CAM wrote:
>
> Roy Lewallen wrote:
> > I highly recommend ZoneAlarm, a firewall by Zone Labs
> > (http://www.zonelabs.com). It can be set to detect all outgoing
> > communications. This will alert you if a virus, or sleeper program like
> > Back Orifice, tries to contact the Internet from your machine. This will
> > at least let you know you're infected, and will prevent you from
> > unknowingly sending infected messages to others. There's a free version
> > that's very capable.
>
> Roy, the free version is only free for 60 days according to their web
> page. Do you know how much they charge after 60 days?
> --
> cheers, CAM http://www.qsl.net/w5dxp

3662. Re: Brightness Temperature -- Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 17:27:48 UTC
From: goofy <dbeard@aoc.nrao.edu>
Message-ID: <a53anj$ct6$1@chaos.aoc.nrao.edu>
Source record: 148157

Contact The National Radio Astronomy Observatory. They have a PR dude
who is eager to answer all radio astronomy questions.

Try ---------- www.nrao.edu

D.J. Beard
National Radio Astronomy Observatory
Very Long Baseline Array
North Liberty, Iowa

astroman <me@nowhere.net> wrote in message
news:u786bgcf51qcc5@corp.supernews.com...
> Wayne,
> Jim gave you a good answer. You may also want to hang out on sci.astro or
> sci.astro.amateur. They have a lot of knowledgeable folks there also.
>
> "Wayne Watson" <mtnviews@earthlink.net> wrote in message
> news:3C715AAC.F268CFA9@earthlink.net...
> > I'm looking at a book on radio astronomy and the author talks about
> calculating the equivalent
> > blackbody temperature of the galactic center from the formula:

3663. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 17:36:44 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C753025.72B61DE5@icok.net>
Source record: 148150

And then again, if both methods are done correctly,
you probably couldn't tell any difference...
'Doc

3664. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 17:46:35 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <vjca7u0uglu14n2nrvqcnbkr2bureascqj@4ax.com>
Source record: 148151

On Thu, 21 Feb 2002 02:06:21 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

snip
>
>99.5% of my incoming mail is spam. 70 percent of it comes from the far east,
>Taiwan etc., in Chinese characters or really wierd indecipherable stuff. I
>get 20 or 30 spams per day.

There are strategies to reduce their coming to you (noted frequently
here by a tag line following the poster's closing noting "remove the X
in the address to send me e-mail"). This is to tackle the problem at
the outset (scanners reading these messages, finding your address and
sending you spam).

The etiquette of this varies with those who feel put upon to remove
that X....

The alternative is to run barefoot and take care of the problem at the
receiving end. Use filters to send the spam to the trash can (still
does nothing however about the download time spent before taking out
the trash delivered).

>
>For months I have automatically deleted all e-mails with attachments. But
>but before final dumping I inspect in case there's one which I am certain is
>OK to at least read the message. So far as I can remember I have not opened
>a non-OK attachment for months and months. And I have opened only 1
>attachment of any sort in months.
>
>To a knowledgable person only -
>
>Off-topic Question 1. Is it possible to contract a virus other than by
>opening an attachment ? I have IE and OE.

That is the "feature" of OE, it will start that attachment as a
"service" for you (**** you very much MS). The Hackers just love this
and it is the principal form of epidemics that rage through the
internet in a matter of hours.

Disable the feature! Unfortunately for the last security bug admitted
to by Microsoft it also mean disabling most of the browser when you
pull that particular plug (I am thankful MS software does not run life
support systems).

>
>Off-topic Question 2. If I have contracted a virus is it possible for me to

>infect my own website when I upload files to it ?

Yes and No. This is strictly dependant upon the nature of the virus. Some run on only MS/Intel platforms. Many servers run on Sun or Apache software on non-Intel hardware. For them, the virus dies immediately (lack of oxygen).

Then you have MS servers that would not only support this virus, but have there own vulnerabilities (they don't need to wait for your virus as they already have been hit directly by hackers - it's just so easy).

Most virii are of the Macro construction tailored for OE and the Office suite. This is the argument MS makes about their browser being tightly wed to the operating system. This is a nice idea - if they understood the concept of monoculture suicide when a single infection can be transmitted across the entire platform.
>
>There may be others interested.
>
>I have not uploaded anything to my website for 3 weeks.
>Regards, Reg G4FGQ
>
>

Hi Reg,

It is highly unlikely that any infection has been transmitted across to your web site. The reason is that the software to port your pages to the host do not support those same macros (they don't care one way or the other; unless, of course, you use MS Office software to do the porting - sigh - another "feature").

However, once a virus has hit, it may carry what is called a "trojan horse." This is a variant that is an executable program (other than application macro and the macro may have installed the trojan horse) that is designed to pick and choose when and where to attack. These are most often called DOS attacks (denial of service). That is, your machine will run this program automatically and without your knowledge. The general characteristic is it wakes up, looks at the clock and if it is not "time" goes back to sleep. In other words, it is wholly transparent to you and does nothing disruptive to your machine.

When it IS time, it and 1000's like it in infected machines across the net will come alive and start sending requests to a targeted site to overload that site's capacity to respond to those requests and the requests of legitimate visitors to that site; hence the term denial of service (no one gets anything done). And still, you are not directly affected; that is, there is no outward appearance of infection.

The net result is you may read of a popular site being closed down by hackers, and there will be nasty e-mail coming your way, identifying

you as the accomplice! To remove this infection requires doing a "sweep" of your system to test for unauthorized, running software.

The trojan horse may also monitor your activities and report them to the source of the infection. Feel like making a purchase at e-bay? This program will look over your shoulder as you fill in your credit card information. Guess where this information is off to next? This is best defeated with a "firewall."

A firewall monitors all requests from or transmissions to the internet and works on predefined rules that will nip any suspicious activity in the bud (my firewall is from Agnitum and is available for free as a beta currently). Oddly enough my firewall reveals there is a considerable amount of "attempted" traffic from my machine to Microsoft! I, of course, nip it in the bud (my own form of denial of service ;-).

As it is considered an extreme breach of etiquette to post attachments to this and many (other than pornographic) newsgroups; there is absolutely NO NEED to have a newsreader with OE "features."

Microsoft, as a service to you, has set the default options of OE to accept this behavior. If you feel it is inappropriate (and if indeed you were aware - we've already covered that ground), it is your responsibility to disable them. You may do exactly this only to have those over-ridden (as a service to you) with the next "silent" upgrade that was performed behind your back (providing of course you do not have that firewall).

Absolutely none of this happens with Java software unless you ask for it (do not confuse Java with that abomination Java Script). That is, Java software naturally assumes you are not promiscuous and have no taste for these shenanigans (the inversion of the MS security mentality - or lack thereof. MS considers you to be a whore, or encourages you to respond like one).

You may have eradicated the virus, but freedom from future infection is not guaranteed. As in life, this is a function of your choice in partners. Stick with the old routine and you will be infected again and again and again.... Weekly headlines prove that ad nauseum.

Break the cycle at the vector.

73's
Richard Clark, KB7QHC

3665. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 18:04:04 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <moca7ukuffge6dq14nsrfe6k5lidi7r1ci@4ax.com>
Source record: 148152

On Thu, 21 Feb 2002 13:27:29 GMT, "R. Scott" <kf7qz@yahoo.com> wrote:

>There is a scrap metal resale place in Seattle but if I remember last
>time I stopped in he was almost as much new for used :(, cannot find any
>here in Everett. Will check it out in Seattle again if I get down
>there.
>
>Going down to Boeing Surplus Saturday, maybe they are getting it in
>again :)
>
>
>Thanks ever so much for all your kind comments and suggestions, it
>really came in handy.
>
>Rick KF7QZ

Hi Rick,

All you need to do is go down 4th into Georgetown to find scrap metal
vendors galore.

Also try Electronic Dimensions in Tacoma. They are located two blocks
down the hill from the Dome (424 Puyallup Ave.). This is a HUGE
warehouse crammed to the ceiling with surplus.

You can dicker with the owner Glen Galati (a Ham), but he may bend
your ear for 1/2 an hour to answer a simple question :-)
The store has limited hours and is not open Monday nor Tuesday and
only from 10-6 weekdays; 10-3 Saturday. He carries tons of test
equipment and even shielded rooms (transportables). He is a retired
Air Force procurement type who obviously still has contacts. One of
his funnier stories is how the soldiers from Ft. Lewis buy equipment
from him because he's cheaper than the normal channels (which have
surplused that same gear to him). This is about the ONLY practical
government rebate ever offered.

Boeing Surplus is a pale shadow of its days in the 70's when you could
find anything.

73's
Richard Clark, KB7QHC

3666. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 18:09:01 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <ppda7uoij0gmc1h8l96l60gbp139526h85@4ax.com>
Source record: 148153

On Thu, 21 Feb 2002 10:32:40 GMT, Mark Hall
<vze2mhvc@bellatlantic.net> wrote:

>Another "Trick" good for fishing expeditions is to bury two rods in the earth
>separated so that you get 50 ohms. An SWR analyzer will help.
>

Hi Mark,

This was a technique of communication employed during WWI, except the
frequencies were AF. The range was several miles. The originator's
name was Barkhausen (and is also a term used for a certain type of
interference).

73's
Richard Clark, KB7QHC

3667. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 18:12:33 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <b2ea7u8fuql1cl41grg58t6g9ou32oj5fr@4ax.com>
Source record: 148154

On Wed, 20 Feb 2002 11:51:07 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>J. Harvey wrote:
>"Better the antenna than the windscreen."
>
>Reminds me of the storied loan by NASA of their "Chicken Cannon" to
>British Aerospace for windscreen testing.
>
>The Brits asked: "What`s wrong with this thing? It takes out the
>windscreen, the pilot`s headrest, and knocks a hole in the bulkhead
>behind!"
>
>NASA replied: "Thaw the chicken."
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

The Chicken Cannon now finds service in the Canadian TV program Royal
Canadian Air Farce.

73's
Richard Clark, KB7QHC

3668. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 18:15:39 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C75394B.50AC9F83@IEEE.org>
Source record: 148155

Richard Harrison wrote:
> Cecil`s system is superior. Some, though, may find it more trouble to
> implement. Avoiding a tuner may be a big plus with the CAM System.

One thing it does is avoid high power expensive tuners usually needed
for amplifiers. That was my original problem. So tuner losses are
automatically avoided.

Another thing it does is avoid impedances that built-in tuners cannot
match. My new IC-756pro has a built-in tuner and my Ladder-Line Length
selector always presents the 765pro tuner with impedances it can match.

Another thing it does is minimize common-mode currents.
--
cheers, CAM http://www.qsl.net/w5dxp

3669. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 18:16:52 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C753994.18554021@IEEE.org>
Source record: 148156

'Doc wrote:
> And then again, if both methods are done correctly,
> you probably couldn't tell any difference...

You can always tell the difference, Doc, about $300. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

3670. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 18:36:25 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <J6bd8.9121$ss5.1268@nwrddc02.gnilink.net>
Source record: 148158

I've had Zone alarm on both my home computers for a couple of years
now - just installed the free AVI software, and it found *4* existing
viruses on one of my PCs that ZA didn't even know existed...

--
Gary - KJ6Q
= = = = = = = =
BIGGEST THREAT to U.S. National parks?
Not pollution or environmental issues...
It's UN seizure, as allowed by our "political leaders",
already seen in Yellowstone Park and the Grand Canyon!
.....
American government - giving our country away, million
by million, and acre by acre - to many who are sworn enemies.
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C752A9B.437D6215@eznec.com...
> According to the Zone Labs web site:
>
> "ZoneAlarm is free for individual and not-for-profit charitable
entity
> use (excluding governmental entities and educational institutions).
> For-profit business entities, governmental entities, or educational
> institutions, your license will be free for an introductory sixty
(60)
> day period but you must purchase a valid end-user license after 60
days
> in order to continue using the software."
>
> and
>
> "Our original product, ZoneAlarm, is still FREE for personal and
> non-profit use."
>
> So it's free for an unlimited time unless used for commercial
purposes.
> Their Zone Alarm Pro is $39.95, a bargain at the price. You can get
more
> information from their web site.
>
> Roy Lewallen, W7EL
>
> CAM wrote:
> >
> > Roy Lewallen wrote:

> > > I highly recommend ZoneAlarm, a firewall by Zone Labs
> > > (http://www.zonelabs.com). It can be set to detect all outgoing
> > > communications. This will alert you if a virus, or sleeper
program like
> > > Back Orifice, tries to contact the Internet from your machine.
This will
> > > at least let you know you're infected, and will prevent you from
> > > unknowingly sending infected messages to others. There's a free
version
> > > that's very capable.
> >
> > Roy, the free version is only free for 60 days according to their
web
> > page. Do you know how much they charge after 60 days?
> > --
> > cheers, CAM http://www.qsl.net/w5dxp

3671. Re: Antenna Wind Survival

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 18:45:21 UTC
From: SAM <xxscottm@xxnetcommander.comxx>
Message-ID: <5fbd8.138898$Aw2.9935442@bin7.nnrp.aus1.giganews.com>
Source record: 148159

I am not a PE or structural engineer but my recollection is that the 80 MPH standard is a minimum recommended standard specified in ANSI/EIA 222-E and widely accepted in the tower manufacturing industry. The standard establishes a minimum windspeed and radial ice load that a tower should withstand if it is to me safely erected. I can't remember, but I think that 80 MPH is a category two hurricane, something that is not out of the relm of possibility anywhere in North America. Again, this may be incorrect. Just going from vague memory. Try doing a search on EIA 222-E.

Scott M.
KA1MRO

3672. Stranded wire used for traps?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 18:50:27 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <Tjbd8.9250$ss5.7126@nwrddc02.gnilink.net>
Source record: 148160

I realize (I think...) that the best material used for winding traps or mobile coils is SOLID wire in varying guages, and preferably air-wound - but is there any data or test results when stranded, plastic coated wire is used - and wound over a PVC form? Sometimes what's "best" isn't necessarily practical - and I have some very nice stranded 16 ga UV resistant plastic encased wire I'd like to use for some 40 meter mobile coil experimenting I'm working on - but would hate to see what MIGHT be a good design seriouslt flawed by materials used.

Mind you, I'm prepared for SMALL compromises in end results - but would LARGE reductions in efficiency be expected to result from stranded/plastic coated wire? Yeah, I'm aware of potential heating problems at higher power levels...

--
Gary - KJ6Q
= = = = = = = =

3673. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 19:07:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C754572.46462D90@eznec.com>
Source record: 148161

It's not the function of Zone Alarm to detect viruses residing on your machine. For that, you need good anti virus software -- Norton is one of the most widely used -- and keep it updated. What Zone Alarm or a similar firewall does is intercept and prevent hackers from getting into your system via your Internet connection. My firewall has logged four attempts so far today, and four yesterday -- things are a little slow just now. Viruses, worms, trojan horses, and other malevolent software can be planted on your machine without your knowledge by this method, and firewalls like Zone Alarm help prevent this. But unlike most other firewalls, Zone Alarm also detects outgoing messages from your computer that might be sent by virus-like software that got implanted in your machine either via your Internet connection, by opening an email attachment, or by downloading and opening an infected picture, program, or other file.

You need at least one firewall and at least one good anti virus program to live with today's Internet. And none of these is perfect, so you should check often and keep an eye out for any unusual operation or any outgoing communication you can't account for.

Roy Lewallen, W7EL

Gary - KJ6Q wrote:
>
> I've had Zone alarm on both my home computers for a couple of years
> now - just installed the free AVI software, and it found *4* existing
> viruses on one of my PCs that ZA didn't even know existed...
>
> --
> Gary - KJ6Q

3674. Re: Stranded wire used for traps?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 19:12:41 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7546A1.494E977C@icok.net>
Source record: 148162

Gary,
I don't think it would make enough difference in
efficiency to be able to tell the difference. But,
it's going to be kinda hard to change 'taps'. The
biggest difference between solid/stranded wire would
be mechanical, not electrical...
'Doc

3675. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 19:39:31 UTC
From: richardharrison@webtv.net
Message-ID: <18928-3C754CF3-177@storefull-112.iap.bryant.webtv.net>
Source record: 148164

Richard Clark, KB7QHC wrote:
"This was a technique of communication employed during WW1, except the frequencies were AF."

Morse code?

The problem of prods in the soil may be adjustment for the desired load. A similar load may be the water load used by engineering labs at powerline frequencies. This is a guillotine which can be inserted so that its diagonal blade can provide the desired resistance in contact with the water. With finesse, this might work at r-f.

At the shortwave broadcast plant, we used stainless steel wire to dissipate up to 50 KW. Problem with wire lines is the spacing between wires is too close for convenience at 50 ohms, even with multiple wires, usually. But, this can be gently transformed to almost any desired impedance with a tapered transmission line.

For 100 KW dissipation, we erected regular Copperweld wires in a parallel wire line a couple of feet off the ground with the spacing between wires adjusted for the desired impedance. We steamed out the worms with that one.

Best regards, Richard Harrison, KB5WZI

3676. Re: Stranded wire used for traps?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 19:44:06 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <a6cd8.1$hQ5.0@nwrddc01.gnilink.net>
Source record: 148163

Thanks Doc - my thoughts as well - and this is to be a single band design, so no taps - at least
until the basic 40 meter attributes are established...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"'Doc" <w5lz@icok.net> wrote in message news:3C7546A1.494E977C@icok.net...
> Gary,
> I don't think it would make enough difference in
> efficiency to be able to tell the difference. But,
> it's going to be kinda hard to change 'taps'. The
> biggest difference between solid/stranded wire would
> be mechanical, not electrical...
> 'Doc

3677. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 19:57:17 UTC
From: richardharrison@webtv.net
Message-ID: <18929-3C75511D-51@storefull-112.iap.bryant.webtv.net>
Source record: 148165

I gave Arnold B. Bailey`s TV rhombic data with the exception of the graphics. On the drawing is a 600-ohm termination resistor at the far end of the rhombic to make the antenna unidirectional in the direction of the terminated far end. The termination resistor absorbs energy coming from the direction opposite from the terminated end. Using a termination resistor may help get a cleaner signal.

Best regards, Richard Harrison, KB5WZI

3678. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 20:27:07 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <XAHX6yAbgVd8EwyG@pickmere.demon.co.uk>
Source record: 148076

In article <20020221143636.75574.qmail@phoenix.aye.net>, Barrett
Richardson <barrett@phoenix.aye.net> writes
>Anybody have experience using small(ish) rhombics for broadcast
>tv reception? I've spent a couple of weeks searching at google
>for information about the same and haven't found much. The few
>reports that say they work great really didn't give much
>detailed information. I've put up a small one (10' by 5'10")
>and it works, but not fantastic. I'm considering a larger
>one, 1 wl on a side for channel 2 -- about 28' total length,
>but if I can't get better performance than a consumer grade
>Deep Fringe antenna I could probably find a cause more worthy
>of the effort. I have a Wineguard pr-9032 which is the best
>consumer grade UHF I could find (16 dbd on channel 30) and it
>outperforms my scaled down rhombic, and my small rhombic outperforms
>the low end VHF/UHF combos (on UHF but not VHF).

Have you tried a long wire? Here in UK in the 50s they were used for
fringe reception. One version had a series of small capacitors in the
line, total length about 50 ft for 45Mc/s for London.

Mike
--
M.J.Powell

3679. Questions about stacking 2 meter antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 20:52:54 UTC
From: Mike KC5LNN <bozobar@NOSPAMhouston.rr.com>
Message-ID: <G6dd8.1720$0y2.69945@typhoon.austin.rr.com>
Source record: 148166

Hello All

I live in a apartment and can not have a big antenna , so I am building a pair of 2mtr squalo (square halo) antennas for SSB use.
What is the correct spacing between them? 1/4 wave C to C or inner side to inner side?
What is the best way to build a power divider/co-phasing harness coax? 2pieces RG-6 75ohm 1/4 wave (x v factor of the coax) joined at one end by a so-239.
Thanks
Mike KC5LNN

3680. Re: Stranded wire used for traps?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 21:12:11 UTC
From: the-boatman <the-boatman@lineone.net>
Message-ID: <3c756298_2@mk-nntp-1.news.uk.worldonline.com>
Source record: 148167

Winding trap coils for the 40 Mtr band out of stranded wire
is ok - the differance would only realy come to notice when
getting into VHF.
If the plastic coating is very thick, it means the turns cannot
be wound tight together so reducing the Q of the coil.
Again, at 40 Mtrs this would probably be of negligable influance.

Regards, Peter G0LRP
.
"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:Tjbd8.9250$ss5.7126@nwrddc02.gnilink.net...
> I realize (I think...) that the best material used for winding traps
> or mobile coils is SOLID wire in varying guages, and preferably
> air-wound - but is there any data or test results when stranded,
> plastic coated wire is used - and wound over a PVC form? Sometimes
> what's "best" isn't necessarily practical - and I have some very nice
> stranded 16 ga UV resistant plastic encased wire I'd like to use for
> some 40 meter mobile coil experimenting I'm working on - but would
> hate to see what MIGHT be a good design seriouslt flawed by materials
> used.
>
> Mind you, I'm prepared for SMALL compromises in end results - but
> would LARGE reductions in efficiency be expected to result from
> stranded/plastic coated wire? Yeah, I'm aware of potential heating
> problems at higher power levels...
>
> --
> Gary - KJ6Q
> = = = = = = = =
>
>
>

3681. Weird Dipole problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 21:33:00 UTC
From: Screaming Skull <KG4IVT@hot.mail.spicedmeat.sucks.leave.me.alone.com>
Message-ID: <gIdd8.26568$rs6.12199206@typhoon.southeast.rr.com>
Source record: 148071

I have been experimenting with some 11m dipoles in my attic so I can see what will work before I take my morse test to finish up my general upgrade. I have to use attic antennas due to restrictions in my neighborhood. While I have been able to get decent results with one dipole I have made and put up, I am puzzled by this phenomenon that seems to plague me.

When I first put a dipole up there it ran along the frame from the peak of the roof down the frame. This dipole worked terribly, didn't receive, even worse on transmit. I then remounted one in the opposite direction, the first one (the bad one) went North to South as a sloper and the other faced East to West as a straight dipole. I tried the N&S scheme on 6m before too and got terrible results as well. I have yet to try it on the E&W. So my question is what could cause this to happen? Could it be do to the fact that the N&S dipole basically faces the sections of my house and attic that are covered by aluminum siding or is the sloping causing something to go wrong or.....?

I am open to any suggestions here. Thanks!

3682. Re: Questions about stacking 2 meter antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 21:34:47 UTC
From: SAM <xxscottm@xxnetcommander.comxx>
Message-ID: <XJdd8.147775$d34.10760912@bin8.nnrp.aus1.giganews.com>
Source record: 148168

Center to Center. Anything else will distort the pattern differently than
the effect you are looking for.

"Mike KC5LNN" <bozobar@NOSPAMhouston.rr.com> wrote in message
news:G6dd8.1720$0y2.69945@typhoon.austin.rr.com...
> Hello All
>
> I live in a apartment and can not have a big antenna , so I am building a
> pair of 2mtr squalo (square halo) antennas for SSB use.
> What is the correct spacing between them? 1/4 wave C to C or inner side to
> inner side?
> What is the best way to build a power divider/co-phasing harness coax?
> 2pieces RG-6 75ohm 1/4 wave (x v factor of the coax) joined at one end by
a
> so-239.
> Thanks
> Mike KC5LNN
>
>
>

3683. MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 21:36:58 UTC
From: Pedro Motilla <pedro.motilla.QUITAESTO@ono.com>
Message-ID: <_Ldd8.4548$sZ4.73113@news.ono.com>
Source record: 148069

Hi all of you��

I have just purchased a second hand MFJ259 (not MFJ259B), and i do not really know how works the frecuency counter and for what is.

For example, can i mesure the frecuency of my 2m transceiver in order to check it?

How?

Does anybody uses it? what is your feeling?

Thanks.

3684. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 22:19:25 UTC
From: Barrett Richardson <barrett@phoenix.aye.net>
Message-ID: <20020221221925.93176.qmail@phoenix.aye.net>
Source record: 148070

On Thu, 21 Feb 2002, Richard Harrison wrote:

> Barrett Richardson wrote:
> > "I`ve put up a small one (rhombic) (10` by 5` 10") and it works, but
> > not fantastic."
>
> It`s too small, Arnold B. Bailey in "TV and Other Receiving Antennas"
> has a design I posted here. An Aussie built it and reported it worked as
> advertised.
>

Do you know if he was able to do any comparison between it and
the best consumer grade deep fringe antennas on the market?

-

Barrett

3685. Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 22:54:37 UTC
From: Don Johnston <duck@mindspring.com>
Message-ID: <a53tqnmrs1@nntp9.atl.mindspring.net>
Source record: 148072

I have a handheld aviation radio that I can only pick up the aircraft side of a transmission. It has a short (about 8 inch "rubber ducky") antenna that mounts with a BNC connector. Would I be able to pick up the ground side of the transmisson (source is appx. 18 miles away) with an outside antenna? Would it be possible to build one?

Thanks in advance,
Don

3686. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 23:03:55 UTC
From: SAM <xxscottm@xxnetcommander.comxx>
Message-ID: <v1fd8.143929$Aw2.10158626@bin7.nnrp.aus1.giganews.com>
Source record: 148073

Sure,

I would just build a J pole cut for about 115 MHz. and feed it with some
RG58. Should work great.
Scott M.
KA1MRO

"Don Johnston" <duck@mindspring.com> wrote in message
news:a53tqnmrs1@nntp9.atl.mindspring.net...
> I have a handheld aviation radio that I can only pick up the aircraft side
> of a transmission. It has a short (about 8 inch "rubber ducky") antenna
that
> mounts with a BNC connector. Would I be able to pick up the ground side of
> the transmisson (source is appx. 18 miles away) with an outside antenna?
> Would it be possible to build one?
>
> Thanks in advance,
> Don
>
>
>

3687. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 23:07:49 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C757DC5.8050208@sympatico.ca>
Source record: 148074

well first off.... DO NOT connect the MFJ directly to the radio (I heard of it being done and they toasted the MFJ). You can use a handy's "rubber duck" antenna on the BNC connector, place the unit in the near field of the antenna attached to the radio to be tested without contacting it. With the MFJ in Frequency Counter mode, briefly transmit on low power and take a reading off the MFJ's display. Oh, one thing... before running the test, it's nice to ask if the frequency is in use first (good operating practice)

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

Pedro Motilla wrote:

> Hi all of youï¿½ï¿½
>
> I have just purchased a second hand MFJ259 (not MFJ259B), and i do not
> really know how works the frecuency counter and for what is.
>
> For example, can i mesure the frecuency of my 2m transceiver in order to
> check it?
>
> How?
>
> Does anybody uses it? what is your feeling?
>
> Thanks.
>
>
>

3688. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-21 23:18:36 UTC
From: Don Johnston <duck@mindspring.com>
Message-ID: <a53vfo$7pq$1@slb4.atl.mindspring.net>
Source record: 148075

Thanks!

Uh, what's that mean? :-)

Can you point me to a URL that has some instructions?

"SAM" <xxscottm@xxnetcommander.comxx> wrote in message
news:v1fd8.143929$Aw2.10158626@bin7.nnrp.aus1.giganews.com...
> Sure,
>
> I would just build a J pole cut for about 115 MHz. and feed it with some
> RG58. Should work great.
> Scott M.
> KA1MRO
>
> "Don Johnston" <duck@mindspring.com> wrote in message
> news:a53tqnmrs1@nntp9.atl.mindspring.net...
> > I have a handheld aviation radio that I can only pick up the aircraft
side
> > of a transmission. It has a short (about 8 inch "rubber ducky") antenna
> that
> > mounts with a BNC connector. Would I be able to pick up the ground side
of
> > the transmisson (source is appx. 18 miles away) with an outside antenna?
> > Would it be possible to build one?
> >
> > Thanks in advance,
> > Don
> >
> >
> >
>
>

3689. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 00:04:53 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <a541m5$s3b@nntpa.cb.lucent.com>
Source record: 148077

The handbook has a nice idea. Two pieces of copper clad board with lots of 2 watt rsistors sandwiched between. About 50 of them in parrellel. The handbook has the values. This will dissipate 100 watts in air. Dunking it in mineral oil, ala Heathkit, and you can pump a lot more.

Tony

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message news:3C739A36.AEEF82E6@bellatlantic.net...
> You could probably use a tuner to achieve a conjugate match.
>
> Marty wrote:
>
> > I need to cobble up a dummy load for some quick xmitter tests. The only
> > resistors I have are 10 ohm 20 watt wire wound resistors which I can
> > connect in series to yield 50 ohms.
> >
> > What would be the effect of the inductance of these resistors on a
> > measurement of swr, and is there some way to compensate for it?
> >
> > Any suggestions would be appreciated.
>

3690. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 00:13:19 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7b38kfedfau8c@corp.supernews.com>
Source record: 148078

"Don Johnston" <duck@mindspring.com> wrote in message
news:a53tqnmrs1@nntp9.atl.mindspring.net...
> I have a handheld aviation radio that I can only pick up the aircraft side
> of a transmission. It has a short (about 8 inch "rubber ducky") antenna
that
> mounts with a BNC connector. Would I be able to pick up the ground side of
> the transmisson (source is appx. 18 miles away) with an outside antenna?
> Would it be possible to build one?

Yes. Almost ANY outside antenna would work, but you will have to get it up
at least 160 feet for line of sight to the aircraft on the ground 18 miles
away. The odds are you will be able to pick some of them up by reflections
from tall objects (like TV towers and such) but to be RELIABLE, you've got
to get some altitude on your antenna.

Jim

3691. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 00:14:13 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7b3acl1du70b0@corp.supernews.com>
Source record: 148079

Why would you cut it for the middle of the NAV band when he is trying to receive COM signals? The center of the COM band is 127.5 MHz..

Jim

"SAM" <xxscottm@xxnetcommander.comxx> wrote in message news:v1fd8.143929$Aw2.10158626@bin7.nnrp.aus1.giganews.com...
> Sure,
>
> I would just build a J pole cut for about 115 MHz. and feed it with some
> RG58. Should work great.

3692. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 00:17:30 UTC
From: mcduffie@xactcom.net
Message-ID: <oe3b7ukpq0abi4lpsvne1l2vsv713ue4n9@4ax.com>
Source record: 148080

On Thu, 21 Feb 2002 21:36:58 GMT, "Pedro Motilla"
<pedro.motilla.QUITAESTO@ono.com> wrote:

> For example, can i mesure the frecuency of my 2m transceiver in order to
> check it?

You can get a ballpark number from it, but it does not have an accurate
frequency standard, so accuracy will not be high.

gm
--
There is no x in my ISPs domain name.

3693. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 00:38:09 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a543th$32f$4@quark.scn.rain.com>
Source record: 148081

Don Johnston <duck@mindspring.com> wrote:
> I have a handheld aviation radio that I can only pick up the aircraft side
> of a transmission. It has a short (about 8 inch "rubber ducky") antenna that
> mounts with a BNC connector. Would I be able to pick up the ground side of
> the transmisson (source is appx. 18 miles away) with an outside antenna?
> Would it be possible to build one?

You must live in some bumpy territory. I am 30+ miles away from the
local control tower - and their transmissions come in loud and clear.

On the other hand, there is a range of hills between me and an airport
about 35 miles to the North, and I cannot hear that tower at all.

--
Bill Nelson (billn@peak.org)

3694. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 00:43:54 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C759329.BF15CC41@bellatlantic.net>
Source record: 148082

Actually it's a good technique for getting worms out of the ground. I know
it works at 60 Hz anyway..

;73

Richard Harrison wrote:

> Richard Clark, KB7QHC wrote:
> "This was a technique of communication employed during WW1, except the
> frequencies were AF."
>
> Morse code?
>
> The problem of prods in the soil may be adjustment for the desired load.
> A similar load may be the water load used by engineering labs at
> powerline frequencies. This is a guillotine which can be inserted so
> that its diagonal blade can provide the desired resistance in contact
> with the water. With finesse, this might work at r-f.
>
> At the shortwave broadcast plant, we used stainless steel wire to
> dissipate up to 50 KW. Problem with wire lines is the spacing between
> wires is too close for convenience at 50 ohms, even with multiple wires,
> usually. But, this can be gently transformed to almost any desired
> impedance with a tapered transmission line.
>
> For 100 KW dissipation, we erected regular Copperweld wires in a
> parallel wire line a couple of feet off the ground with the spacing
> between wires adjusted for the desired impedance. We steamed out the
> worms with that one.
>
> Best regards, Richard Harrison, KB5WZI

3695. Want Winradio Type Software For Icom

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 00:53:32 UTC
From: ddmga@yahoo.com
Message-ID: <296ea75a.0202211653.921cc26@posting.google.com>
Source record: 148084
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,it.hobby.radioamatori,rec.radio.swap

I just got an Icom IC-R7100 receiver. I used to have a Winradio
Wr1000i. Is there a software package out there for the Icom that is
as good or better than the Winradio software?

Thanks for any help!

-David DDMGA@YAHOO.COM

3696. Re: Weird Dipole problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 00:55:42 UTC
From: Drink <REMOVE_THISdrink@coqui.net>
Message-ID: <Tygd8.57$hK4.17546@e420r-atl1.usenetserver.com>
Source record: 148083

"Covered with aluminum siding"? Covering the dipole isn't a good thing.
If I just read it wrong it could also be that (if it's tacked up to a beam)
the wood/roofing material's affecting your signal. If you're sure your
installation's correct, go back up and take a look with closer scrutiny at
it. You might see something you overlooked like bad connection, behind
metal flashing, etc.
I put up my first dipole against the side of a concrete wall. I never
thought, initially, what all the re-bar would do to it. I moved it a foot
or so and it was like turning on a light bulb (figuratively speaking).
73's,
Drink, WP3JQ
"Screaming Skull" <KG4IVT@hot.mail.spicedmeat.sucks.leave.me.alone.com>
wrote in message news:gIdd8.26568$rs6.12199206@typhoon.southeast.rr.com...
> I have been experimenting with some 11m dipoles in my attic so I can see
> what will work before I take my morse test to finish up my general
upgrade.
> I have to use attic antennas due to restrictions in my neighborhood.
While
> I have been able to get decent results with one dipole I have made and put
> up, I am puzzled by this phenomenon that seems to plague me.
>
> When I first put a dipole up there it ran along the frame from the peak of
> the roof down the frame. This dipole worked terribly, didn't receive,
even
> worse on transmit. I then remounted one in the opposite direction, the
> first one (the bad one) went North to South as a sloper and the other
faced
> East to West as a straight dipole. I tried the N&S scheme on 6m before
too
> and got terrible results as well. I have yet to try it on the E&W. So my
> question is what could cause this to happen? Could it be do to the fact
> that the N&S dipole basically faces the sections of my house and attic
that
> are covered by aluminum siding or is the sloping causing something to go
> wrong or.....?
>
> I am open to any suggestions here. Thanks!
>
>

3697. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 02:17:52 UTC
From: richardharrison@webtv.net
Message-ID: <18931-3C75AA50-7@storefull-112.iap.bryant.webtv.net>
Source record: 148086

Barrett Richardson wrote:
"Do you know if he was able to do any comparison between it and the best consumer grade antennas on the market?"

No. He did not say which antennas he had previously tried. He only reported poor signals before he put up the rhombic and satisfactory signals after the rhombic was up.

It`s been a year or so, but Bailey`s rhombic was what he said he put up. The 14 db gain figure versus a dipole (Bailey always uses dbd) is dependable and can be compared with gain figures for deep fringe antennas. The deep fringe antennas are likely to have gain quotations at their best frequency and be referenced to an isotropic which is a couple of db better looking than dbd. The rhombic figure is at 200 MHz, a Bailey standard practice. At higher frequencies, the rhombic has higher gain.

No one has mentioned height, but line of sight to the horizon is about:
D = square root of 2h.
D is the distance to the horizon in miles, and h is the antenna height in feet. TV broadcasters try to put viewers within their horizon by using very high transmitting antennas. So, height of the rhombic is almost unimportant except for getting the vertical pattern directivity down along the horizontal and not beamed uselessly up towards the sky. For this, 1/2-wavelerngth of elevation for the rhombic, or more, is satisfactory. 1/2-wavelength at channel 2 is only about 9 feet. So, that shouldn`t be too onerous.

Best regards, Richard Harrison, KB5WZI

3698. Re: Weird Dipole problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 02:31:19 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020221213119.16181.00000140@mb-mq.aol.com>
Source record: 148085

A dipole radiates off its sides . . so if your sides are aluminum siding, the diple is shielded.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

3699. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 02:59:02 UTC
From: n7ws@yahoo.com
Message-ID: <3c75abff.91643712@news.triconet.org>
Source record: 148087

On Thu, 21 Feb 2002 02:28:16 GMT, "marvin rosen" <raghead@worldnet.att.net>
wrote:

|REG!!! besides having nortons anti virus i also have a free anti virus
|download called"AVG"... they provide you with free updates & will also
|automatically scan your computer at your designated time..they also scan on
|boot up. also any in/outgoing e-mail is scanned..hope this helps others in
|the group

I might give this a try. In the meantime, I use Eudora for email (an old version without ads), Free Agent for a newsreader and Netscape Communicator for a browser. If sites I visit require plug-ins for song and dance, I leave.

None of these applications share address books or anything else and they didn't come from Microsoft.

I also run ZoneAlarm, AdSubtract and Norton AV.

My ISP does a good job too of intercepting virus containing email. They stop Snow White from HAHAHA about once a week.

I don't get the Chinese crap anymore since I changed ISPs and email address. Unfortunately, I had a "mail to:" link on my home page and the robots found it so now I get a lot of crap via n7ws*@arrl.net. So I redirected that to a yahoo mail account where they filter off a lot of the known bulk mail.

To get even, I added a lot of 'mail to:' addresses for some of the more obnoxious spammers to my web page, so when the robots go looking they can spam the spammers.

I do not put my credit card numbers on the Internet. I know it's supposed to be safe, however, I remember a while back when Western Union had to ask about 15,000 folks to cancel their credit cards because of a "leak" in their web security. For sure, this was a hack _into_ their system and it could happen anywhere these data reside but it seems to me that it would be easier when the data are going and coming.

I know the hoops through which I had to jump when I was processing Secret data on a computer located inside a shield room with no connection to the outside world. From this perspective Internet "security" is a joke.

If an online vendor doesn't have an 800 number where I can speak to a human being and complete my transaction, they can ring up a No Sale.

My two cents.

Wes N7WS

3700. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 03:09:41 UTC
From: k1bqt@aol.com
Message-ID: <20020221220941.27703.00000138@mb-mi.aol.com>
Source record: 148088

>Would I be able to pick up the ground side of the transmisson (source is appx. 18 miles away) with an outside antenna?<

Sure--I hear Manchester NH ground traffic any time day or night from 35 miles away with some "Granite State" hills in between using a 11-dBi yagi at 35 feet. The airport and my house are both around 250' ASL. Propagation characteristics are about the same as they would be for 2-M weak-signal SSB--with the small inherent disadvandage of using vertical polarization thrown in. In order to cheat mother nature and hear over the horizon, you'll need some gain plus height to do it (a rubber duck has negative gain and...well...duckish height). I have a small 3 element broadbanded design that might work pretty well for you at chimney height over a 18 mile path. If you're really interested, I can E-mail you a Word file that describes how to build it.

Rick K1BQT

3701. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 03:14:07 UTC
From: jcplpsm@aol.communicate
Message-ID: <20020221221407.13852.00000112@mb-mk.aol.com>
Source record: 148089

>Sure--I hear Manchester NH ground traffic any time day or night from 35 miles
>away with some "Granite State" hills in between using a 11-dBi yagi at 35
>feet.

Yea, but that's not a fair comparison. New Hampshire is God's country so radio wave always propagate well there :-)

Scott M.
KA1MRO/8

3702. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 03:22:42 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C75B982.81B8D407@coqui.net>
Source record: 148090

Wes Stewart wrote:
>
> On Thu, 21 Feb 2002 02:28:16 GMT, "marvin rosen" <raghead@worldnet.att.net>
> wrote:
>
> |REG!!! besides having nortons anti virus i also have a free anti virus
> |download called"AVG"... they provide you with free updates & will also
> |automatically scan your computer at your designated time..they also scan on
> |boot up. also any in/outgoing e-mail is scanned..hope this helps others in
> |the group
>
> I might give this a try. In the meantime, I use Eudora for email (an old
> version without ads), Free Agent for a newsreader and Netscape Communicator for
> a browser. If sites I visit require plug-ins for song and dance, I leave.

AVG only works on Outlook Express Mail.

-Bill (Eudora/Netscape)

3703. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 03:41:29 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <u7bfdusid27b1@corp.supernews.com>
Source record: 148091

A full 40 years ago, when doing vhf propagation studies in West Virginia
(a story unto itself) I spotted a rhombic antenna in a front yard.
Everyone on this group knows how we can spot antennas that can not be
seen by mere mortals. Turned the car around (a task on those roads) and
took a better look. Yep, a miniature rhombic. Could even see a
resistor at the far end from the house. Knocked on the door. Upshot
was that the son-of-the-house had been in the military working with HF
and brought some "learning" home.
It was common to see very long transmission lines from a house to
the antenna that was placed at a hot spot. I am here to tell you that
propagation in such terrain is very interesting.
So, yes. One may and can use a rhombic to receive TV. Not good
value for a radio amateur at HF even if one has the room. 73 Mac
N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net
Office: JCM@McLMcL.Com
"Barrett Richardson" <barrett@phoenix.aye.net> wrote in message
news:20020221143636.75574.qmail@phoenix.aye.net...
> Anybody have experience using small(ish) rhombics for broadcast
> tv reception? I've spent a couple of weeks searching at google
> for information about the same and haven't found much. The few
> reports that say they work great really didn't give much
> detailed information. I've put up a small one (10' by 5'10")
> and it works, but not fantastic. I'm considering a larger
> one, 1 wl on a side for channel 2 -- about 28' total length,
> but if I can't get better performance than a consumer grade
> Deep Fringe antenna I could probably find a cause more worthy
> of the effort. I have a Wineguard pr-9032 which is the best
> consumer grade UHF I could find (16 dbd on channel 30) and it
> outperforms my scaled down rhombic, and my small rhombic outperforms
> the low end VHF/UHF combos (on UHF but not VHF).
>
> -
>
> Barrett

3704. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 03:49:46 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <sdjd8.14631$lS1.3113282@news20.bellglobal.com>
Source record: 148092

"Don Johnston"
> I have a handheld aviation radio that I can only pick up the aircraft side
> of a transmission. It has a short (about 8 inch "rubber ducky") antenna
that
> mounts with a BNC connector. Would I be able to pick up the ground side of
> the transmisson (source is appx. 18 miles away) with an outside antenna?
> Would it be possible to build one?

Why not borrow, buy or make an inexpensive whip (Radio Shack usually has some sort of telescopic antenna on a BNC connector). Adjust it to 1/4 lambda (23" ?). Then clamber up onto the roof of your house and see if you can get any signal at all. If you can get a weak signal, then it might be worth building an outside antenna. If you get nothing, then you'll have to try harder (Yagi, preamp, tower) or give up.

I built my neighbour (retired pilot with a float plane) a sleeve vertical dipole out of cheap coax cable (LAN coax) and put it in a length of PVC pipe. He clamped it to his chimney (yes, I know...) and it worked for him.

He was in the same situation (no 'Tower' signal in his kitchen using handheld), except only about 10 miles.

3705. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 04:39:34 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C75CB7D.97E62F61@icok.net>
Source record: 148093

Don,
An outside antenna will improve reception, but
you still may not hear the ground side transmissions.
If you can get it up high enough, sure, you can hear
the airport, but depending on the local terrane, how
high is high enough??
'Doc

3706. Re: Weird Dipole problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 04:47:45 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C75CD67.C180F88D@icok.net>
Source record: 148094

Screaming Skull,
Could be several things, ranging from an improperly made dipole, to there was just nothing to hear. The most probably reason is that the 'siding' is shielding the antenna. Making the antenna 'slope' wouldn't have much to do with it, it does make an antenna sort of directional, but not directional enough to cause what's happening to you.
Just as an experiment, take the antenna outside, hang it up high enough not to 'cloths-line' your self, and see what happens. If you still hear nothing on 11 meters, there's something wrong with the dipole. If you do hear stuff, then the attic location just ain't gonna work...
'Doc

3707. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 04:53:44 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C75CECE.B4B4F66D@icok.net>
Source record: 148095

Pedro,
The MFJ259 frequency counter is not very accurate. I
would not try to determine your transciever's frequency
by using the '259. You can use your transciever to check
the accuracy of the '259, though. Just turn on the transciever
to a known frequency, then tune the '259 till you hear it
on the transciever. Compare the two frequency readings and
see how far off the '259 is. There's no need to transmit
at all.
'Doc

3708. Re: open wire feeders questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 04:57:34 UTC
From: "a. giammarino" <agia@ix.netcom.com>
Message-ID: <v4jb7uccnh5d7cv2k1s4d46ehf0ovghq94@4ax.com>
Source record: 148096

On Thu, 21 Feb 2002 02:29:46 -0500, "AB Brown"
<abbrown@nospammail.com> wrote:

>1) How are open wire feeders affected by objects, such as aluminum rain
>gutters, shingles, and antenna mast, which it will run near? How should I
>position it to avoid these?

A lot of advice (and good advice) says to keep the feedline away from
other metallic objects. At my shack, I have absolutely no choice but
to run my feeder line through two holes I drilled in the bottom
portion of my metal window frame. The feeder line crosses the window
frame at a right angle as opposed to running parallel with the frame.

I do keep my rats nest of cables away from the short piece that
connects to the tuner just before the feed line goes outside.
Otherwise, I'm not sure what impact this has but I've been on the air
for years this way. I guess my point is, if you must run the feed
line near metal, keep it to a minimum!

--
A. "Tony" Giammarino (WA6HTF)
San Diego, CA

3709. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 05:06:37 UTC
From: davejack@sonic.net
Message-ID: <davejack-2102022106400001@d73.nas21.sonic.net>
Source record: 148097

I have found some old radio books that include designs for TV reception:
Antenna Manual, By Woodrow Smith is one.
This one sized for FM radio reception centered on 97 MHz
multiply dimensions by 1.5 for channels 1 to 6
for channels 7 to 13 (highband!?!) multiply dimensions by 0.5
overal length= 55'-9"
sides of diamond = 30'
Distance across center = 22'-6"
minimum mounting height = 10' above obstructions, 30' min, 40' perferred
two 390 ohm terminating resisters
matching section (I can't describe...) but important to 300 ohm twin lead.
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net
> Office: JCM@McLMcL.Com
> "Barrett Richardson" <barrett@phoenix.aye.net> wrote in message
> news:20020221143636.75574.qmail@phoenix.aye.net...
> > Anybody have experience using small(ish) rhombics for broadcast
> > tv reception? I've spent a couple of weeks searching at google
> > for information about the same and haven't found much. The few
> > reports that say they work great really didn't give much
> > detailed information. I've put up a small one (10' by 5'10")
> > and it works, but not fantastic. I'm considering a larger
> > one, 1 wl on a side for channel 2 -- about 28' total length,
> > but if I can't get better performance than a consumer grade
> > Deep Fringe antenna I could probably find a cause more worthy
> > of the effort. I have a Wineguard pr-9032 which is the best
> > consumer grade UHF I could find (16 dbd on channel 30) and it
> > outperforms my scaled down rhombic, and my small rhombic outperforms
> > the low end VHF/UHF combos (on UHF but not VHF).
> >
> > -
> >
> > Barrett
David and Becky Jackson
Santa Rosa, CA
A Macintosh House!

3710. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 05:27:42 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C75D6CA.1B47AD85@att.net>
Source record: 148098

Wes, playing Devil's Advocate for a bit, why would you trust a completely unknown clerk-person at the end of an 800 line with your credit card number when you won't trust a reasonably secure encryted transfer from your computer to another? I know, none of my business, but just curious . . .

I never feel easy about even handing my card to a waiter in a restaurant - we have no way of knowing how many cards have their info copied, etc.

A few years back at one of the finest restaurants in Dallas, I paid the tab with my credit card, and we waited and waited for the waiter to return with the receipt, etc. After about 20 minutes, I pursued the matter and was told with a big smile that "Gee whiz! Somehow your card has gotten misplaced after we posted the transaction, but don't worry, you can call and cancel it" or words to that effect.

I just looked at this person for a moment and then said calmly "You have five minutes by my watch to place that card in my hand. If you do not, at that time I am calling the Dallas Police Dept. immediately. Now get moving!"

About three minutes later, the card had mysteriously been "found."

I think that we are in far greater risk when we mail a check to someone which contains all the numbers some people need to harvest your account and make solid inroads on stealing your identity.

Cruel world, isn't it?

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Wes Stewart wrote:
>
> On Thu, 21 Feb 2002 02:28:16 GMT, "marvin rosen" <raghead@worldnet.att.net>
> wrote:
>
> |REG!!! besides having nortons anti virus i also have a free anti virus
> |download called"AVG"... they provide you with free updates & will also
> |automatically scan your computer at your designated time..they also scan on
> |boot up. also any in/outgoing e-mail is scanned..hope this helps others in
> |the group
>

> I might give this a try. In the meantime, I use Eudora for email (an old
> version without ads), Free Agent for a newsreader and Netscape Communicator for
> a browser. If sites I visit require plug-ins for song and dance, I leave.
>
> None of these applications share address books or anything else and they didn't
> come from Microsoft.
>
> I also run ZoneAlarm, AdSubtract and Norton AV.
>
> My ISP does a good job too of intercepting virus containing email. They stop
> Snow White from HAHAHA about once a week.
>
> I don't get the Chinese crap anymore since I changed ISPs and email address.
> Unfortunately, I had a "mail to:" link on my home page and the robots found it
> so now I get a lot of crap via n7ws*@arrl.net. So I redirected that to a yahoo
> mail account where they filter off a lot of the known bulk mail.
>
> To get even, I added a lot of 'mail to:' addresses for some of the more
> obnoxious spammers to my web page, so when the robots go looking they can spam
> the spammers.
>
> I do not put my credit card numbers on the Internet. I know it's supposed to be
> safe, however, I remember a while back when Western Union had to ask about
> 15,000 folks to cancel their credit cards because of a "leak" in their web
> security. For sure, this was a hack _into_ their system and it could happen
> anywhere these data reside but it seems to me that it would be easier when the
> data are going and coming.
>
> I know the hoops through which I had to jump when I was processing Secret data
> on a computer located inside a shield room with no connection to the outside
> world. From this perspective Internet "security" is a joke.
>
> If an online vendor doesn't have an 800 number where I can speak to a human
> being and complete my transaction, they can ring up a No Sale.
>
> My two cents.
>
> Wes N7WS

3711. Re: Where do you find aluminium tubing for projects.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 05:46:34 UTC
From: Rick Karlquist <richard@karlquist.removethis.com>
Message-ID: <_Wkd8.3523$%D5.17481@rwcrnsc52.ops.asp.att.net>
Source record: 148099

Yes indeed. I have over 3000 feet (2 and 3 inch) that I bought for about 20
cents/ft used. I just missed getting another bunch of it for FREE.

Rick N6RK

"Mark Walsh" <mark@km6xu.die.spam.die.com> wrote in message
news:a5248tdqr1@bob.news.rcn.net...
> "Rick Karlquist" <richard@karlquist.removethis.com> wrote:
>
> > I build a lot of stuff from aluminum irrigation tubing. Besides
> > buying it used from farmers, you can buy it new from the
> > national chain "Rain for Rent". I just called them today
> > coincidentally to get their latest prices. The smallest they
> > have is 1 1/2 inch for 0.84/foot. The biggest I got a price
> > for was 5 inch, .078 wall for $4/foot.
>
> You can get it much cheaper if you buy it used.
> I built a quarter-wave for 3.900 MHz, and the tubing
> cost almost nothing compared to all of the other stuff
> (guy anchors, guy cable, insulators, cable clamps, etc.).
>
> Mark Walsh ***** mark@die.spam.die.km6xu.com ***** http://www.km6xu.com
>
>

3712. circuit board for ProData interface

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 05:54:01 UTC
From: John O'Flaherty <wewelcomespam@blackhole.net>
Message-ID: <3C75DCF9.8F05F520@isp01.net>
Source record: 148100

Thanks for your article in QST. Do you still have any of the circuit
boards available?

oflahert@isp01.net

--
john

3713. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 06:21:12 UTC
From: n7ws@yahoo.com
Message-ID: <3c75da78.103542364@news.triconet.org>
Source record: 148101

On Thu, 21 Feb 2002 09:52:09 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

|Barrett Richardson wrote:
|"I`ve put up a small one (rhombic) (10` by 5` 10") and it works, but
|not fantastic."
|
|It`s too small, Arnold B. Bailey in "TV and Other Receiving Antennas"
|has a design I posted here. An Aussie built it and reported it worked as
|advertised.
|
|"Description: Four straight horizontal conductors forming a diamond"
|
|"Size at 200 MHz: Two #10 wires each 36 feet long, separated 18 feet at
|midpoint, overall length 31 feet"
|
|"Transmission Line: 300 ohms balanced"
|
|"Resistance at Center Frequency: 600 ohms"
|
|Antenna Average Surge Impedance: 600 ohms"
|
|Physical and Patterns: Can`t reproduce here
|
|"Gain at Center Frequency 14.5 db (or less)"
|
|"Frequency Bandwidth: 1 db down, 30%,
| 3 db down, 100%"
|
|Rhombics are usually 4 or 5 wavelengths on a side at the design
|frequency. Bailey`s rhombic is 4.5 wavelengths on a side at 246 MHz. You
|could expect more than 14.5 db gain at higher frequencied and less at
|lower frequencies. The sides are about one wavelength at channel 2.

The problem with Rhombics is the terrible sidelobes. Without careful design the first pair can sometimes be bigger than the "main" lobe.

The Laport double parallelogram version can do much better in this regard. I have modeled one in Eznec that has the largest sidelobes (the thirds) down about 12 dB with F/B >20 dB. Free space gain is about 15 dBi. This is with an overall length of about 60 feet at 144 MHz or a bit under 9 wavelengths.

Modeling this is tricky because of the multiple wires at the feedpoint and loads and the number of wires meeting at acute angles and/or crossing. I used segment tapering on both ends of all wires and then had to tweak slightly to get the

number of segments below 500 (the Eznec limit)

Wes N7WS

3714. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 08:24:44 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202220024.1f24722f@posting.google.com>
Source record: 148102

"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:<u7bfdusid27b1@corp.supernews.com>...
> A full 40 years ago, when doing vhf propagation studies in West Virginia
> (a story unto itself) I spotted a rhombic antenna in a front yard.
> Everyone on this group knows how we can spot antennas that can not be
> seen by mere mortals. Turned the car around (a task on those roads) and
> took a better look. Yep, a miniature rhombic. Could even see a
> resistor at the far end from the house. Knocked on the door. Upshot
> was that the son-of-the-house had been in the military working with HF
> and brought some "learning" home.

Rhombics were very common for TV use back in the 40s,50's. Then the
yagi's and log type designs took over because people wanted to watch
more than one channel and could spin them around. I have a QST article
about TV rhombics somewhere. It was from the 50's I think. A fairly
large "yard sized" rhombic has a lot of gain on VHF. Probably more
than many of todays "TV" antennas being most are compromises to cover
such a large spread of frequencies. MK

3715. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 09:16:07 UTC
From: Pedro Motilla <pedro.motilla.QUITAESTO@ono.com>
Message-ID: <r%nd8.4607$sZ4.75102@news.ono.com>
Source record: 148103

Dear Friends:

Yesterday night (in Spain) was the first time i used it and today i have discovered that input button is a little hard, so i have to press it strongly in order to switch into Frecuency Counter. I have found correct what some of you told me about accuracy. "It gives to you an idea, but not a precise count frecuency".

By the other hand it is very simple to use for adjusting antennas, i have adjusted one in few minuts. The disapointment in front of MFJ259B is that the 259B has an internal microcontroler which make a lot of calculations, so it gives to you direct readout for many variables, which in 259 you have to hand calculate (for example: Capacitance or inductance).

Thanks to everyone
Have a nice time.
Pedro

"Pedro Motilla" <pedro.motilla.QUITAESTO@ono.com> escribi&#65533; en el mensaje news:_Ldd8.4548$sZ4.73113@news.ono.com...
> Hi all of you&#65533;&#65533;
>
> I have just purchased a second hand MFJ259 (not MFJ259B), and i do not
> really know how works the frecuency counter and for what is.
>
> For example, can i mesure the frecuency of my 2m transceiver in order to
> check it?
>
> How?
>
> Does anybody uses it? what is your feeling?
>
> Thanks.
>
>

3716. Re: Questions about stacking 2 meter antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 13:33:51 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C7647C9.4543FA12@gte.net>
Source record: 148104

SAM wrote:

> Center to Center. Anything else will distort the pattern differently than
> the effect you are looking for.

The gain vs. stacking distance is quite broad. Gain will maximize between 50-60"
(this through modeling and test range).
Closer distances will not distort the pattern- it will remain eggshaped as is
the case for all shortened dipole type omnis, but the stacking gain will not be
realized.
Dale W4OP
for PAR Electronics, Inc.

3717. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 13:34:16 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C7648D7.BEAEA78E@umich.edu>
Source record: 148105

Pedro Motilla wrote:
>
> Dear Friends:
>
> Yesterday night (in Spain) was the first time i used it and today i have
> discovered that input button is a little hard, so i have to press it
> strongly in order to switch into Frecuency Counter.

This sounds like other 259's I've worked with. I'm not impressed with
the switches and buttons they use. Both mine and my friend's 259 have
bad range switchces (the main rotary switch). Some positions you have
to wiggle the switch to make it settle in, others you actually have to
hold the switch to keep it in connection. On mine, the mode button
is completely flakey. Their debounce curcuitry isn't working at all.
It steps through multiple modes each time I press. It's like playing
a slot machine to get this device into the right mode.

Bob, KI8AB

3718. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 13:45:28 UTC
From: richardharrison@webtv.net
Message-ID: <23944-3C764B78-39@storefull-111.iap.bryant.webtv.net>
Source record: 148108

Wes, N7WS wrote:
"The trouble with rhombics is terrible side lobes."

That`s true with Bailey`s TV rhombic, too. It has side lobes about 40, 50, and 75 degrees either side of the main lobe. If other TV signals on the same channel are in these directions, they may interfere.

There is significantly more gain in the main lobe than in any side lobe. So, you`ve improved S/N over an omnidirectional antenna in any case.

Rhombics are good antennas. They are the most often used commercial antenna for point to point application. This, because they are simple and work over a wide frequency range without tuning or adjustment. Rhombics are not ideal, but give good performance over a wider frequency range.

Best regards, Richard Harrison, KB5WZI

3719. Re: Weird Dipole problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 13:47:53 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C764C09.68FF20BE@crosslink.net>
Source record: 148106

Screaming Skull wrote:
>
> I have been experimenting with some 11m dipoles in my attic ...
> I have to use attic antennas due to restrictions in my neighborhood. ....
>
> I am open to any suggestions here. Thanks!

Others have addressed your questions so let me offer a different suggestion. Faced with the same problem many years ago, I drilled a 3/8 hole in the roof just over the attic access portal in a closet and made a vertical dipole out of a CB whip from Radio Shack and a 10' piece of conduit. This let me poke the whip up thru the hole at night and draw it down out of sight when not in use. That was then. Now I'd get one of those 35-ft collapsable masts from MFJ.

When the HOA finally noticed I pointed out that the rules only forbid *attaching* antennas and this one wasn't "attached" in the legal sense*; that it was like a portable BBQ grill vs a permanent backyard fireplace. I promised to get rid of it if they outlawed BBQ grills. There was mucho sniveling but the antenna stayed, tho I was careful to take it down when not in use. Natch YMMV but I'd think the same arguement'd apply to any "unattached" structure.

*"attached" has a well defined legal meaning. For example, If I rent a house from you and hang a picture on the wall the picture is still mine cuz its not "attached" but if I "attach" (glue) paneling to the walls it becomes yours and must be left when I move out. No, I ain't no lawyer nor very bright ... but ah kin read ;o).

Good luck, KA3DWW

3720. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 14:06:22 UTC
From: richardharrison@webtv.net
Message-ID: <29200-3C76505E-16@storefull-115.iap.bryant.webtv.net>
Source record: 148107

Mac, N8TT wrote:
(Rhombic) Not good value for radio amateur at HF even if one has the room."

My father-in-law, W1DBM, now SK, would disagree with you. He had 3 rhombics in his favorite directions on his mountain top in Connecticut. These rhombics excelled in opening bands.

Best regards, Richard Harrison, KB5WZI

3721. Multiband dipole - trial and error results

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 14:21:49 UTC
From: Bob Cook <captcook@compuserve.com>
Message-ID: <a55k78$9ta$1@suaar1ab.prod.compuserve.com>
Source record: 148109

All,

Re designing and building multi-band HF dipoles.

I have been using multiband dipoles for HF operation some years now with good success. At present I use two. One is a multi-conductor, (four conductors), single cable design, which I use vertically on a 50 foot sailboat. Another is a multi-wire set of dipoles which I have installed in my condo attic for home operation. I am getting ready to make a new single cable multi-conductor antenna for the attic and in experimenting with calculating and verifying resonant lengths and finding some puzzling outcomes. I am sharing my findings here in the event someone else has experiemented with single cable, multic-conductor dipoles and cares to share their findings and insights.

Other posts have been made to the forum discussing multiband dipoles and I am aware of those in the past 3 months or so, infact pacrticipated in a few of these discussions. Please note I am not here interested in sets of mult-wire dipoles set at angles to one another, like 90 degrres, etc. I am primarily interested in designing and making what I will call single cable, multi-conductor dipoles.

Here are the details of the antenna(s) I am presently testing. I would like an antenna resonant on 40, 30, 20, 17, 15, 12 and 10 meter ham bands. The cable I am using is 5 conductor TV rotator cable. I bought a 100 foot piece of cable. My plan is to put the two antennas next to each other or at right angles to each other. I cut it in two pieces one piece for the 40, 30, 20 meter antennas and one for the 17, 15, 12 and 10 meter antennas. From prior experience I knew that each dipole would affect the resonant frequency of the adjacent dipoles but was not sure in what direction or by how much. I suspected each dipole would lower the resonant frequency of the others. And I suspected that resonant frequency of the shorter, (higher frequency) dipoles would be most affected.

As a starting point using the formula 468 / frequency mhz), I cut all the antenans 8% too long, ie for a frequency 8% below my desired resonant frequency for each antenna. I then connected the antennas, one at a time to my tranceiver using a very short, (2 feet), piece of 75 ohm balanced feedline. I then ran SWR and foward vs reflected power tests. I carefully created a table noting the desired resonant frequencies, the design length by formula, the design length plus the 8% allowance, the predicted resonant frequency with the 8% additional length, and then when tested the foward and reflected power for each antenna. I also noted the sharpness of the resonant dip for each dipole. My intent is to find by calculation and trial and error to trim each dipole down to bring each one to exact resonance at my desired resonant frequencies.

The results so far have been partially as predicted and partially quite puzzling. Testing antenna 40, 30 & 20 meter antenna the 40 and 30 meter resonant frequencys were lower than predicted. The resonant point of the 40 meter dipole was low by 10%. The 30 meter dipole was low by 3%. The 20 meter antenna had no dip, ie no resonant point within 30% of the predicted resonant frequency. Hmmm..what happened to the resonant point of the 20 meter dipole?

The 17, 15, 12 and 10 meter antenna had a similar result. That is the resonant point of the 17 and 15 meter dipoles was 3-8% lower than predicted, and this time there was no resonant point for the 12 or 10 meter dipoles within 30% of the predicted resonant frequencies. So again, I am puzzled as to what happened to the resonant points for these two dipoles?

That's it...comments?

Bob
K9KKY

www.Ocean-Pro.com
Professional Yacht Delivery
Offshore Sailing Instruction
Naples, FL 800-329-4884

3722. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 14:39:44 UTC
From: richardharrison@webtv.net
Message-ID: <4685-3C765830-40@storefull-113.iap.bryant.webtv.net>
Source record: 148111

David Jackson wrote:
"---matching section (I can`t describe...)---."

A tapered line is the usual matching section for a rhombic. Like the antenna, iit is not particularly frequency selective.

The spacing at the driven end of the rhombic is chosen to work with the feedwire size to produce an impedance equal to the characteristic impedance of the rhombic. Insulators which gradually shrink in length as they descend in altitude on the feedwires are used to space the feeders. At the transmission line altitude, the spacing is the same as the transmission line. It`s a done deal.

A tapered line could have been used by Bailey to transform his specified 600 ohms at the center frequency down to the 300 ohm feedline he specified. He must have thought it wasn`t worth the trouble. The spacing between twinlead wires is very small, but larger wire and spacing could have been used in the downleads. But , the antenna works as specified.

Best regards, Richard Harrison, KB5WZI

3723. response to feeders question and a new question about dipole support

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 14:39:45 UTC
From: AB Brown <abbrown@nospammail.com>
Message-ID: <a55lekvop1@slb4.atl.mindspring.net>
Source record: 148110

Thanks folks for all the informative responses. It looks like I should be able to use open wire feeders after all. I like the W5DXP design as no tuner is used, except I would have a problem finding an appropriate place to mount the "ladder line length selector". I wonder if I could use relays in place of the switches he uses? Can anyone recommend a specific brand of relay that works best?

Now my next topic involves antenna support. The only way I can mount a 130' dipole at the 37' height is to use three supports- two for the ends and one for the center. Even with this, the ends of the dipole will have to be bent so about 15' hangs vertically at each end. I've been thinking about using three 20' 6 inch by 6 inch posts to start with, with tv mast extensions to 37'. The posts would be buried approximately 4' into the ground, with the masts extending about 20' above the top of the posts. There are three questions that come to mind here: 1) Can the three post with mast extension system be successful without using guy wires?
2) Will the dipole interact with the masts and, if so, how can I avoid this?
3) Are there any plans found on the web showing the construction of a 35-40' self supporting wooden mast?

Lastly, as I really didn't want to throw in yet another question, can anyone suggest a website or provide instructions for the proper ground insertion of the wooden post/ mast system I describe above? Things like... is 4' depth sufficient, should the posts be surrounded with concrete, etc.. just general mounting instructions.

Again, thanks in advance for all responses.

AB

3724. mq2

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 15:42:42 UTC
From: Andy M <andrew.markham@virgin.net>
Message-ID: <nEtd8.14437$Ah1.1635151@news2-win.server.ntlworld.com>
Source record: 148112

Hi Mike

review of the MQ2 I thought you might like to read.

Andy

Ron

I have an MQ2 on the roof of my house. It doesn't work as well as a bigger aerial and is probably only marginally better than a dipole. It has disadvantages as any compact, loaded aerial does. I have had plenty of contacts with mine however including all continents on 20m, 17m and 15m.

It has a fairly narrow bandwidth but my autotuner can match the feeder OK across the bands - works best at resonance as you would expect.

If your expectation are slightly above a wire dipole you will be happy. If you expect the thing to function as well as a full sized two element you will be disappointed. The MQ2 is however a LOT smaller than a full sized two element. I also have a Force 12 C-3SS and this is more than two times bigger in length and width than the MQ2 - the Force 12 works great but I couldn't put it on top of my house!! If the MQ2 is the biggest thing you can have then it will probably be fine for you.

Oh and by the way, I worked a fellow in the states (I'm in England) who also had an MQ2 except his was only 12 feet off the ground on a temporary pole and mine at about 45 feet! So they do work.

Good luck with your decision.

Nick G4FAL

<rons533@dejazzd.com> wrote in message news:3C7515CA.6FAA@dejazzd.com...
> Finally got the A99 vertical running and now I am going to try the MQ2
> Hybrid Quad since I am limited on space. I remember these antennas from
> years back when I though they looked like they wouldn't work. After
> research I find that they do work very well. I have not been able to
> find anyone who can say anything bad about this antenna in the reviews.
> Thought I would see what all here know about this antenna before I
> purchase it. Anyone dissatisfied?
>
> Thanks

3725. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 15:47:49 UTC
From: richardharrison@webtv.net
Message-ID: <4686-3C766825-8@storefull-113.iap.bryant.webtv.net>
Source record: 148114

Mark Keith wrote:
"A fairly large "yard sized" rhombic has a lot of gain on VHF."

And, it scales to HF.

For shortwave broadcasting, we might be ordered to transmit to a new country, or on a band for which we had no curtain antenna, or on a band in which all our curtains were in use at the scheduled times.

We coukd throw up a rhombic in a few hours and blister the new target with signal. A nice feature was being able to use the rhombic on any frequency between 6 and 17 MHz without touching any antenna tuning adjustments. Yes, the width of the target covered shrank as frequency rose. Yes, more of the signal overshot the target as frequency rose. But, as Cecil observed, halitosis is better than no breath at all. Sometimes, we even used the rhombic outside the usual 6 to 17 MHz range, and they still worked.

For program relays, we used only rhombics on both ends of the circuit. There were just too many frequency changes needed to keep on top of changing propagation to always get the best signal. We used triple frequency diversity and were perpetually shifting to lower or higher frequencies. The order wire was busy saying: put this language or that language on the next higher or lower frequency, that is, one of the three frequencies simultaneously carrying the program relay of that language at the moment.

For broadcasts you only make scheduled program changes. You must announce your schedules over and over in advance so listeners will know where to look for you. The schedules are based on propagation predictions and you have to be there whether there is propagation or no propagation because these conditions can change rapidly. The curtain antenna can serve well. You will be broadcasting for hours on the same frequency. You can adjust matching networks in advance of frequency changes when another curtain will resume service. That doesn`t work well for program relay.

Best regards, Richard Harrison, KB5WZI

3726. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 16:03:19 UTC
From: n7ws@yahoo.com
Message-ID: <3c7668bf.139970864@news.triconet.org>
Source record: 148113

On Fri, 22 Feb 2002 08:39:44 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:

|David Jackson wrote:
|"---matching section (I can`t describe...)---."
|
|A tapered line is the usual matching section for a rhombic. Like the
|antenna, iit is not particularly frequency selective.
|
|The spacing at the driven end of the rhombic is chosen to work with the
|feedwire size to produce an impedance equal to the characteristic
|impedance of the rhombic. Insulators which gradually shrink in length as
|they descend in altitude on the feedwires are used to space the feeders.
|At the transmission line altitude, the spacing is the same as the
|transmission line. It`s a done deal.

Tapered lines are neat. Traveling waves on transmission "don't like" step changes in Zo (discontinuities); when they encounter them, reflections are generated. But when the line Zo changes smoothly and gradually, the waves are "tricked" into thinking all is well.

We used a lot of waveguide tapers when testing Phoenix missile transmitters and receivers. Because of size constraints, the missile waveguide was 1/4 height and of course the test equipment was all full-height WR-90.
|
|A tapered line could have been used by Bailey to transform his specified
|600 ohms at the center frequency down to the 300 ohm feedline he
|specified. He must have thought it wasn`t worth the trouble. The spacing
|between twinlead wires is very small, but larger wire and spacing could
|have been used in the downleads. But , the antenna works as specified.

The Laport rhombic I mentioned earlier yields a 300 ohm SWR of under 1.4:1.

Wes Stewart N7WS

3727. Re: mq2

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 17:24:52 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020222122452.10614.00000010@mb-fp.aol.com>
Source record: 148115

I have one of the six band models and find it quite good mounted on my roof. If I could have a big antenna, I would put up a tower and a Quad or maybe one of the new Stepper Yagis from Fluidmotion. But the QTH just won't allow it.

If the MQ2 is all you can put up, you will not be sorry you did. It has good front to side, fair front to back and decent gain. The bandwidth tunes just fine with the autotuner in my rigs. I have run a full KW into it without a problem. Country count is now 295 after 2 years.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

3728. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 17:39:46 UTC
From: Barrett Richardson <barrett@phoenix.aye.net>
Message-ID: <Pine.BSF.4.10.10202221207140.30843-100000@phoenix.aye.net>
Source record: 148116

On Thu, 21 Feb 2002, Richard Harrison wrote:

> No one has mentioned height, but line of sight to the horizon is about:
> D = square root of 2h.
> D is the distance to the horizon in miles, and h is the antenna height
> in feet. TV broadcasters try to put viewers within their horizon by
> using very high transmitting antennas. So, height of the rhombic is
> almost unimportant except for getting the vertical pattern directivity
> down along the horizontal and not beamed uselessly up towards the sky.
> For this, 1/2-wavelerngth of elevation for the rhombic, or more, is
> satisfactory. 1/2-wavelength at channel 2 is only about 9 feet. So, that
> shouldn`t be too onerous.
>

This may be some good news. An example of a station I'm after is
15.2kw antenna 78 meters above ground 72 miles away on UHF
channel 27. For comparison I can get a fuzzy unwatchable picture
picture from a channel 50, 26.2kw at 100 meters, 55 miles away
with the smallest UHF/VHF combo Radio Shack sells. The FCC
data for the channel 50 shows a field value of about 0.3 in
my direction. The Wineguard pr-9032 gives only a marginal
improvement on channel 50. With the Wineguard I can also ascertain
there is a channel 27 there, but this may be deceptive because
there is a much stronger channel 27 about 100 miles distant to
the rear. On the same tower as the channel 50 and about the
same height there is a channel 24 with 10.9 kw but a 398kw
channel 24 is about 45 miles to the rear. The stronger channel
24 to the rear disappears with the 10ft rhombic pointed opposite,
but I still can't get the other channel 24. My small Radio Shack antenna
and Wineguard both just get the channel 24 that is to the rear,
so the f/b ratio of a rhombic helps in that regard. I had blamed the
mediocre improvements of the Wineguard's performance on lack of height
(it's only at twelve feet) and was in the process of figuring out how to
get a larger temporary rhombic 30 ft off the ground for testing without
lots of labor. If I can worthwhile information by testing for UHF
reception just a few feet off the ground, that is definitely good news.

-

Barrett

3729. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 17:41:57 UTC
From: Barrett Richardson <barrett@phoenix.aye.net>
Message-ID: <Pine.BSF.4.10.10202221240480.30843-100000@phoenix.aye.net>
Source record: 148117

On Thu, 21 Feb 2002, M.J.Powell wrote:

> Have you tried a long wire? Here in UK in the 50s they were used for
> fringe reception. One version had a series of small capacitors in the
> line, total length about 50 ft for 45Mc/s for London.
>

I found a couple of test posts at google that mentioned it,
but couldn't find any details.

-

Barrett

3730. Re: response to feeders question and a new question about dipole support

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 17:48:35 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C768467.87B52B05@icok.net>
Source record: 148118

AB,
1. More than likely, you won't have to guy the masts with the provision that you increase the depth you 'plant' them in the ground.
I think you would be 'better off' with a mast slightly shorter than
you planned, than not getting them deep enough.
2. The antenna will interact with the metal mast to some extent,
but probably not enough to really make any difference. Keep the feed
line away from the mast (wood or metal), you may be able to adapt the
old TV twin lead stand-offs to work with ladder line.
3. The 'HandBook' used to have an artical about making wooden masts.
I haven't looked for it lately so have no idea if it's still included.

No idea about finding how much to bury a mast, but the local power
company suggests/recommends about 15% of the pole length, up to about
eight feet deep. I would think that something around 5 to 6 feet should
'do' for a 30 foot pole. I don't think concrete would be necessary, but
I would definitely coat a wooden pole/mast with some type of preservative.
Maybe creosote (if you can find it) or tar.

Good luck with your installation. If it works well, you can come
and do mine!
'Doc

3731. Re: Weird Dipole problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 18:01:36 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a560ue$2vu2$1@news1.tribune.com>
Source record: 148019

I re roofed my house several years ago. Shingles USED to be coated with
gravel. The ones i got several years ago were coated with some kind of slag
that seemed like it might have metalic content.
ka9car

Screaming Skull <KG4IVT@hot.mail.spicedmeat.sucks.leave.me.alone.com> wrote
in message news:gIdd8.26568$rs6.12199206@typhoon.southeast.rr.com...
> I have been experimenting with some 11m dipoles in my attic so I can see
> what will work before I take my morse test to finish up my general
upgrade.
> I have to use attic antennas due to restrictions in my neighborhood.
While
> I have been able to get decent results with one dipole I have made and put
> up, I am puzzled by this phenomenon that seems to plague me.
>
> When I first put a dipole up there it ran along the frame from the peak of
> the roof down the frame. This dipole worked terribly, didn't receive,
even
> worse on transmit. I then remounted one in the opposite direction, the
> first one (the bad one) went North to South as a sloper and the other
faced
> East to West as a straight dipole. I tried the N&S scheme on 6m before
too
> and got terrible results as well. I have yet to try it on the E&W. So my
> question is what could cause this to happen? Could it be do to the fact
> that the N&S dipole basically faces the sections of my house and attic
that
> are covered by aluminum siding or is the sloping causing something to go
> wrong or.............?
>
> I am open to any suggestions here. Thanks!
>
>

3732. Re: response to feeders question and a new question about dipole support

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 18:03:12 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a5611e$306u$1@news1.tribune.com>
Source record: 148021

Write to Cecil and ask him to send you the photos from his last qth where he
used relays.
He modified some to work better

Jd

AB Brown <abbrown@nospammail.com> wrote in message
news:a55lekvop1@slb4.atl.mindspring.net...
> Thanks folks for all the informative responses. It looks like I should be
> able to use open wire feeders after all. I like the W5DXP design as no
> tuner is used, except I would have a problem finding an appropriate place
to
> mount the "ladder line length selector". I wonder if I could use relays
in
> place of the switches he uses? Can anyone recommend a specific brand of
> relay that works best?
>
> Now my next topic involves antenna support. The only way I can mount a
130'
> dipole at the 37' height is to use three supports- two for the ends and
one
> for the center. Even with this, the ends of the dipole will have to be
bent
> so about 15' hangs vertically at each end. I've been thinking about using
> three 20' 6 inch by 6 inch posts to start with, with tv mast extensions to
> 37'. The posts would be buried approximately 4' into the ground, with the
> masts extending about 20' above the top of the posts. There are three
> questions that come to mind here: 1) Can the three post with mast
extension
> system be successful without using guy wires?
> 2) Will the dipole interact with the masts and, if so, how can I avoid
this?
> 3) Are there any plans found on the web showing the construction of a
> 35-40' self supporting wooden mast?
>
> Lastly, as I really didn't want to throw in yet another question, can
anyone
> suggest a website or provide instructions for the proper ground insertion
of
> the wooden post/ mast system I describe above? Things like... is 4' depth
> sufficient, should the posts be surrounded with concrete, etc.. just
> general mounting instructions.
>
> Again, thanks in advance for all responses.
>

> AB
>
>

3733. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 18:09:04 UTC
From: richardharrison@webtv.net
Message-ID: <28177-3C768940-3@storefull-116.iap.bryant.webtv.net>
Source record: 148023

I wrote: "---put this language or that language on the next higher or lower frequency."

This was a request from the receiver site to the transmitter site to change one of the three frequencies carrying a program relay. I insinuated that propagation caused changes, but that`s not all. The spectrum is sometimes an undiscplined place, so the receiver site checks the repertoire for a clean frequency that can work when interference alights as it too frequently does. Three viable frequencies are needed at all times so that the triple diversity reception works properly.

Best regards, Richard Harrison, KB5WZI

3734. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 18:10:12 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7d2bksvcoo170@corp.supernews.com>
Source record: 148020

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20020221220941.27703.00000138@mb-mi.aol.com...
> >Would I be able to pick up the ground side of the transmisson (source is
appx.
> 18 miles away) with an outside antenna?<
>
> Sure--I hear Manchester NH ground traffic any time day or night from 35
miles
> away with some "Granite State" hills in between using a 11-dBi yagi at 35
feet.
> The airport and my house are both around 250' ASL.

Yes, but you are receiving the reflections off the hills, not a direct
signal. You can talk elebenty-bazillion dB gain on your antenna, and given
no line of sight (with an error correction for diffraction) you won't hear a
damn t'ing. I garontee.

Jim

3735. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 18:15:03 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7d2ko30noun00@corp.supernews.com>
Source record: 148022

That's a simple question to answer...

Given average diffraction from a clean horizon, line of sight range is given as:

range = sqrt (2 * (antenna height))

Where range is in miles, and antenna height is in feet.

Given that the aircraft on the ground have an antenna height of 6' or so, and at 18 miles range, we can solve the equation backwards to give the fact that the antenna has to be up about 160' to get this kind of range.

"'Doc" <w5lz@icok.net> wrote in message news:3C75CB7D.97E62F61@icok.net...
> Don,
> An outside antenna will improve reception, but
> you still may not hear the ground side transmissions.
> If you can get it up high enough, sure, you can hear
> the airport, but depending on the local terrane, how
> high is high enough??

3736. Re: Weird Dipole problem

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 18:17:43 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C768B47.59DC1727@crosslink.net>
Source record: 148024

KA9CAR wrote:
>
> I re roofed my house several years ago. Shingles USED to be coated with
> gravel. The ones i got several years ago were coated with some kind of slag
> that seemed like it might have metalic content.

Sound's like a ground plane for a vertical to me .. :o)
KA3DWW

3737. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 19:32:27 UTC
From: richardharrison@webtv.net
Message-ID: <28174-3C769CCB-54@storefull-116.iap.bryant.webtv.net>
Source record: 148025

Barrett Richardson wrote:
"This may be some good news. An example of the station I`m after is 15.2 kw antenna 78 meters above ground 72 miles away."

The news could be better. Do you have an obstructed path? A mountain between you and the transmitter?

78 meters above a "plane" earth surface gives a horizon of about 22 miles. Your horizon needs to be 50 miles to total 72 miles. Your antenna would only have to be up 1250 feet if there were no path obstructions.

The atmosphere bends and scatters radio and TV signals but reliable over the horizon transmission requires huge antenna gains on both ends of a path in most cases.

TV receives a wide band, up to 6 MHz. More signal is needed to compete with noise in so much bandwidth. Radio usually occupies less bandwidth and takes less signal for satisfactory reception.

You will have anomalous propagation which provides occasional long distance reception, but don`t count on it.

Best regards, Richard Harrison, KB5WZI

3738. Re: mq2

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 19:52:10 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <a567bg$6qk$1@newsg2.svr.pol.co.uk>
Source record: 148026

Hi Chaps !

Thanks for the info ...

I am considering buying one of these and was wondering about performance.

I have an SGC SG235 500w auto ATU, in your opinion do you
think I may be able to add this to the antenna and use it to expand
the usable bandwidth of the antenna without having the ATU in the shack ????

This way I won't have the losses of a high SWR on the coax ... in theory :)

Please CC me direct if you reply as my news provider isn't too reliable :)

73 and gud DX ...

MikeT ...
M0AWS
http://www.cybatek.fsnet.co.uk/m0aws/

K4IA <k4ia@aol.comnojunk> wrote in message
news:20020222122452.10614.00000010@mb-fp.aol.com...
> I have one of the six band models and find it quite good mounted on my
roof. If
> I could have a big antenna, I would put up a tower and a Quad or maybe one
of
> the new Stepper Yagis from Fluidmotion. But the QTH just won't allow it.
>
> If the MQ2 is all you can put up, you will not be sorry you did. It has
good
> front to side, fair front to back and decent gain. The bandwidth tunes
just
> fine with the autotuner in my rigs. I have run a full KW into it without
a
> problem. Country count is now 295 after 2 years.
> Radio K4IA
> Craig Buck
> Fredericksburg, Virginia USA
> ----------------------
> REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll
Free,
> Callback, Calling Cards, Pagers and more Tune to
http://www.ld.net/?bucksavers

3739. Re: mq2

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 20:19:57 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020222151957.15910.00000059@mb-ci.aol.com>
Source record: 148027

Your SWR won't be high enough to make a diiference. My max is 2.5:1 on the upper end of 20 meter fone. It is 1:1 at 14.058.

I think the disadvantage of having a heavy tuner mounted up on the boom is far worse than a little SWR on the feed line.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

3740. Re: mq2

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 20:32:36 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <a569n9$jr5$1@newsg1.svr.pol.co.uk>
Source record: 148028

Hi Craig,

Thanks for the swift reply !
I thought the band width on 20m of the antenna was just a few tens of kcs
???
If you are getting this sort of bandwidth then I have to agree, forget the
ATU !

I'll be driving into the antenna with a valve based linear amplifier so an
SWR of 2:1
won't be a problem !!

Cheers and thanks for the info.

MikeT ...
M0AWS

K4IA <k4ia@aol.com> wrote in message
news:20020222151957.15910.00000058@mb-ci.aol.com...
> Your SWR won't be high enough to make a diiference. My max is 2.5:1 on
the
> upper end of 20 meter fone. It is 1:1 at 14.058.
>
> I think the disadvantage of having a heavy tuner mounted up on the boom is
far
> worse than a little SWR on the feed line.
> Radio K4IA
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http://www.ld.net/?bucksavers
>

3741. Re: mq2

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 20:47:37 UTC
From: Mike Tatum <miket@cybatek.fsnet.co.uk>
Message-ID: <a56aje$8tq$1@newsg2.svr.pol.co.uk>
Source record: 148029

Hi again Craig,

According to the manufacturers SWR plots the bandwidth on 20m for the MQ2
is just a mere 13khz ... can you tell me how you've got such a broad
coverage on 20m ??

Thanks !

MikeT ...

K4IA <k4ia@aol.comnojunk> wrote in message
news:20020222151957.15910.00000059@mb-ci.aol.com...
> Your SWR won't be high enough to make a diiference. My max is 2.5:1 on
the
> upper end of 20 meter fone. It is 1:1 at 14.058.
>
> I think the disadvantage of having a heavy tuner mounted up on the boom is
far
> worse than a little SWR on the feed line.
> Radio K4IA
> Craig Buck
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> ----------------------
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Free,
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http://www.ld.net/?bucksavers

3742. Re: mq2

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 21:20:19 UTC
From: rons533@dejazzd.com
Message-ID: <3C76B586.6F08@dejazzd.com>
Source record: 148031

Andy M wrote:
>
> Hi Mike
>
> review of the MQ2 I thought you might like to read.
>
> Andy
>
> ----------
>
> Ron
>
> I have an MQ2 on the roof of my house. It doesn't work as well as a bigger
> aerial and is probably only marginally better than a dipole. It has
> disadvantages as any compact, loaded aerial does. I have had plenty of
> contacts with mine however including all continents on 20m, 17m and 15m.
>
> It has a fairly narrow bandwidth but my autotuner can match the feeder OK
> across the bands - works best at resonance as you would expect.
>
> If your expectation are slightly above a wire dipole you will be happy. If
> you expect the thing to function as well as a full sized two element you
> will be disappointed. The MQ2 is however a LOT smaller than a full sized two
> element. I also have a Force 12 C-3SS and this is more than two times bigger
> in length and width than the MQ2 - the Force 12 works great but I couldn't
> put it on top of my house!! If the MQ2 is the biggest thing you can have
> then it will probably be fine for you.
>
> Oh and by the way, I worked a fellow in the states (I'm in England) who also
> had an MQ2 except his was only 12 feet off the ground on a temporary pole
> and mine at about 45 feet! So they do work.
>
> Good luck with your decision.
>
> Nick G4FAL
>
> <rons533@dejazzd.com> wrote in message news:3C7515CA.6FAA@dejazzd.com...
> > Finally got the A99 vertical running and now I am going to try the MQ2
> > Hybrid Quad since I am limited on space. I remember these antennas from
> > years back when I though they looked like they wouldn't work. After
> > research I find that they do work very well. I have not been able to
> > find anyone who can say anything bad about this antenna in the reviews.
> > Thought I would see what all here know about this antenna before I
> > purchase it. Anyone dissatisfied?

> >
> > Thanks

This is the first negative review I have seen on this antenna. Just wondering what balun people are using with the antenna to get best pattern and power from the antenna?

3743. Re: Rhombic for tv reception

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 21:24:10 UTC
From: Barrett Richardson <barrett@phoenix.aye.net>
Message-ID: <Pine.BSF.4.10.10202221612560.35424-100000@phoenix.aye.net>
Source record: 148030

On Fri, 22 Feb 2002, Richard Harrison wrote:

>
> The news could be better. Do you have an obstructed path? A mountain
> between you and the transmitter?

No, but I take the height comment only applies to line of sight and
not the forward scatter phenomenom.

>
> 78 meters above a "plane" earth surface gives a horizon of about 22
> miles. Your horizon needs to be 50 miles to total 72 miles. Your antenna
> would only have to be up 1250 feet if there were no path obstructions.

Really wasn't goint to attempt line of sight. Get 15 stations clear
now, have line of sight on only two of them.

>
> The atmosphere bends and scatters radio and TV signals but reliable over
> the horizon transmission requires huge antenna gains on both ends of a
> path in most cases.
>
> TV receives a wide band, up to 6 MHz. More signal is needed to compete
> with noise in so much bandwidth. Radio usually occupies less bandwidth
> and takes less signal for satisfactory reception.
>
> You will have anomalous propagation which provides occasional long
> distance reception, but don`t count on it.
>

Getting the weak channel 50 from so far beyond it's horizon on a
continuous basis just got me wondering if I could snag a couple
more about 15 miles farther out. If such a thing exists, I think
I'm in kind of a local sweet spot. I've always gotten better
reception than others in the locality and have a smaller and
shorter antenna.

-

Barrett

3744. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 22:04:23 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C76C05B.F5F53460@icok.net>
Source record: 148032

Jim,
And, not knowing the topography of his location,
anything I could have said would more than likely
have been wrong. Right?
'Doc

3745. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 22:28:55 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7dhgp9k8f7n5c@corp.supernews.com>
Source record: 148033

Right. No, wait, wrong. Right? Left? Who the hell cares?

Jim

"'Doc" <w5lz@icok.net> wrote in message news:3C76C05B.F5F53460@icok.net...
>
>
> Jim,
> And, not knowing the topography of his location,
> anything I could have said would more than likely
> have been wrong. Right?
> 'Doc

3746. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 22:44:22 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <bRzd8.27037$Lc2.3185573@news20.bellglobal.com>
Source record: 148034

"Jim Weir"
>... given no line of sight (with an error correction
> for diffraction) you won't hear a damn t'ing.
> I garontee.

Yes, but isn't there almost always some amount of diffraction (or creeping waves, or some other mechanism) given typical terrain ? I have a feeling that would be difficult to eliminate all non-LOS (but almost LOS) paths completely. I have read of many examples of non-LOS paths being used with simple application of ludicrous amounts of antenna gain.

I visited a ham in Halifax, NS that had a 20' homemade dish that he used for Moon bounce (600 watts out, 0.4 dB NF in). On the 440MHz band, he could talk to hams in Saint John, NB "...anytime I want to..." over a path of about 150 miles. He was on a bit of a hill, but not THAT high.

Obviously, this approach may not be applicable to the original post.

3747. Re: Effect of inductive resistors in dummy load?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 23:09:13 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <tcAd8.2964$jC3.101702@news1.east.cox.net>
Source record: 148035

That was the nice thing about tube PAs with PiNet tuning, light bulb loads were easily matched.

Peter

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message news:3C74CBA7.D3A2FA4E@bellatlantic.net...
> You can always try the Old Timer's Light Bulb Technique for a quick "dummy" for
> HF. The filament in a light bulb has very little inductance. For high power,
> just put a bunch in series parallel. Another "Trick" similar to the graphite
> "Can of Sand", is to use Salt Water. When it starts steaming, it's time to
> QRT. I wonder if you can add Salt to brake fluid or mineral Oil directly?
> Another "Trick" good for fishing expeditions is to bury two rods in the earth
> separated so that you get 50 ohms. An SWR analyzer will help.
>
> '73 KI4Z
>
> Jurek P wrote:
>
> > Try to build your own. Take small metal can (that's one of your electrodes),
> > fill with sand and graphite powder mixture, push in second electrode, flat
> > or round and that's it. You will have to play with sand/graphite ratio a
> > little, fine tuning by position of the second electrode.
> > I used this method for few kW applications as a "quick and dirty" field
> > solution.
> > Have fun,
> >
> > Jurek, KJ7OV
> > ex SP2BNL
> > "Richard Harrison" <richardharrison@webtv.net> wrote in message
> > news:20262-3C73B2BC-4@storefull-113.iap.bryant.webtv.net...
> > >
> > > Marty wrote:
> > > "What would be the effect of the inductance of these resistors on a
> > > measurement of swr, and is there some way to compensate for it?"
> > >
> > > Besides tuning out unwanted inductance, there is another problem to be
> > > taken into account. A wirewound resistor of 10 ohms at d-c has more

than
> > > 10 ohms resisance at r-f de to skin effect.
> > >
> > > Skin depth penetration in resistance wire at r-f is inversely
> > > proportional to the square root of the frequency. So, the higher the
> > > frequency, the higher the resistance. The r-f resistance of a
wire-wound
> > > dummy load resistance will be higher for VHF than for HF.
> > >
> > > For copper, penetration depth is 0.0026 inch at 1 MHz. Penetration
depth
> > > is proportional to the square root of resistivity. So, r-f current
will
> > > run deeper in resistance wire than in copper.
> > >
> > > Find some real non-inductive resistors for your dummy load.
> > >
> > > Best regards, Richard Harrison, KB5WZI
> > >
>

3748. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 23:11:51 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <ZeAd8.27065$Lc2.3199525@news20.bellglobal.com>
Source record: 148036

"Robert Lyons"
> This sounds like other 259's I've worked with.
> I'm not impressed with the switches and buttons
> they use...

IMHO, MFJ products certainly do plumb the depths of poor quality. I'm sure you have heard the old joke MFJ = Makes F* Junk.

I've got an MFJ 12V Power Strip that had been labelled backwards and then repainted and then relabelled. The backwards labels were still obvious under the paint.

I bought an MFJ Noise Bridge - very poorly built. The 9V battery wouldn't stay in the holder. The battery holder was right on the circuit card. Just too cheaply built and not worth the price charged.

3749. Re: mq2

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 23:20:01 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020222182001.21783.00000146@mb-mq.aol.com>
Source record: 148037

I think I misspoke. I just tested again and my SWR measured here in the shack at the end of 50 feet of coax is:
14.001 2:1
14.058 1:1
14.100 2:1
14.200 5:1
14.350 is 6:1.

According to the chart in the ARRL Handbook, the additional loss in 100 feet of RG8A is only 1db at a 6:1 SWR on 20 meters. I dare say that is not enough to worry about.

SWR on other bands is better
21.000 2:1
21.058 1.5:1
21.100 1.4:1
21.200 1.3:1
21.300 2:1
21.400 3:1
Additional loss at 3:1 is 1/2 db

I have no problem with my "valve based" linear - an Ameritron AL572. But the antenna manufacturer does warn you to reduce power if the SWR is above 2:1. An ATU won't help you with that because the concern is the antenna itself and the ATU won't change the SWR on the antenna.

However, I can say that I have run the full KW with no ill effects - so far. I have only done it for short periods of time when I needed the extra power to snag some new DX. I'll bet you could melt the coils if your ran big power at high SWR for too long.

Hope this helps

Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

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3750. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-22 23:51:07 UTC
From: k1bqt@aol.com
Message-ID: <20020222185107.10992.00000140@mb-fj.aol.com>
Source record: 148038

Jim wrote--

>range = sqrt (2 * (antenna height))<

Jim's simplistic response trolls a deeper question. If this "rule-of-thumb" were literally true, why would anyone bother constructing a station for weak-signal VHF work? Those 100-mile-plus schedules we keep on non-open VHF bands simply couldn't happen. Right?

To resolve the mystery, I recommend starting with the ARRL Antenna Book on page 23-9. This primer offers a good introduction to the dynamics of station gain vs. path loss. I won't burn a lot of bandwidth paraphrasing it, except to note that receiver sensitivity, transmitter power, antenna height and gain at both ends of the path, bandwidth, and S/N all play important roles in overcoming the very high path losses that exist over the horizon.

I believe Jim is correct in pointing out that VHF OTH work does depend heavily on bending and scattering. However, this "concept" involves much more than bouncing signals off rocks--and it is a highly reliable mode (been around for decades).

Many of today's scanners and airband HTs sport 1-uV or better AM sensitivity (superior to those $2000+ NAV/COM radios sitting in the airplanes). Couple weak-signal capability with a modest directional antenna on the roof, and I promise you'll hear a lot of stuff not visible outside the window. :)

Rick K1BQT

3751. TIA EIA 222F

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 00:43:17 UTC
From: Billy Echols <b_echols@bellsouth.net>
Message-ID: <mrBd8.14197$2v1.417300@e3500-atl1.usenetserver.com>
Source record: 148039

I have an electronic copy (.pdf) of the TIA EIA 222F if anyone needs it. It is just larger than 4 MB unZIPped. Send me an email to me if you want a copy: wa2nyr@arrl.net.

be

3752. Re: Hybrid Quad MQ2 decision

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 01:24:07 UTC
From: jclind@sentex.net
Message-ID: <dG80d04f0oVk-pn2-h1wHzP38CWdh@localhost>
Source record: 148040

On Thu, 21 Feb 2002 15:46:31 UTC, rons533@dejazzd.com wrote:

> Finally got the A99 vertical running and now I am going to try the MQ2
> Hybrid Quad since I am limited on space. I remember these antennas from
> years back when I though they looked like they wouldn't work. After
> research I find that they do work very well. I have not been able to
> find anyone who can say anything bad about this antenna in the reviews.
> Thought I would see what all here know about this antenna before I
> purchase it. Anyone dissatisfied?
>
> Thanks

Hi

I have a MQ4 on my tower at 50ft. I also have a pair or alpha delta
dipoles, the 160/80/40 and the LBPlus (80-10). On all bands from 20M
and up, my mq4 is quieter and exibits directionality (obviously, a
full size beam would be better but, this is what I am using. I am
satisfied with it. It is rather narrow in band width but any good
antenna tuner will sort that out. I have had mine up since November
and seems to be surviving quite well.
I am also only 25KM from TGM and I know the owner. Quality workmanship
and top components go into each.

Enjoy it.

John
ve3sjv

3753. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 02:00:03 UTC
From: Surfcaster <surf@earth.net>
Message-ID: <DICd8.9318$0C1.786968@newsread1.prod.itd.earthlink.net>
Source record: 148041

Hi,
I agree with your sence of direction.
You could even go as far a shreading your monthly bills too. All your accounts are on every bill you toss into the garbage.

Play it safe. Pay cash, in person, no Checking or savings accounts. No bank or retirement ira's either. They have account numbers too. Oh don't give your SS out either - Gee imagine the scoop they could get on you.

73's
Stan

"George, W5YR" <w5yr@att.net> wrote in message news:3C75D6CA.1B47AD85@att.net...
> Wes, playing Devil's Advocate for a bit, why would you trust a completely
> unknown clerk-person at the end of an 800 line with your credit card number
> when you won't trust a reasonably secure encryted transfer from your
> computer to another? I know, none of my business, but just curious . . .
>
> I never feel easy about even handing my card to a waiter in a restaurant -
> we have no way of knowing how many cards have their info copied, etc.
>
> A few years back at one of the finest restaurants in Dallas, I paid the tab
> with my credit card, and we waited and waited for the waiter to return with
> the receipt, etc. After about 20 minutes, I pursued the matter and was told
> with a big smile that "Gee whiz! Somehow your card has gotten misplaced
> after we posted the transaction, but don't worry, you can call and cancel
> it" or words to that effect.
>
> I just looked at this person for a moment and then said calmly "You have
> five minutes by my watch to place that card in my hand. If you do not, at
> that time I am calling the Dallas Police Dept. immediately. Now get
> moving!"
>
> About three minutes later, the card had mysteriously been "found."
>
> I think that we are in far greater risk when we mail a check to someone
> which contains all the numbers some people need to harvest your account and
> make solid inroads on stealing your identity.
>

> Cruel world, isn't it?
>
> 72/73/oo, George W5YR - the Yellow Rose of Texas
> Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
> Amateur Radio W5YR, in the 56th year and it just keeps getting better!
> QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771
> Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437
>
> All outgoing email virus-checked by Norton Anti-Virus 2002
>
>
>
>
> Wes Stewart wrote:
> >
> > On Thu, 21 Feb 2002 02:28:16 GMT, "marvin rosen"
<raghead@worldnet.att.net>
> > wrote:
> >
> > |REG!!! besides having nortons anti virus i also have a free anti virus
> > |download called"AVG"... they provide you with free updates & will also
> > |automatically scan your computer at your designated time..they also
scan on
> > |boot up. also any in/outgoing e-mail is scanned..hope this helps others
in
> > |the group
> >
> > I might give this a try. In the meantime, I use Eudora for email (an
old
> > version without ads), Free Agent for a newsreader and Netscape
Communicator for
> > a browser. If sites I visit require plug-ins for song and dance, I
leave.
> >
> > None of these applications share address books or anything else and they
didn't
> > come from Microsoft.
> >
> > I also run ZoneAlarm, AdSubtract and Norton AV.
> >
> > My ISP does a good job too of intercepting virus containing email. They
stop
> > Snow White from HAHAHA about once a week.
> >
> > I don't get the Chinese crap anymore since I changed ISPs and email
address.
> > Unfortunately, I had a "mail to:" link on my home page and the robots
found it
> > so now I get a lot of crap via n7ws*@arrl.net. So I redirected that to
a yahoo

> > mail account where they filter off a lot of the known bulk mail.
> >
> > To get even, I added a lot of 'mail to:' addresses for some of the more
> > obnoxious spammers to my web page, so when the robots go looking they
can spam
> > the spammers.
> >
> > I do not put my credit card numbers on the Internet. I know it's
supposed to be
> > safe, however, I remember a while back when Western Union had to ask
about
> > 15,000 folks to cancel their credit cards because of a "leak" in their
web
> > security. For sure, this was a hack _into_ their system and it could
happen
> > anywhere these data reside but it seems to me that it would be easier
when the
> > data are going and coming.
> >
> > I know the hoops through which I had to jump when I was processing
Secret data
> > on a computer located inside a shield room with no connection to the
outside
> > world. From this perspective Internet "security" is a joke.
> >
> > If an online vendor doesn't have an 800 number where I can speak to a
human
> > being and complete my transaction, they can ring up a No Sale.
> >
> > My two cents.
> >
> > Wes N7WS
>

3754. Re: Want Winradio Type Software For Icom

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 02:01:13 UTC
From: Surfcaster <surf@earth.net>
Message-ID: <JJCd8.9330$0C1.785210@newsread1.prod.itd.earthlink.net>
Source record: 148042
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,it.hobby.radioamatori,rec.radio.swap

You could write your own software. The only thing the Winradio has is a
fance scope on it. Big deal.

Stan

"David" <ddmga@yahoo.com> wrote in message
news:296ea75a.0202211653.921cc26@posting.google.com...
> I just got an Icom IC-R7100 receiver. I used to have a Winradio
> Wr1000i. Is there a software package out there for the Icom that is
> as good or better than the Winradio software?
>
> Thanks for any help!
>
> -David DDMGA@YAHOO.COM

3755. Re: Brightness Temperature -- Radio Astronomy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 02:17:01 UTC
From: Bart Rowlett <BHRowlett@west.raytheon.com>
Message-ID: <3C76FB9D.CBE3530A@west.raytheon.com>
Source record: 148043

Wayne Watson wrote:

> I'm looking at a book on radio astronomy and the author talks about calculating the equivalent
> blackbody temperature of the galactic center from the formula:
>
> Teq = (b*l*l)/(2*k)
>
> where Teq is the equiv temp
> b is the brightness of the object in watts/meter*meter/cycle per sec/steradians
> l = wave length (15 m is used)
> k=Boltzman constant
>
> His answer is 50,000K. No mention is made of what b is. I would guess this is derived by some
> measurement with a radio telescope.

> In fact, how does one use a radio telescope to measure the required brightness? Is this *easily*
> done?

For the case of an extended source such as the 'galactic center', the apparent brightness spectral
density is measured by dividing the power spectral density (watts / (meter^2 - Hz)) at the antenna
aperture by the solid angle (steradians) subtended by the receiving antenna beamwidth. Of course
corrections are required for antenna and transmission line efficiency, and the introduction of
corrupting noise by various sources. The antenna beamwidth can be determined from first principals
though calibration on a test range is usually required if an accuracy of better than a couple of
decibels is required.

> I take it that such brightnesses are measured over surfaces rather than points.

Correct. Brightness is a surface property and is of little meaning unless the object can be resolved.

> How does one
> find the (necessary) power over the surface of an object? I would think the resolution of amateur
> radio telescopes would be so low as to make it very difficult to measure the brithness of an object
> like Mars or Jupiter.

First measure the power spectral density (watts / (meter^2 - Hz)) at the telescope antenna. Then
divide by the solid angle subtended by the object, typically determined separately for planetary
objects using optical telescopes. Most planetary objects are roughly spherical and may not radiate
uniformly in all directions (not lambertian), so the calculation actually returns the brightness of an
equivalent lambertian radiator.

bart
wb6hqk

3756. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 02:37:37 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C770064.AFFD8FC5@icok.net>
Source record: 148044

Jim Weir,
Well, I care for one. If I can't give an honest
answer, I don't see any point in giving a wrong one.
If I'm not familiar with the land around him, how could
I give himany kind of a 'correct' answer? From what
you've posted, I see that you don't feel that way.
'Doc

3757. Re: Hybrid Quad MQ2 decision

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 03:00:30 UTC
From: MRR <PacificCommonwealth@SecuritiesDealer.com>
Message-ID: <3C77060C.B713B270@SecuritiesDealer.com>
Source record: 148045

You will love it.

Ron W7MRR

rons533@dejazzd.com wrote:

> Finally got the A99 vertical running and now I am going to try the MQ2
> Hybrid Quad since I am limited on space. I remember these antennas from
> years back when I though they looked like they wouldn't work. After
> research I find that they do work very well. I have not been able to
> find anyone who can say anything bad about this antenna in the reviews.
> Thought I would see what all here know about this antenna before I
> purchase it. Anyone dissatisfied?
>
> Thanks

3758. Re: VIRUS NOW ERADICATED

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 03:33:41 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C770D95.4E856B42@coqui.net>
Source record: 148046

Surfcaster wrote:
>
> Hi,
> I agree with your sence of direction.
> You could even go as far a shreading your monthly bills too. All your
> accounts are on every bill you toss into the garbage.
>
> Play it safe. Pay cash, in person, no Checking or savings accounts. No bank
> or retirement ira's either. They have account numbers too. Oh don't give
> your SS out either - Gee imagine the scoop they could get on you.
>
> 73's
> Stan

Geez, maybe you should change your name to "Null" also. There's plenty
of possibilities for fraud but even more for chronic paranoia.

-Bill

3759. EZNEC modeling of GAP Voyager DX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 04:00:42 UTC
From: jdicso@aol.com
Message-ID: <20020222230042.18464.00000124@mb-mk.aol.com>
Source record: 148047

I need help modeling the subject antenna. I'd appreciate advice on modeling the following:
1. Spacing of linear loading rods don't meet minimum criteria for segment lengths. Any work arounds?
2. Source coax is inside lower vertical tubing and connected to terminals in the gap. Can this be handled by Transmission Line only?
3. A coax stub is inside the upper vertical tubing. Length is increased by adding a capacitor at the top. How is the coax modeled? How is the capacitor modeled?

Thanks, Jim K2SZ

3760. Maspro or Cushcraft??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 08:59:21 UTC
From: dolan morrison <dolan.morrison@ntlworld.com>
Message-ID: <%RId8.22678$Ah1.2494758@news2-win.server.ntlworld.com>
Source record: 148048

I intend buying a larger 2 metre yagi.Any opinions on the above regarding quality etc.There seems to be a big difference in price.
tia
Dolan
GM0LZE

3761. D2T Italian Wideband Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 10:10:44 UTC
From: g4ceo@talk21.com
Message-ID: <2a7604be.0202230210.727d6f87@posting.google.com>
Source record: 148049

Anybody out there using one?. I can't make up my mind to replace my aged tribander with either a Cushcraft MA5B Mini Beam, or the Italian D2T wideband 2 ele beam. Any comments or operating experiences of the D2T would be welcomed.
Bob G4CEO.

3762. Anyone know where to get Isotron plans??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 10:13:52 UTC
From: kl0an <pauljordan@gci.net>
Message-ID: <u7eqv28oc1je27@corp.supernews.com>
Source record: 148050

I jsut read the article in this months CQ magazine about Isotron antennas
and was wondering if there's anyplace to find a set of plans fo making one
of these antennas..

Drop me an e-mail if you know of any.

pauljordan@gci.net

Thanks and 73,
Paul Jordan
kl0an

3763. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 12:22:20 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C778862.A91A1AF8@bellatlantic.net>
Source record: 148051

Amazing that MFJ is still in business. Their Tech support must be working overtime when an additional dollar per unit invested in higher quality would of solved the problem and stopped the phone calls. I wonder how much MFJ spends average per unit sold in returns and phone time trying to convince customers to keep the junk? Also assuming they wanted to sell a quality product, you'd think subsequent versions would of solved the problem.

'73 KI4Z

Robert Lyons wrote:

> Pedro Motilla wrote:
> >
> > Dear Friends:
> >
> > Yesterday night (in Spain) was the first time i used it and today i have
> > discovered that input button is a little hard, so i have to press it
> > strongly in order to switch into Frecuency Counter.
>
> This sounds like other 259's I've worked with. I'm not impressed with
> the switches and buttons they use. Both mine and my friend's 259 have
> bad range switchces (the main rotary switch). Some positions you have
> to wiggle the switch to make it settle in, others you actually have to
> *hold* the switch to keep it in connection. On mine, the mode button
> is completely flakey. Their debounce curcuitry isn't working at all.
> It steps through multiple modes each time I press. It's like playing
> a slot machine to get this device into the right mode.
>
> Bob, KI8AB

3764. Re: Maspro or Cushcraft??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 13:45:28 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020223084528.17710.00000213@mb-fn.aol.com>
Source record: 148052

>I intend buying a larger 2 metre yagi.Any opinions on the above regarding
>quality etc.There seems to be a big difference in price.
>tia
>Dolan
>GM0LZE
>

I would steer clear of Cushcraft. From what I've heard and from what I've read
on the newsgroups lately, they are the WORST company for customer service.
Customer service is a big part of buying a product, so even if you have to pay
a couple extra dollars for another brand, I wouldn't buy Cushcraft.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

3765. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 15:41:27 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <fodf7u0qudomrk82mpa17v47qr49i6tbqu@4ax.com>
Source record: 148053

I have been buying and using MFJ equipment for many years. I guess I have been one of the lucky ones as I have not had problems with any of them (yet.) I have looked inside some of them, and the soldering scared me so bad I just closed it back up quick! :-) Of course 30 years in aerospace manufacturing and quality assurance tends to make one rather critical of workmanship anyway. The problem is, "where are you going to buy this stuff if not MFJ?" It's the only game in town for much of what they make. I just grin and bear it.

Dick - W6CCD

On Sat, 23 Feb 2002 12:22:20 GMT, Mark Hall
<vze2mhvc@bellatlantic.net> wrote:

>Amazing that MFJ is still in business. Their Tech support must be working
>overtime when an additional dollar per unit invested in higher quality would
>of solved the problem and stopped the phone calls. I wonder how much MFJ
>spends average per unit sold in returns and phone time trying to convince
>customers to keep the junk? Also assuming they wanted to sell a quality
>product, you'd think subsequent versions would of solved the problem.
>
>'73 KI4Z

3766. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 16:04:03 UTC
From: Roland Stiner <nk2u@1stconnect.com>
Message-ID: <3%Od8.1723$hK4.633759@e420r-atl1.usenetserver.com>
Source record: 148054
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

> The Official W9INN Antennas Page is ONLINE at the web site listed below.
> It features illustrations, measured field data, and ordering
> information.

You did not list it...

Roland

3767. Re: Helical Antenna Sidelobes - Pls Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 16:18:47 UTC
From: Ed Ngai <engai@sprintmail.com>
Message-ID: <3C77C20C.F85F8810@sprintmail.com>
Source record: 148055
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Gollywog wrote:
> Hi all,
> I've found what appears to be a cheap and easy homebrew helical suitable for
> use in a current project. If possible I'd like to reduce the side lobes that
> appear in the horizontal plane radiation pattern. Anybody here doing Phase
> 3D (AO 40) satellite stuff, etc could give me some pointers? What if I just
> bent a 1 foot wide piece of aluminum to make a 320 degree (or so)
> cylindrical shield. The antenna indicated would then be mounted inside and
> be pointed out the vertical slit. Would this "shear off" the side lobes?

> 2.4GHz Homebrew Helical by Jason Hecker is at :
> http://users.bigpond.net.au/jhecker/

> This is a single page site. The radiation patterns mentioned above appear
> at the very bottom of the page.

Have you heard of multi-element helicals? It wont help your sidlobes, but
you might get some more gain. You have only 1 wire, so put in a 2nd antenna
wire 180 deg. from the 1st, or 2 more wires 120 deg.s apart.
You don't have a metal ground plain, so how about a sheet of some metal
instead of a plastic bucket? Keep the antenna element off the gnd. plain
w/ heat shrink tube?

3768. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 16:22:42 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c77c1d2$1@news.bnb-lp.com>
Source record: 148056
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Ronald,
What did I not list?

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3769. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 16:23:58 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <zmPd8.19403$IS1.4117174@news20.bellglobal.com>
Source record: 148057

"Dick Hughes"
> The problem is, "where are you going to buy this
> stuff if not MFJ?" It's the only game in town
> for much of what they make. I just grin and bear it.

What pisses me off is that they seem to go out of their way to make it cheap. They seem to like to use specially manufactured ultra thin metal for their homemade cabinets. Some of their products can be crushed like a beer can. The screws that hold the lid on always seem to strip out the case because they use such an aggressive thread pitch so that they can put the screw in with three turns instead of six turns.

Some of their products look tempting, but these are the sorts of issues that aren't visible in advertisements. I've learned my lesson. They always seem to find a way to "exceed their customers' expectations" (surprising the new owner with imaginative and creative elements of poor mechanical design quality).

Maybe they could have a "Deluxe Line" of products (for which they would charge the extra $0.50) and not make such strenuous efforts to cheapen the design.

Sorry to rant, but the world would be a better place if they did something to improve their product design standards.

3770. Updates to www.ab7sl.com

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 16:36:17 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c77c501$1@news.bnb-lp.com>
Source record: 148058

Some new stuff and some updates since last month....
found at http://www.ab7sl.com

1. NEW - Cushcraft R7 / R7000 page.
includes black box photos and component values
w/schematic also R7 / R7000 instruction and assembly manuals
Note: (all downloadable too..)

2. Prescott, Arizona Page has many all-new photos

3. Equipment Photos Page has some all-new photos added

4. Downloadable DXCC List updated - 16-Feb-2002

5. AB7SL - DXCC "Need List" - pls check it out....

6. Weather Page has real-time conditions for 12 selected US cities
and links for complete USA / World real-time weather data

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3771. Re: Maspro or Cushcraft??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 17:13:18 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C77CD9E.3C26FC28@tampabay.rr.com>
Source record: 148063

i would suggest M2 they are very high quality yagis
check them out at www.M2inc.com

dolan morrison wrote:

> I intend buying a larger 2 metre yagi.Any opinions on the above regarding
> quality etc.There seems to be a big difference in price.
> tia
> Dolan
> GM0LZE

3772. Re: Maspro or Cushcraft??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 17:15:08 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C77CE0C.7C252FC8@tampabay.rr.com>
Source record: 148059

i have never had a bit of problems with cushcraft and customer service i called them up placed a parts order and when it wasnt here in 3 weeks time they emailed me back and said it will be there in 3 days no charge and it was a $40 order

VHFRadioBuff wrote:

> >I intend buying a larger 2 metre yagi.Any opinions on the above regarding
> >quality etc.There seems to be a big difference in price.
> >tia
> >Dolan
> >GM0LZE
> >
>
> I would steer clear of Cushcraft. From what I've heard and from what I've read
> on the newsgroups lately, they are the WORST company for customer service.
> Customer service is a big part of buying a product, so even if you have to pay
> a couple extra dollars for another brand, I wouldn't buy Cushcraft.
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
> 73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
> Toms River, NJ USA! Grid FM29ww
> http://vhfradiobuff.tripod.com
> http://edfas.tripod.com

3773. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 17:22:09 UTC
From: Don Johnston <duck@mindspring.com>
Message-ID: <a58j37gmc1@slb7.atl.mindspring.net>
Source record: 148061

Aw geez, guys. Come on now. I don't know squat about antennas, dipoles, wavelengths, or any of that stuff. I guess I should have mentioned that. I'm not trying send signals to Mars, I was just curious if an external antenna would help.

I don't know if the db loss will shorten the wavelength of the dipole which will cause me to have more frequent bowel movements. But I did get some very useful information that will help me stick something outside my window that may, I repeat, MAY help me pick up more of the communications than I currently am.

If it doesn't, I won't complain. I promise.

'nuff said?

"'Doc" <w5lz@icok.net> wrote in message news:3C770064.AFFD8FC5@icok.net...
>
>
> Jim Weir,
> Well, I care for one. If I can't give an honest
> answer, I don't see any point in giving a wrong one.
> If I'm not familiar with the land around him, how could
> I give himany kind of a 'correct' answer? From what
> you've posted, I see that you don't feel that way.
> 'Doc

3774. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 17:22:17 UTC
From: Peter Hunt <news@peterhunt.zoetermeernet.nl>
Message-ID: <a58j0fnd1@news1.xs4all.nl>
Source record: 148060
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Don't try to open this page in Netscape, that is a disaster!!!!!

Peter Hunt.

3775. Re: Maspro or Cushcraft??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 17:24:30 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020223122430.17735.00000193@mb-fn.aol.com>
Source record: 148062

>i have never had a bit of problems with cushcraft and customer service i
>called
>them up placed a parts order and when it wasnt here in 3 weeks time they
>emailed
>me back and said it will be there in 3 days no charge and it was a $40 order

Then I would say you're the exception to the rule. The majority of what I've heard about Cushcraft has been bad, which is why I will never do business with them.

=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

3776. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 17:43:41 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c77d4ce$1@news.bnb-lp.com>
Source record: 148064
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Peter,
The entire site is tested with the current version browsers from Microsoft IE6, Opera 6, and Netscape 6. All pages including the W9INN Page are fine with these browsers....

If you are using an older browser (especially Netscape) then you might want to upgrade since many sites now use up-to-date html that was devised long after these older browsers were released.

The site is however 'optimized' for IE 6 (as it says on the home page) since over 90% of my visitors use Internet Explorer.

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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www.ab7sl.com

3777. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:06:26 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <DSQd8.19459$IS1.4172462@news20.bellglobal.com>
Source record: 148065
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Charles Johnston"
> The site is however 'optimized' for IE 6 (as it says on the home page)
> since over 90% of my visitors use Internet Explorer.

According to the access statistics for Google:

http://www.google.com/press/zeitgeist.html

MS IE 5.0, 5.5 & 6.0 are EACH about three times more popular than Nutscape.

3778. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:12:19 UTC
From: n7ws@yahoo.com
Message-ID: <3c77d968.53633485@news.triconet.org>
Source record: 148066

On Sat, 23 Feb 2002 10:43:41 -0700, "Charles Johnston" <ctj92@cableone.net>
wrote:

|Hello Peter,
| The entire site is tested with the current version browsers from
|Microsoft IE6, Opera 6, and Netscape 6. All pages including the W9INN
|Page are fine with these browsers....
|
| If you are using an older browser (especially Netscape) then you might
|want to upgrade since many sites now use up-to-date html that was
|devised long after these older browsers were released.

As I said earlier on this same topic:

"I too use an older version of Netscape and I'm damned tired of cybergeek web
page designers that assume everyone has the latest software, a 1 GHz processor
with 1 Gbyte RAM, a 35" monitor, a dedicated T1 line and wants to look at their
product via streaming video.

If these folks want me as a consumer, they are making a big mistake.

There are few nice things to say about the nation's telephone companies anymore
but one of them is that they understand backward compatibility. You don't have
to buy a new telephone every six months to keep making phone calls. In fact your
old 1950 rotary dial handset should work just fine.

Telephone companies are run by business people who realize that they need to
keep *all* of their customers, not just the ones with the latest whiz-band
super-duper handset with a 1 GHz processor, 3-D video and your choice of
"designer" color."
|
| The site is however 'optimized' for IE 6 (as it says on the home page)
|since over 90% of my visitors use Internet Explorer.
|

99.999% of the phone companies' customers use tone dialing handsets, but the
companies still accomodate pulse dialing.

3779. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:13:39 UTC
From: mcduffie@xactcom.net
Message-ID: <kdmf7u42qsikiojnimio9t4je279sg9tpe@4ax.com>
Source record: 147970

On Sat, 23 Feb 2002 08:41:27 -0700, Dick Hughes <rhughes33@cableone.net>
wrote:

> I have been buying and using MFJ equipment for many years. I guess I
> have been one of the lucky ones as I have not had problems with any of
> them (yet.)

Likewise. I haven't seen much to complain about in MFJ for decades.
The first stuff they came out with was real junk, and earned them the
well known Mother X-ing Junk name. I remember hot glued pc boards, in
hobby boxes, etc. But when they came out with the first mass produced
TAPR 2 TNC clone, things turned around. There were some cheap tuners
out there from MFJ, but you get what you pay for.

As for the 259, I bought mine used, and it has worked flawlessly for
many years (even after it fell off the truck at 50+ MPH). No problem
with the push buttons at all, and have only had to clean the rotary
switch one time, something you would normally expect on a device that
doesn't get used very often. Oxidation happens.

My only regret is that I don't have one of the newer ones with digital
readout and more functions.

gm
--
There is no x in my ISPs domain name.

3780. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:29:55 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <EcRd8.19474$lS1.4185035@news20.bellglobal.com>
Source record: 148067

> ...damned tired of cybergeek web
> page designers that assume everyone
> has the latest software, a 1 GHz processor
> with 1 Gbyte RAM, a 35" monitor, a dedicated
> T1 line and wants to look at their product
> via streaming video...

Unlike the "1 GHz processor with 1 Gbyte RAM, a 35" monitor, a dedicated T1
line..."
...IE 6.0 is a free download. I suspect that Nutscape updates are free too.

Excuse me for putting it so simply: Old software sucks. New software
sometimes sucks too, but old software sucks more.

At work: Windows 95, etc. Pure hell. Constant crashes. Garbage.
At home: Windows XP, etc. Easy. Stable.

3781. Re: older browers (was W9INN Antennas web page is now ONLINE)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:33:58 UTC
From: paul friedman <pfriedman8426@attbi.com>
Message-ID: <qgRd8.5171$Or3.748805@typhoon.mn.ipsvc.net>
Source record: 147969

Wes:

I am not trying to talk you in to upgrading your software or your processor. You might find this interesting, however. I asked a company which is a fairly major vendor of out-sourced web design why they ignored older browsers. The answer was that folks with older browsers tend to NOT be on-line buyers (they gave me some comparative statistics which I do not remember and never knew from whence they came). If this is true and the purpose of the site is to sell stuff (as opposed to merely increasing hits), then ignoring older browsers might well make business sense.

Again, I'm not looking for a fight here.. just passing along the information (such as it is) in case you or anyone else is interested.

Paul

"Wes Stewart" <n7ws@yahoo.com> wrote in message
news:3c77d968.53633485@news.triconet.org...
> On Sat, 23 Feb 2002 10:43:41 -0700, "Charles Johnston"
<ctj92@cableone.net>
> wrote:
>
> |Hello Peter,
> | The entire site is tested with the current version browsers from
> |Microsoft IE6, Opera 6, and Netscape 6. All pages including the W9INN
> |Page are fine with these browsers....
> |
> | If you are using an older browser (especially Netscape) then you might
> |want to upgrade since many sites now use up-to-date html that was
> |devised long after these older browsers were released.
>
> As I said earlier on this same topic:
>
> "I too use an older version of Netscape and I'm damned tired of cybergeek
web
> page designers that assume everyone has the latest software, a 1 GHz
processor
> with 1 Gbyte RAM, a 35" monitor, a dedicated T1 line and wants to look at
their
> product via streaming video.
>
> If these folks want me as a consumer, they are making a big mistake.
>
> There are few nice things to say about the nation's telephone companies
anymore

> but one of them is that they understand backward compatibility. You don't
have
> to buy a new telephone every six months to keep making phone calls. In
fact your
> old 1950 rotary dial handset should work just fine.
>
> Telephone companies are run by business people who realize that they need
to
> keep *all* of their customers, not just the ones with the latest whiz-band
> super-duper handset with a 1 GHz processor, 3-D video and your choice of
> "designer" color."
> |
> | The site is however 'optimized' for IE 6 (as it says on the home page)
> |since over 90% of my visitors use Internet Explorer.
> |
>
> 99.999% of the phone companies' customers use tone dialing handsets, but
the
> companies still accomodate pulse dialing.

3782. Re: circuit board for ProData interface

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:36:32 UTC
From: John O'Flaherty <wewelcomespam@blackhole.net>
Message-ID: <3C77E130.945E3031@blackhole.net>
Source record: 148068

John O'Flaherty wrote:
>
> Thanks for your article in QST. Do you still have any of the circuit
> boards available?

Apologies for this misdirected message.

--
john

3783. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:37:43 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c77e179@news.bnb-lp.com>
Source record: 147971

Hello Wes,
Please for Pete's sake...take a Valium!

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3784. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:42:59 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7fol6hc3qjh0e@corp.supernews.com>
Source record: 147972

Don...after all this drivel...

Go buy yourself some Radio Shack RG-58 coax off the bulk spool in the back of the store. Don't use that prepackaged crap on the racks. Buy enough coax so that you can reach the point on the house where you want to mount your outside antenna, plus a few feet.

Put a BNC connector on one end of the coax. Strip the outer black sheath 22" back from the open end. Use an icepick to open a hole in the braid (without breaking too many of the braid wires). Snake the center conductor/insulation out this hole. Get yourself a piece of dry wood or plastic pipe about 4' long. Staple (or cable tie) the end of the center conductor/insulation to one end of the wood/pipe. Staple the end of the braid to the opposite end of the wood/pipe.

Fasten this contraption to your outside house mounting point using string or rope. Orient it with the wood/pipe vertical and the center conductor/insulation at the TOP of the wood/pipe. Run the coax away from the antenna at right angles as far as you can, at least 24" or so. See if you can hear what you want to hear.

If you can, THEN start reading all about how gain antennas work and all that stuff. If you can't hear what you want to hear, gain antennas aren't going to buy you a lot, as you will be listening to a lot of noise even if you can pick up more signal with the gain.

Jim
(Airplane antennas are us)

"Don Johnston" <duck@mindspring.com> wrote in message
news:a53tqnmrs1@nntp9.atl.mindspring.net...
> I have a handheld aviation radio that I can only pick up the aircraft side
> of a transmission. It has a short (about 8 inch "rubber ducky") antenna
that
> mounts with a BNC connector. Would I be able to pick up the ground side of
> the transmisson (source is appx. 18 miles away) with an outside antenna?
> Would it be possible to build one?
>
> Thanks in advance,
> Don
>
>

3785. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:42:59 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c77e2b5$1@news.bnb-lp.com>
Source record: 147973
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Here are some more interesting statistics for browser share based on
over 500 million visitors for the month of Jan-2002 that shows 91% of
the users browse with Internet Explorer.
It really gives no impetus to the webmasters to design or support the
older browsers any longer...
Found at:
http://www.thecounter.com/stats/2002/January/browser.php

Browser Stats
Tue Jan 1 00:05:01 2002 - Thu Jan 31 23:55:04 2002 31.0 Days

1. MSIE 5.x 322695658 (64%)
2. MSIE 6.x 115189588 (23%)
3. MSIE 4.x 23015294 (4%)
4. Netscape 4.x 22311050 (4%)
5. Netscape comp. 5596301 (1%)
6. Netscape 6.x 3642593 (0%)
7. Unknown 2452049 (0%)
8. Opera x.x 2058201 (0%)
9. Netscape 3.x 730086 (0%)
10. Netscape 5.x 697125 (0%)
11. MSIE 3.x 401654 (0%)
12. MSIE 2.x 363378 (0%)
13. Netscape 2.x 24607 (0%)
14. Netscape 1.x 713 (0%)
15. MSIE 1.x 667 (0%)

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3786. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:44:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7fomukmhlo01c@corp.supernews.com>
Source record: 147974

Gee, Doc, had a double ration of grump flakes for breakfast, did we?

Jim

"'Doc" <w5lz@icok.net> wrote in message news:3C770064.AFFD8FC5@icok.net...
>
>
> Jim Weir,
> Well, I care for one. If I can't give an honest
> answer, I don't see any point in giving a wrong one.
> If I'm not familiar with the land around him, how could
> I give himany kind of a 'correct' answer? From what
> you've posted, I see that you don't feel that way.
> 'Doc

3787. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:48:39 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7fovm4lq1k468@corp.supernews.com>
Source record: 147975

And the name of your company that you run and do the value engineering for
and have been in business for forty some years is named ???

Jim

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:zmPd8.19403$lS1.4117174@news20.bellglobal.com...
> "Dick Hughes"

>
> What pisses me off is that they seem to go out of their way to make it
> cheap. They seem to like to use specially manufactured ultra thin metal
for
> their homemade cabinets.

3788. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 18:49:47 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C77E43C.F1FA2D94@icok.net>
Source record: 147976

Jim Weir,
Not really, just don't like to be fed a ration of
'crap' as you tried to do.
'Doc

3789. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 19:13:50 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C77E9EE.12328835@IEEE.org>
Source record: 147977

"J. Harvey" wrote:
> Excuse me for putting it so simply: Old software sucks. New software
> sometimes sucks too, but old software sucks more.

In the case of netnews readers, Netscape 4.6 is a lot better behaved
than Netscape 6.2. For some reason, using Netscape 6.2, my news server
keeps asking for login and password, over and over. When replying to
netnews postings, Netscape 6.2 puts in a lot of unneeded unnecessary
extra blank lines.
--
cheers, CAM http://www.qsl.net/w5dxp

3790. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 19:15:08 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C77EA3C.BB1BD3D5@IEEE.org>
Source record: 147978

Charles Johnston wrote:
> Hello Wes, Please for Pete's sake...take a Valium!

Who's Pete?
--
cheers, CAM http://www.qsl.net/w5dxp

3791. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 19:33:14 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c77ee7d@news.bnb-lp.com>
Source record: 147979
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Cam,
"Pete" is the invisible representative for the rest of us for whose sake we stand. Wes is such a whiner I thought it best to advise him (on Pete's behalf) to take a Valium....

Or ..... Wes could just drop out of the hobby completely - and / or - disappear from the internet.

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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Official W9INN Antennas Page
www.ab7sl.com

3792. Re: Maspro or Cushcraft??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 19:54:46 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C77F346.34AB844D@tampabay.rr.com>
Source record: 147980

the company that pisses me off is mosley
they take forever to get out any order no matter how big or small
i ordered a 9 ele 2 meter yagi from them it took 10 weeks to get it and i would
call up and ask about it nearly every week after the first month and they would
find all sorts of stories to tell me like out of boom stock or this or that
then when it finally got here i was so disappointed in its construction and
materials and how much of the construction i had to do that i never did get the
thing together
then to make matters worse i have a mosley 6 meter vertical and i needed an
aluminum wire part of the hairpin match i called them up and wanted to place an
order for that part and i asked them how long it would take to get the part and
they said about a week i said cool and your sure it wont take 8 weeks like before
they said no will go out end of this week
well it took 8 weeks to the day to get out a 1/8th diam aluminum wire about 3 feet
ling
what a terrible company

VHFRadioBuff wrote:

> >i have never had a bit of problems with cushcraft and customer service i
> >called
> >them up placed a parts order and when it wasnt here in 3 weeks time they
> >emailed
> >me back and said it will be there in 3 days no charge and it was a $40 order
>
> Then I would say you're the exception to the rule. The majority of what I've
> heard about Cushcraft has been bad, which is why I will never do business with
> them.
> =-
> 73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
> Toms River, NJ USA! Grid FM29ww
> http://vhfradiobuff.tripod.com
> http://edfas.tripod.com

3793. Relays for the Ladder-Line Length Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 20:35:39 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C77FD1B.79D13D4@IEEE.org>
Source record: 147981

I've got a few inquiries about using relays for the ladder-line length selector. Relays will work but they have the disadvantage of consuming power in order to perform their function. (I'm working on the concept of using small model airplane servo motors for this function that won't require continuous current but I'm not a mechanical engineer.) The relays that I have successfully used are:

Omron, LY4-12d - these relays are four pole double throw and ideally suited for 100 watt RF stuff. Four are needed for a 0-15ft LLLS and five are needed for a 0-31ft LLLS.

I was lucky enough to find a bunch of P&B MR11's at a surplus store in Phoenix. They aren't made anymore but worked very well in a 500 watt system inside a dust-proof enclosure.

I also used P&B KUP-11D15-24's that I obtained for $2 each at a surplus store in Silicon Valley. They handled 500w nicely after tuneup at 100w. I modified the common contact wire such that it exited the relay through the plastic dust cover top rather than at the base of the relay.

Since I don't like the current drain associated with the above relays, I presently use ten DPDT knife switches obtained from a surplus store in Tucson for $2 each. They are mounted on a piece of plexiglas that is mounted in my hamshack window just above my transceiver, amp, and power supply. I can switch the knife switches quicker than I can tune an antenna tuner as I have a chart on the wall with the previous tuning information - no tuner required.
--
cheers, CAM http://www.qsl.net/w5dxp

3794. Need 40/80M Antenna Advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 20:49:49 UTC
From: Richard Lubash <2k-plus@2k-plus.com>
Message-ID: <230220021549494265%2k-plus@2k-plus.com>
Source record: 147982

I live on a wooded 1 acre lot that makes it very difficult to put up wire antennas (lots of 2nd, 3rd growth scruffy trees between the tall ones). I have a 50 foot tower mounted to the house with an Alpha Delta 40, 80, 160 double sloper on the tower with a Tennadyne 10 el log periodic for a top hat and a separate Fritzel FD4 Windom that I switch between for 40 and 80. I do Ok with these antennas but I am looking to do better. I have thought about the Force 12 vertical dipole for 40 or possibly the Butternut HF2V with a medium radial system for 40 and a little bit of 80. My question, would either of these be an improvement (receive & transmit) over my existing antennas or if not any suggestions that don't involve stringing long lengths of wire through the dense foliage.

Thanks,

Richard / N1VXW

3795. ARRL - reaffirms - eQSL's OK for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 21:45:24 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c780d75$1@news.bnb-lp.com>
Source record: 147983
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

The ARRL has recently reaffirmed just one week after the original historic announcement (08-Feb-2002) that eQSL Cards - ARE - accepted for DXCC....this remark from the eQSL Webmaster found at this

URL: http://www.eqsl.cc/qslcard/comments.cfm
"ARRL reaffirmed today that it will accept eQSLs that are mailed. AG or not" (Webmaster)
15-Feb-2002

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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3796. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 21:57:52 UTC
From: k1bqt@aol.com
Message-ID: <20020223165752.07848.00000290@mb-mn.aol.com>
Source record: 147985

> If you can't hear what you want to hear, gain antennas aren't going to buy you a lot, as you will be listening to a lot of noise even if you can pick up more signal with the gain.<

Let's see, dangling a dipole fed with cheap RG-58 from a broom handle is a better plan for hearing the tower because mounting a directional antenna on the roof and feeding it with low-loss cable will just pick up a lot of noise. Did I get that right?
Glad you straightened us out!

Rick K1BQT

3797. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 21:58:17 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3C781079.4A6AF107@sympatico.ca>
Source record: 147984

> Excuse me for putting it so simply: Old software sucks. New software
> sometimes sucks too, but old software sucks more.
>

Let me just add one word "Consumer" software.
That's the stuff that comes with a Microsoft style warranty - 'we guarantee that this product might, perhaps, perform more-or-less as advertised for maybe 90 days, and if it don't it's your problem not ours, even if we know it is faulty'.

Can you imagine trusting your money, or your life to that sort of stuff?

Professional software continues to run the world as the generations of consumer stuff evolve. Air Traffic Control, Banks, Telephone companies etc. etc. are quite happily running on stuff older than some of the posters.

Before I retired, the organization I worked for made a practice of locking new business software releases in the vault, unopened, for six months to let some other poor sucker find the bugs - we had corporate subscritions so got all the upgrades.

Serious operational software - the stuff that did important things as opposed to pretty things - was professionally tested for at least six months before anyone was allowed to install it on anything other than a test and evaluation system. If it was modified or upgraded it went back for the full test and evaluation process.

And now, back to HAM radio; which thank goodness, does not have the same hang-up about last year's radios.

Dave
Used to be a software geek, but grew out of it.

3798. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 22:14:04 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3C78142C.42EC2E35@sympatico.ca>
Source record: 147987

The simple answer is that, unlike other radio services using VHF/UHF;
Air Traffic Control has no interest in communicating with stations on
the surface at more than a few miles - usually just on the airport.

Therefore their antennas are selected and positioned so as to provide a
clear path to aircraft. They don't normally place them up on high hills,
or worry about obstructions which will limit surface coverage. As long
as they are 'line-of-sight' to aircraft in the airspace they are
interested in their requirements are met.

The aircraft on the other hand have a large 'line-of-sight' coverage
which can easily exceed a 200 mile radius for high level traffic on Jet
Routes.

In other words, you may be able to hear aircraft from long distances but
most likely will not hear ground transmissions for any significant range
- there will always be exceptions due to the occassional antenna site on
top of a hill, or some anomalous propagation.

I can hear some ground transmissions from a site some considerable
distance away (its on a hill), yet several busy airports much closer are
inaudible despite high, or even active ourdoor antennas.

It's just the nature of AVIATION VHF/UHF systems.

Dave Holford
VE3HLU

Don Johnston wrote:
>
> I have a handheld aviation radio that I can only pick up the aircraft side
> of a transmission. It has a short (about 8 inch "rubber ducky") antenna that
> mounts with a BNC connector. Would I be able to pick up the ground side of
> the transmisson (source is appx. 18 miles away) with an outside antenna?
> Would it be possible to build one?
>
> Thanks in advance,
> Don

3799. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 22:15:19 UTC
From: k1bqt@aol.com
Message-ID: <20020223171519.07848.00000300@mb-mn.aol.com>
Source record: 147988

>I was just curious if an external antenna
would help.<

The answer is yes:

1. An external antenna will help.

2. An external antenna with some gain will help a little more.

3. An external antenna with some gain that's fed with low-loss feedline will help even more.

4. An extenal antenna with some gain that's mounted above the roof and in the clear (and fed with low-loss coax) should help quite a bit. It should help because every improvement you make in your antenna system will enable your radio to capture more signal and less noise.

Rick K1BQT

3800. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 22:38:04 UTC
From: k1bqt@aol.com
Message-ID: <20020223173804.07848.00000310@mb-mn.aol.com>
Source record: 147989

> yet several busy airports much closer are inaudible despite high, or even active ourdoor antennas.<

Everything you say about Ground Stations is true...which is why I find it challenging to pick them up.

High helps, but "active" may hurt, especially if your feedline doesn't have a lot of loss to begin with. Many after-market preamps are noisier than the front ends in many of today's radios. Also, a preamp can easily overload your receiver's front-end with strong out-of-band signals. I use a GaAs FET preamp on my airband yagi, but I also have a passband filter built into the magic-T that knocks down the out-of-band stuff. The system would probably work virtually as well without the preamp.

Directional gain usually helps a lot more than active gain because--among other things--directivity rejects much of the surrounding noise energy that would otherwise compete with the desired signal.

Rick K1BQT

3801. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 23:00:46 UTC
From: peter@strg-alt-entf.org
Message-ID: <a596us$5js78$1@ID-31.news.dfncis.de>
Source record: 147990
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment
Body handling: HTML body converted to readable text

In rec.radio.amateur.dx Charles Johnston wrote:

> The entire site is

a crude hack with

> tested with the current version browsers from
> Microsoft IE6, Opera 6, and Netscape 6.

thus ignoring all the Mac, Unix, Linux users, or those with the latest
stable Netscape.

>All pages including the W9INN
> Page are fine with these browsers....
>
> The site is however 'optimized' for IE 6 (as it says on the home page)
> since over 90% of my visitors use Internet Explorer.

You take that as a good sign, don't you?

http://validator.w3.org/ cannot even *start* validating this junkyard,
because of

Fatal Error: no document type declaration

Ouch.

Peter Lemken
DF5JT
Berlin

--
Yes, it works!

3802. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 23:11:01 UTC
From: Larry Johnson <larryj@teleport.com>
Message-ID: <3C781ECD.67AE1304@teleport.com>
Source record: 147991

CAM - Charles has a small group of "overseers" that feel the need to "respond" to him whenever he makes a posting about his web site updates, eQSLs, or any other DX info that many of us find useful. Perhaps his suggestions of medicinal supplements may prevent them from anxiety (or even stroke!) that they suffer when reading his posts (rather than just pressing the DELete key.)

CAM wrote:
>
> Charles Johnston wrote:
> > Hello Wes, Please for Pete's sake...take a Valium!
>
> Who's Pete?
> --
> cheers, CAM http://www.qsl.net/w5dxp

3803. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 23:26:14 UTC
From: n7ws@yahoo.com
Message-ID: <3c7814be.522652@news.triconet.org>
Source record: 147992

On Sat, 23 Feb 2002 13:29:55 -0500, "J. Harvey" <JM001.Harvey@sympatico.ca>
wrote:

|> ...damned tired of cybergeek web
|> page designers that assume everyone
|> has the latest software, a 1 GHz processor
|> with 1 Gbyte RAM, a 35" monitor, a dedicated
|> T1 line and wants to look at their product
|> via streaming video...
|
|Unlike the "1 GHz processor with 1 Gbyte RAM, a 35" monitor, a dedicated T1
|line..."
|...IE 6.0 is a free download. I suspect that Nutscape updates are free too.

And they're worth just what you pay for them.
|
|Excuse me for putting it so simply: Old software sucks. New software
|sometimes sucks too, but old software sucks more.

Really. When I retired a couple of years ago, my department was still using HP-9836 computers running HP Basic or Pascal to control dozens of HP-IB instruments and collect and process test data on missile hardware from such as AMRAAM and Tomahawk.

You can be damned sure we didn't do this over the "productivity enhancing" network that the company hired Computer Sciences Corp to install and maintain. It ran the latest and greatest Windows NT, which I dubbed "Not Today", which described when it would be up and running.

The HP machines were using at most 1M of RAM and often no more than 512K. That's "K" not "G". The problems if any, where usually with the buggy firmware that HP put into the latest-and-greatest instruments.

But HP quit supporting these a long time ago because it's not good for business. They need to sell new stuff just as Microsoft, Dell, Gateway, etc. need to do, so obsolescence is part of the business plan. And the foolish buy into the idea. I could go on about how planned obsolescence affects your very security and costs you a lot of tax money, but this isn't the place.

In closing I'll just report that my mother-in-law still has a dial telephone hooked up in her garage and it works every time.

3804. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 23:27:17 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a598sj$5kehu$1@ID-124126.news.dfncis.de>
Source record: 147993

Quality is the extent to which something conforms to specified performance data. If the performance is specified as being rubbish, and that's what you get, then that's high quality. Always look at the performance specification before buying. If it does not have a performance specification then don't buy it! Don't buy pigs in pokes !

I have some experience with using such antenna analyser instruments. They give the right answers with sufficient accuracy to serve the purpose intended. I have found them very useful. Their small physical size allows them to do jobs which to the bigger instruments would be impossible.

My only complaint is the purchase cost of such instruments. It is too high for what is inside the boxes. I have successfully used the instruments for several years. Design and development design costs must have been recovered some time ago.

From a users point of view it is time the sign +/- of X was displayed on the meter. The technology has been available for many years. Where is it?

Are manufacturers waiting until they have extracted the maximum possible profit from present designs before introducing bringing something "new" ?
--
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

3805. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 23:56:34 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c782c30@news.bnb-lp.com>
Source record: 147994
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Wes,

Wes said.....
>In closing I'll just report that my mother-in-law still has a dial
telephone
>hooked up in her garage and it works every time.

...now isn't that kind of an inconvenient place to have to take your
calls? BTW Wes...valium is on sale at Osco this week. Ask your doc for
a scrip....you need it.

"Wes......It's just a hobby. ...for crying out loud man!"

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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3806. building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-23 23:58:07 UTC
From: tucansam@whodis.org
Message-ID: <a59aafmvl1@reader2.panix.com>
Source record: 147995

Hi everyone.

This is my first dive into antenna building, thus I am very green. Please forgive the simplistic nature of my questions.

I am trying to build an antenna to grab 118.5Mhz, the tower frequency of an airport about 17 miles from me. I have a stick of PVC and some RG58 and want to build a simple, vertical ground plane (based on a response I got to a previous post).

I have one now cut to 26" and it performs reasonably well in grabbing stuff out of the air that my rubber duck never got. But I still can't get the tower.

Rather than cutting the coax to the center of the band I want to get, can I cut it to 1.97 ft (243/118.5) and hope to get any better gain?

If that doesn't work my next attempt will likely be a directional yagi, so I'll probably be back :)

Thanks!

Jason

3807. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 00:17:42 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c783124$1@news.bnb-lp.com>
Source record: 147996
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Peter,
You know ...you must be one really lonely guy.....but I digress....

Peter said..
>thus ignoring all the Mac, Unix, Linux users, or those with the latest
>stable Netscape.

All of those users you mentioned (combined!) make up less than 5% of the total number
of "world wide web surfers". This is what you get bent out-of-shape over?

Please Peter.....post something meaningful or drop off the net.....no one will ever miss you if you do!

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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3808. Re: building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 01:03:36 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C783BD7.783198A1@icok.net>
Source record: 147997

Jason,
Not really. The length of th antenna you have now
is close enough so that if you were in range of the
tower, you should be hearing it (I'm assuming that it's
as high as you can get it). What will help more than
anything else is more height. Good luck...
'Doc

3809. Call Sign as your Dot.com name $11.95

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 01:19:33 UTC
From: News Editor <news@ez-domainnameregistration.com>
Message-ID: <u7gfunqr2j4d9e@corp.supernews.com>
Source record: 147998

Register your call sign as your Dot.com domain name for only $11.95. No website? No problem-- we'll provide a free page saying "Welcome to the future home page of ..." Or use with your free website at AOL, GeoCities, or your ISP-- see Domain Forwarding for how. No popup or banner ads. You own it. You control it. No gimmicks, period! Great support for hams provided by NJ5U. www.Ez-DomainNameRegistration.com

3810. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 01:58:03 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <KMXd8.59913$JZ.7254315@news20.bellglobal.com>
Source record: 148000

I wrote:
> What pisses me off is that they [MFJ] seem to
> go out of their way to make it cheap.

"Jim Weir"
> And the name of your company that you run
> and do the value engineering for and have
> been in business for forty some years is
> named ???

'MFJ Enterprises, Inc., was founded in 1972 by Martin F. Jue.' That's thirty years tops, not "forty some".

Are you claiming personal responsibility for MFJ's quality ? Wow....what a great newsgroup. Everybody is here...

Suggestion for senior management - increase prices by about a dollar or two per unit and aim the extra $ in the general direction of mechanical quality (traditional meaning - not that new ISO9000-hijacked meaning that allows 'consistent junk').

You don't need to make such efforts to make the cases cheap. Use thicker metal. Mount the battery holders to the case, not the PCB. Make sure the battery stays in the holder. Make sure the screws don't strip out the case. Put the labels on the right way the first time. If you make a mistake, clean it off completely - don't just paint over it. (Geezuz, I only have 2 MFJ products !!!!!!!!)

And finally, one doesn't have to operate their own company to be qualified to report on their own personal experiences with obvious and systematic quality problems. A well run company would be well advised to listen to their customers - especially their former customers...

Good luck.

3811. Re: Call Sign as your Dot.com name $11.95

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 01:58:09 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c7848af@news.bnb-lp.com>
Source record: 147999
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.morse,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Hello News Editor,
I have used domain forwarding for years and it is very useful. However
I pay only $16 / year for the domain registration, the email forwarding,
URL forwarding, full-frame forwarding, toll-free tech support, domain
parking, and full-featured DNS....all found at.....
http://www.buydomains.com/

Your price (from your site) is $23. IMHO if smart people shop around
for these kinds of services they won't be contacting you.....your
competition has already got you whipped but good.....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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Official W9INN Antennas Page
www.ab7sl.com

3812. Re: building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 02:28:00 UTC
From: tucansam@whodis.org
Message-ID: <a59j3g$445$1@reader2.panix.com>
Source record: 148001

```
: Not really. The length of th antenna you have now
: is close enough so that if you were in range of the
: tower, you should be hearing it (I'm assuming that it's
: as high as you can get it). What will help more than
: anything else is more height. Good luck...

Thanks Doc. More height is something I'm definetely working on.
```

3813. Info

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 03:03:16 UTC
From: Steve Bainbridge <Steve.Bainbridge@m1swb.freeserve.co.uk>
Message-ID: <MSGID_2=3a250=2f220=40fidonet_1b160aa7@fidonet.org>
Source record: 147986

Hi

any ideas who actualy make Q-TEK ants, and have they a web site.

Steve

3814. Re: ARRL - reaffirms - eQSL's OK for DXCC

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 03:16:27 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c785b0a$1@news.bnb-lp.com>
Source record: 148002
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Bill and others....
This covered with a link you can click on to get the registration
email re-sent to you right away. Here is the URL.

http://www.eqsl.cc/qslcard/faq.cfm#Signup

Here is the text ...but you'll need to go the eQSL link above to use the
clickable link...

I registered but never got a Signup Code in my e-mail!

If it still hasn't arrived after 15 minutes or so (to account for
Internet delays), click here and we will re-send it to your e-mail
address immediately.
If your e-mail address had spelling errors, our fully automated system
will have received an e-mail about it. If you believe that is the case,
go here and you can correct the bad address and re-send your Signup Code
to you.

Good luck and happy eQSL'ing....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3815. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 03:33:51 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3C785F1F.7F3ED9D8@sympatico.ca>
Source record: 148003

Rick Littlefield wrote:
>
> > yet several busy airports much closer are inaudible despite high, or even
> active ourdoor antennas.<
>
> Everything you say about Ground Stations is true...which is why I find it
> challenging to pick them up.
>
> High helps, but "active" may hurt, especially if your feedline doesn't have a
> lot of loss to begin with. Many after-market preamps are noisier than the front
> ends in many of today's radios. Also, a preamp can easily overload your
> receiver's front-end with strong out-of-band signals. I use a GaAs FET preamp
> on my airband yagi, but I also have a passband filter built into the magic-T
> that knocks down the out-of-band stuff. The system would probably work
> virtually as well without the preamp.
>
> Directional gain usually helps a lot more than active gain because--among other
> things--directivity rejects much of the surrounding noise energy that would
> otherwise compete with the desired signal.
>
> Rick K1BQT

No argument from me, except that I would differentate between active
antennas (good ones that is) and preamplifiers with which I have found
exactly the limitations you mention.

I find my Dressler ARA-900 gives little problem on VHF/UHF, but some HF
actives can create an amazing bunch of garbage.

Dave

3816. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 03:47:28 UTC
From: peter@strg-alt-entf.org
Message-ID: <a59nog$5ks9n$1@ID-31.news.dfncis.de>
Source record: 148004
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.dx Charles Johnston <ctj92@cableone.net> wrote:
>
> ------------
> Peter said..
>>thus ignoring all the Mac, Unix, Linux users, or those with the latest
>>stable Netscape.
> -----------
>
> All of those users you mentioned (combined!) make up less than 5% of the
> total number
> of "world wide web surfers". This is what you get bent out-of-shape
> over?

Millions of flies.

Peter Lemken
DF5JT
Berlin

--
Yes, it works!

3817. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 03:47:44 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <AnZd8.29131$Lc2.4060182@news20.bellglobal.com>
Source record: 148006

"Dave Holford"
> Let me just add one word "Consumer" software.

You're right - I was referring to people that like to run old and/or weird software (Nutscape for example) on their home PC and then complain incessantly about the problems that they experience.

> Professional software continues to run the world
> as the generations of consumer stuff evolve.
> Air Traffic Control, Banks, Telephone companies
> etc. etc. are quite happily running on stuff older
> than some of the posters.

Old 'Air Traffic Control' software is the worst of all. Extremely (!!!) inefficient routing algorithms - wastes billions per year. I've seen a website where someone had found a flaw in the overall design that could lead to small VFR aircraft arriving unannounced in front of a commercial transport at the boundaries between ATC zones. Rare but frightening. The new on-board Collision Avoidance Systems will help of course. It is such an ugly monster that the FAA is spending billions trying to make it go away. I understand that the Canadian ATC system is a great deal more advanced (smaller problem).

Telephone Billing Systems are pretty ugly too... Telephone Companies might be happy, but their customers may be less happy. I guess you know that foreign operators can put items on your bill that will take you months of begging to have 'forgiven just this once' ? There is often no practical way to deal with billing errors or bogus charges.

3818. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 03:49:41 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7gom56h8pr000@corp.supernews.com>
Source record: 148005

No, idiot, just like everything else in this thread, you didn't get it. Go take a remedial class in English 101.

Jim

"Rick Littlefield" <k1bqt@aol.com> wrote in message news:20020223165752.07848.00000290@mb-mn.aol.com...

> Let's see, dangling a dipole fed with cheap RG-58 from a broom handle is a
> better plan for hearing the tower because mounting a directional antenna on the
> roof and feeding it with low-loss cable will just pick up a lot of noise. Did I
> get that right?

3819. Re: Relays for the Ladder-Line Length Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 03:55:21 UTC
From: Rick Karlquist <richard@karlquist.removethis.com>
Message-ID: <JuZd8.2725$bs1.47159@sccrnsc01>
Source record: 148007

How about using latching vacuum relays, available from
Max Gain Systems (http://www.mgs.com)?

Rick N6RK
www.n6rk.com

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C77FD1B.79D13D4@IEEE.org...
> I've got a few inquiries about using relays for the ladder-line length
> selector. Relays will work but they have the disadvantage of consuming
> power in order to perform their function. (I'm working on the concept of
> using small model airplane servo motors for this function that won't
require
> continuous current but I'm not a mechanical engineer.) The relays that I
have
> successfully used are:
>
> Omron, LY4-12d - these relays are four pole double throw and ideally
> suited for 100 watt RF stuff. Four are needed for a 0-15ft LLLS and
> five are needed for a 0-31ft LLLS.
>
> I was lucky enough to find a bunch of P&B MR11's at a surplus store in
> Phoenix. They aren't made anymore but worked very well in a 500 watt
> system inside a dust-proof enclosure.
>
> I also used P&B KUP-11D15-24's that I obtained for $2 each at a surplus
> store in Silicon Valley. They handled 500w nicely after tuneup at 100w.
> I modified the common contact wire such that it exited the relay through
> the plastic dust cover top rather than at the base of the relay.
>
> Since I don't like the current drain associated with the above relays,
> I presently use ten DPDT knife switches obtained from a surplus store in
> Tucson for $2 each. They are mounted on a piece of plexiglas that is
> mounted in my hamshack window just above my transceiver, amp, and power
> supply. I can switch the knife switches quicker than I can tune an antenna
> tuner as I have a chart on the wall with the previous tuning information
> - no tuner required.
> --
> cheers, CAM http://www.qsl.net/w5dxp

3820. Re: Relays for the Ladder-Line Length Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 04:14:45 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7868B5.CB9A4E45@IEEE.org>
Source record: 148008

Rick Karlquist wrote:
> How about using latching vacuum relays, available from
> Max Gain Systems (http://www.mgs.com)?

Seems to be something wrong with that URL as it doesn't have
an index.html. In general, vacuum relays would be too expensive.
After all, what I am saving is the cost of a high power tuner.
--
cheers, CAM http://www.qsl.net/w5dxp

3821. Re: Barker&Williamson Dipole-How Constructed?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 04:55:40 UTC
From: Tom Nelson <nelsonca@stormnet.com>
Message-ID: <3C78724C.84DBDE76@stormnet.com>
Source record: 148010

Thanks to all re: B&W. I think I'll stick with G5RV but will experiment with this design.

Will keep you posted.

Tom
KD6EVM

Tony Angerame wrote:

> Having heard an A/B comparison of this antenna I concluded it was a very
> poor performer. It was at least 5 and maybe as much as 10db down from a
> dipole. So yes you do get quite a bit of frequency agility and don't have to
> use a tuner but it's like a dummy load with a wire attached. So if you plan
> on getting one then buy a 1KW amp to go with it to overcome it's lack of
> gain vs a dipole. I think the military proably liked it because they could
> change frequency without a tuner.
>
> "baney" <baneynospam@home.com> wrote in message
> news:3C715EE2.AD458662@home.com...
> > You may want to check out this site
> > http://www.hard-core-dx.com/nordicdx/antenna/wire/index.html
> > George
> >
> > Tom Nelson wrote:
> > >
> > > Has anyone "reverse engineered" a B&W folded dipole? What kind of balun
> > > is used? What is spreader length? What kind of trap?
> > >
> > > I would like to make one for my own use.
> > >
> > > TNX
> > > Tom

3822. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 05:04:14 UTC
From: k1bqt@aol.com
Message-ID: <20020224000414.07816.00000258@mb-mn.aol.com>
Source record: 148009

>No, idiot, just like everything else in this thread, you didn't get it. Go take a remedial class in English 101.<

Good to know you've feelings, Jim. Do you want to have a technical discussion or a pissing contest? I do both.

Rick K1BQT

3823. On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 06:39:59 UTC
From: Jim Ek <jim-ek@worldnet.att.net>
Message-ID: <3V%d8.10321$lm1.697807@bgtnsc05-news.ops.worldnet.att.net>
Source record: 148011

I hold a technicians license and have recently
been bitten by the antenna bug. (Insert
appropriate joke here.)

Anyhow, I want to start playing around with
constructing antennas. I like many others face
the debilitating handicap of being soldering
impaired. So to me it makes good sense to have a
SWR meter at the minimum, available to check any
antennas I make before using them on my handheld
and turning it into a mass of melted plastic with
little bits of transistors, resisters, and
whatever interspersed.

Anyhow, I just read the thread regarding the
quality of MFJ test equipment. Question
(finally). Who makes a good SWR meter? I don't
know how thoroughly this antenna bug is going to
bite, so I'm going to limit my search to those SWR
for VHF and UHF, and not spend the extra money for
HF capabilities.

Thanks,

Jim Ek - KB9VEZ
Bloomington, IN

3824. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 07:18:25 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202232318.71d47e1f@posting.google.com>
Source record: 148012

k1bqt@aol.com (Rick Littlefield) wrote in message
>
> Directional gain usually helps a lot more than active gain because--among other
> things--directivity rejects much of the surrounding noise energy that would
> otherwise compete with the desired signal.

Comparing a yagi or other gain antenna will be like night and day compared to a vertical when aiming to an airport. The only problem is the band is wide, and it will be hard to have the high gain across the whole band. A log periodic could be good. Myself I just use my 2m el yagi that is vertical. It's fairly omni at 120-130 mhz. With the high sensitivity of the 706g on the aircraft band I can hear quite a bit. I'm about 15 or so miles away from one big airport and 25 or so from another. I can hear the towers to both. I can hear the ATIS for both usually. I usually don't hear too many planes on the ground, but that is normal. I might hear a 737 at hobby every once and a while if they taxi in the right direction. Their antennas are in the vert stab, and pretty high. Also they have fairly powerful radios. As far as in flight, I can listen to a southwest 737 take off from Houston Hobby, and follow his flight all the way to Dallas to the point they descend below about 9000 ft into Dallas. Tuning in order would usually be : 118.7-119.7-132.77-132.27-etc. 132.27 being fort worth center, and I lose them on the handoff to approach. Freq's will vary many times. Not too bad for a low gain antenna. I can hear many aircraft that use Forth Worth Center up in north Texas. Using the ACARS decoder, I've tracked planes to about 300 miles out. Nearly to the OK border from Houston. West texas, LA, etc. You don't have to be too high up to get a nearby tower freq usually. Depends on the airport though. It is a large improvement going to most any outdoor antenna compared to a low indoor antenna. The indoor antenna will pick up planes in flight though. Heck, my 2m 1/4 wave GP hanging from the ceiling in this room can hear hobby tower most of the time. But the 2m yagi at 35 ft is much better. I once made a 4 el yagi for 171 mhz to listen to the NASA capcom feed back in the old days. I used to tune around the marine band and listen to boats out in the gulf, and in Galveston Bay. The yagi heard signals out there that didn't exist at all on the ground plane. The same would hold true listening to airport ground chatter and towers. The bummer part is one tower might be on 118.7, and the next on 127.3, etc. Quite a spread...Not to mention the 132-134,etc mhz center freqs. Luckily you don't need the high gain for planes in flight, so you can concentrate the gain for the tower freq's. Most of the unicoms are in the 122.7-8-9 range. Chopper unicom here is 123.025. Very active here in Houston with all the news, police lifeflight, etc.

MK

3825. Re: building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 07:43:05 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5a5ug$5rhn7$1@ID-124126.news.dfncis.de>
Source record: 148013

Dear Jason,

Please don't apologise for your 'green'-ness. Here you will meet many people as green as you are. The problem is how to distinguish the sheep from the goats.

Not having had any practical experience with 118.5 MHz or thereabouts for 57 years I will not offer advice on building your proposed antenna myself. But I will say your approach to the job is truly in the spirit of ham radio - just check on the materials you already have, use your ingenuity and consider what can be done with them. To begin with a ready-made plan and then working your way down a long shopping never works out - it never worked for me - there's always something unobtainable towards the end. Plans are made to be changed.

I like your apt use of "grab" in connection with antennas. It should be entered in the IEEE technical dictionary. (Cecil please note)

Perhaps "more gain" should be replaced with "less loss". Antenna gain, to within 1% of a decibel, is a phrase used by salesmen as a fictional selling point. No antenna can be more than 100% efficient.

Happy constructing. Hope to meet you here again.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

<tucansam@whodis.org> wrote in message
news:a59aafmvl1@reader2.panix.com...
> Hi everyone.
>
> This is my first dive into antenna building, thus I am very green. Please
> forgive the simplistic nature of my questions.
>
> I am trying to build an antenna to grab 118.5Mhz, the tower frequency of
> an airport about 17 miles from me. I have a stick of PVC and some RG58
> and want to build a simple, vertical ground plane (based on a response I
> got to a previous post).
>
> I have one now cut to 26" and it performs reasonably well in grabbing
> stuff out of the air that my rubber duck never got. But I still can't get
> the tower.
>

> Rather than cutting the coax to the center of the band I want to get, can
> I cut it to 1.97 ft (243/118.5) and hope to get any better gain?
>
> If that doesn't work my next attempt will likely be a directional yagi, so
> I'll probably be back :)
>
> Thanks!
>
> Jason

3826. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 08:18:19 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5a987$5patb$1@ID-124126.news.dfncis.de>
Source record: 148014

This will probably cause an argument - my advice is don't get an SWR meter described as such - get an impedance measuring device. Set off on the right foot!

But if you insist, recent Z-measuring devices have an SWR-indicating scale built in.

SWR meters sold as such do not in fact measure SWR - not even if located at the antenna end of the transmission line.

There's a short article about so-called SWR meters at http://www.g4fgq.com
---
****
Regards, Reg G4FGQ
Free Radio Modelling Software
http://www.g4fgq.com
****

Jim Ek <jim-ek@worldnet.att.net> wrote in message
news:3V%d8.10321$Im1.697807@bgtnsc05-news.ops.worldnet.att.net...
> I hold a technicians license and have recently
> been bitten by the antenna bug. (Insert
> appropriate joke here.)
>
> Anyhow, I want to start playing around with
> constructing antennas. I like many others face
> the debilitating handicap of being soldering
> impaired. So to me it makes good sense to have a
> SWR meter at the minimum, available to check any
> antennas I make before using them on my handheld
> and turning it into a mass of melted plastic with
> little bits of transistors, resisters, and
> whatever interspersed.
>
> Anyhow, I just read the thread regarding the
> quality of MFJ test equipment. Question
> (finally). Who makes a good SWR meter? I don't
> know how thoroughly this antenna bug is going to
> bite, so I'm going to limit my search to those SWR
> for VHF and UHF, and not spend the extra money for
> HF capabilities.
>
> Thanks,
>
> Jim Ek - KB9VEZ

> Bloomington, IN
>
>

3827. Re: Relays for the Ladder-Line Length Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 08:36:23 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5a989$5patb$2@ID-124126.news.dfncis.de>
Source record: 148015

Trouble with many relays, except mercury-wetted or otherwise designed for the job, is high contact resistance on receive. Sooner or later they start giving trouble if left unused for a few hours.

Short term remedy - transmit full power for 1 second.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****
CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C7868B5.CB9A4E45@IEEE.org...
> Rick Karlquist wrote:
> > How about using latching vacuum relays, available from
> > Max Gain Systems (http://www.mgs.com)?
>
> Seems to be something wrong with that URL as it doesn't have
> an index.html. In general, vacuum relays would be too expensive.
> After all, what I am saving is the cost of a high power tuner.
> --
> cheers, CAM http://www.qsl.net/w5dxp

3828. Security in computing (was: Re: W9INN Antennas web page is now ONLINE)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 09:12:25 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2402020112250001@a3b05603.sympatico.bconnected.net>
Source record: 148017
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In article <3c783124$1@news.bnb-lp.com>, "Charles Johnston"
<ctj92@cableone.net> wrote:

> Peter said..
> >thus ignoring all the Mac, Unix, Linux users, or those with the latest
> >stable Netscape.
> -----------
>
> All of those users you mentioned (combined!) make up less than 5% of the
> total number
> of "world wide web surfers".

Could it be that those 5% know something that the other 95% either don't
know, or know but ignore?

David, using a nearly Microsoft-free* and very secure 1.5 gigaflop/s Mac G4

*Exceptions: 9 year old versions of Word and Excel, both so ancient they
are ignorant of macros, and thus immune to macro viruses. Conversion
utilities allow these programs to cope with documents created by more
recent versions; the conversion process discards the macros, and any
viruses the macros may contain.

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

3829. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 09:14:55 UTC
From: Jim Ek <jim-ek@worldnet.att.net>
Message-ID: <ja2e8.4026$FE4.240388@bgtnsc04-news.ops.worldnet.att.net>
Source record: 148016

At this point I am electrically unsophisticated
and have a meager financial boundary for this
pursuit.

Quick checks of some internet vendors show that
impedance measuring devices are many hundreds of
dollars.

I'm viewing this as an elementary exercise in
antenna experimentation, with an eye on moonbounce
using a 5 watt handheld <grin>. Not a new career.

Jim Ek - KB9VEZ
Bloomington, IN

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in
message
news:a5a987$5patb$1@ID-124126.news.dfncis.de...
> This will probably cause an argument - my
advice is don't get an SWR meter
> described as such - get an impedance measuring
device. Set off on the
> right foot!
>
> But if you insist, recent Z-measuring devices
have an SWR-indicating scale
> built in.
>
> SWR meters sold as such do not in fact measure
SWR - not even if located at
> the antenna end of the transmission line.
>
> There's a short article about so-called SWR
meters at http://www.g4fgq.com
> ---
> ****************************
> Regards, Reg G4FGQ
> Free Radio Modelling Software
> http://www.g4fgq.com
> ****************************
>
> Jim Ek <jim-ek@worldnet.att.net> wrote in
message
>
news:3V%d8.10321$Im1.697807@bgtnsc05-news.ops.worl

dnet.att.net...
> > I hold a technicians license and have recently
> > been bitten by the antenna bug. (Insert
> > appropriate joke here.)
> >
> > Anyhow, I want to start playing around with
> > constructing antennas. I like many others
face
> > the debilitating handicap of being soldering
> > impaired. So to me it makes good sense to
have a
> > SWR meter at the minimum, available to check
any
> > antennas I make before using them on my
handheld
> > and turning it into a mass of melted plastic
with
> > little bits of transistors, resisters, and
> > whatever interspersed.
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> > Anyhow, I just read the thread regarding the
> > quality of MFJ test equipment. Question
> > (finally). Who makes a good SWR meter? I
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> > know how thoroughly this antenna bug is going
to
> > bite, so I'm going to limit my search to those
SWR
> > for VHF and UHF, and not spend the extra money
for
> > HF capabilities.
> >
> > Thanks,
> >
> > Jim Ek - KB9VEZ
> > Bloomington, IN
> >
> >
>
>

3830. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 10:00:54 UTC
From: Peter Hunt <news@peterhunt.zoetermeernet.nl>
Message-ID: <a5adh2$g4r$1@news1.xs4all.nl>
Source record: 148018
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

> Browser Stats
>
> 1. MSIE 5.x 322695658 (64%)
> 2. MSIE 6.x 115189588 (23%)
> 3. MSIE 4.x 23015294 (4%)
> 4. Netscape 4.x 22311050 (4%)
> 5. Netscape comp. 5596301 (1%)
> 6. Netscape 6.x 3642593 (0%)
> 7. Unknown 2452049 (0%)
> 8. Opera x.x 2058201 (0%)
> 9. Netscape 3.x 730086 (0%)
> 10. Netscape 5.x 697125 (0%)
> 11. MSIE 3.x 401654 (0%)
> 12. MSIE 2.x 363378 (0%)
> 13. Netscape 2.x 24607 (0%)
> 14. Netscape 1.x 713 (0%)
> 15. MSIE 1.x 667 (0%)

Please don't forget that lots of people are being "forced" to use
IE thanks to Bill. Lots of people aren't familiar with computers
and other browsers and just use what their computer offers.

If it would be possible to make statistics of browsers which have
been chosen by the users themself, I'm sure Netscape will do better.

By the way, I'm using Netscape 4.71 for quite some time now, and
there are only a few sites that aren't "readable". Some other sites
look a bit better in IE, but this is the first site that really makes a
mess on my screen, and I really browse quite a lot! :)

Bye,

Peter Hunt
Holland.

3831. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 10:21:31 UTC
From: Walt Davidson <walt99@tiscali.co.uk>
Message-ID: <oifh7u8ak9n4qjva939snq2afje4tqstsp@4ax.com>
Source record: 147919
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Sat, 23 Feb 2002 10:43:41 -0700, "Charles Johnston"
<ctj92@cableone.net> wrote:

> The site is however 'optimized' for IE 6 (as it says on the home page)
>since over 90% of my visitors use Internet Explorer.

I don't know about that. I am using IE6, but my screen just doesn't
seem to be wide enough to view the "Personal Photos"! ;-)

73 de G3NYY

--
Walt Davidson Email: g3nyy @freeuk.com

3832. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 10:57:39 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5ahbc$5niv6$1@ID-124126.news.dfncis.de>
Source record: 147920

Jim, sorry my description 'impedance measuring device' led you a little astray.

The MFJ259B is an impedance measuring device up to 170 MHz but earlier you said you didn't like some comments made about MFJ products.

I have an MFJ259B. I'm reasonably happy with it. It does jobs which larger more expensive instruments can't do. It is a power hog and soon flattens its own internal batteries. But I use an external DC supply with an RF choke in the power lead.

It measures Z = R+jX but unfortunately does not indicate the sign of jX. That has to be decided by the user by looking at the antenna and length of feedline and using some mental logic. I don't know whether there's a later version of the instrument or whether there's another manufacturer.

It also measures SWR - or rather it calculates SWR from R+jX. It also usefully measures L, C & R component values in the shack provided you already know what type of component it is.

All an ordinary SWR meter tells you is whether the transmitter is loaded with 50 ohms or not. That's all most people want to know. Furthermore it needs the transmitter to be connected to it before it tells you anything at all. If the transmitter is very low power it may not tell you anything even when it IS connected.

For antenna *experiments* I think you will find a simple SWR meter is not enough. You will often be working in the dark. If you go ahead and buy one make sure it works at the power levels you intend to use. There are a variety of manufacturers including those in the Far East. I would think second-hand meters are readily available.

Reg G4FGQ

Jim Ek <jim-ek@worldnet.att.net> wrote in message
news:ja2e8.4026$FE4.240388@bgtnsc04-news.ops.worldnet.att.net...
> At this point I am electrically unsophisticated
> and have a meager financial boundary for this
> pursuit.
>
> Quick checks of some internet vendors show that
> impedance measuring devices are many hundreds of
> dollars.
>
> I'm viewing this as an elementary exercise in
> antenna experimentation, with an eye on moonbounce

> using a 5 watt handheld <grin>. Not a new career.
>
>
> Jim Ek - KB9VEZ
> Bloomington, IN
>
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in
> message
> news:a5a987$5patb$1@ID-124126.news.dfncis.de...
> > This will probably cause an argument - my
> advice is don't get an SWR meter
> > described as such - get an impedance measuring
> device. Set off on the
> > right foot!
> >
> > But if you insist, recent Z-measuring devices
> have an SWR-indicating scale
> > built in.
> >
> > SWR meters sold as such do not in fact measure
> SWR - not even if located at
> > the antenna end of the transmission line.
> >
> > There's a short article about so-called SWR
> meters at http://www.g4fgq.com
> > ---
> > **********
> > Regards, Reg G4FGQ
> > Free Radio Modelling Software
> > http://www.g4fgq.com
> > **********
> >
> > Jim Ek <jim-ek@worldnet.att.net> wrote in
> message
> >
> news:3V%d8.10321$Im1.697807@bgtnsc05-news.ops.worl
> dnet.att.net...
> > > I hold a technicians license and have recently
> > > been bitten by the antenna bug. (Insert
> > > appropriate joke here.)
> > >
> > > Anyhow, I want to start playing around with
> > > constructing antennas. I like many others
> face
> > > the debilitating handicap of being soldering
> > > impaired. So to me it makes good sense to
> have a
> > > SWR meter at the minimum, available to check
> any

> > > antennas I make before using them on my
> handheld
> > > and turning it into a mass of melted plastic
> with
> > > little bits of transistors, resisters, and
> > > whatever interspersed.
> > >
> > > Anyhow, I just read the thread regarding the
> > > quality of MFJ test equipment. Question
> > > (finally). Who makes a good SWR meter? I
> don't
> > > know how thoroughly this antenna bug is going
> to
> > > bite, so I'm going to limit my search to those
> SWR
> > > for VHF and UHF, and not spend the extra money
> for
> > > HF capabilities.
> > >
> > > Thanks,
> > >
> > > Jim Ek - KB9VEZ
> > > Bloomington, IN
> > >
> > >
> >
> >
>
>

3833. MIRACLE ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 11:14:58 UTC
From: dhowie151@tiscali.co.uk
Message-ID: <3c78cac0.3512269@NEWS.TISCALI.CO.UK>
Source record: 147921

HAS ANY BODY HAD ANY EXPERIENCE WITH THIS ANTENNA.I WILL BE GREATFUL
FOR ANY ADVISE.

3834. Re: Security in computing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 12:43:00 UTC
From: peter@strg-alt-entf.org
Message-ID: <a5an4k$5on7n$1@ID-31.news.dfncis.de>
Source record: 147922
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.dx David or Jo Anne Ryeburn <ryeburn@sfu.caz> wrote:
> In article <3c783124$1@news.bnb-lp.com>, "Charles Johnston"
> <ctj92@cableone.net> wrote:
>
>> Peter said..
>> >thus ignoring all the Mac, Unix, Linux users, or those with the latest
>> >stable Netscape.
>> -----------
>>
>> All of those users you mentioned (combined!) make up less than 5% of the
>> total number
>> of "world wide web surfers".
>
> Could it be that those 5% know something that the other 95% either don't
> know, or know but ignore?

You have to know that ole Charles not only advocates eQSL as the only creed,
but also is a disciple of the Church of Micro$oft. Whatever this great
American company produces, simply *must* be great.

Computer security is an area that this gentleman knows nothing about. But
that's good, since he's one of the guys that produces an infinite stream of
money to security consulting companies. It's people like ole Charles who
promote the fierce growth of security tools like virus walls, virus
scanners, firewalls, trojan scanner etc.

Peter Lemken
DF5JT
Berlin

--
Yes, it works!

3835. Re: Need 40/80M Antenna Advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 12:56:00 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C78E1C8.B20BE26F@bellatlantic.net>
Source record: 147923

If you have a 50' tower, I'd go "Loopy".

Richard Lubash wrote:

> I live on a wooded 1 acre lot that makes it very difficult to put up
> wire antennas (lots of 2nd, 3rd growth scruffy trees between the tall
> ones). I have a 50 foot tower mounted to the house with an Alpha Delta
> 40, 80, 160 double sloper on the tower with a Tennadyne 10 el log
> periodic for a top hat and a separate Fritzel FD4 Windom that I switch
> between for 40 and 80. I do Ok with these antennas but I am looking to
> do better. I have thought about the Force 12 vertical dipole for 40 or
> possibly the Butternut HF2V with a medium radial system for 40 and a
> little bit of 80. My question, would either of these be an improvement
> (receive & transmit) over my existing antennas or if not any
> suggestions that don't involve stringing long lengths of wire through
> the dense foliage.
>
> Thanks,
>
> Richard / N1VXW

3836. Re: Relays for the Ladder-Line Length Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 12:57:19 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C78E217.E8E898D8@bellatlantic.net>
Source record: 147924

You can always use Latching relays..

CAM wrote:

> I've got a few inquiries about using relays for the ladder-line length
> selector. Relays will work but they have the disadvantage of consuming
> power in order to perform their function. (I'm working on the concept of
> using small model airplane servo motors for this function that won't require
> continuous current but I'm not a mechanical engineer.) The relays that I have
> successfully used are:
>
> Omron, LY4-12d - these relays are four pole double throw and ideally
> suited for 100 watt RF stuff. Four are needed for a 0-15ft LLLS and
> five are needed for a 0-31ft LLLS.
>
> I was lucky enough to find a bunch of P&B MR11's at a surplus store in
> Phoenix. They aren't made anymore but worked very well in a 500 watt
> system inside a dust-proof enclosure.
>
> I also used P&B KUP-11D15-24's that I obtained for $2 each at a surplus
> store in Silicon Valley. They handled 500w nicely after tuneup at 100w.
> I modified the common contact wire such that it exited the relay through
> the plastic dust cover top rather than at the base of the relay.
>
> Since I don't like the current drain associated with the above relays,
> I presently use ten DPDT knife switches obtained from a surplus store in
> Tucson for $2 each. They are mounted on a piece of plexiglas that is
> mounted in my hamshack window just above my transceiver, amp, and power
> supply. I can switch the knife switches quicker than I can tune an antenna
> tuner as I have a chart on the wall with the previous tuning information
> - no tuner required.
> --
> cheers, CAM http://www.qsl.net/w5dxp

3837. Re: Relays for the Ladder-Line Length Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 13:30:22 UTC
From: AB Brown <abbrown@nospammail.com>
Message-ID: <a5aps9$e9s$1@slb1.atl.mindspring.net>
Source record: 147925

Cecil,

Thanks for the relay info. I was one of the ones inquiring as to the feasibility of their use. I am debating among several antennas to use at my location. When I saw your no tune antenna plans, I added your design to my list.

I'm leaning towards either a trap or loaded dipole for now. I am limited on space, which would make it nearly impossible to erect a 130' dipole without bending the ends at least 25' vertically. I wonder if your design would tolerate using loading coils, with the center frequency set at 3.7 Mhz, and still allow all band operation? The shortened dipole would be about 80' long. Even better for my lot would be loading and bending the antenna as an inverted V.

I would want to avoid relays, but I don't really have a decent location to mount the manual switch network without interference to the ladder line. At my location, relays would have to be used.

I've read that antennas of similar design generate higher than normal harmonics. Do you have harmonics and what steps do you take to curtail them?

Thanks,
AB

> I've got a few inquiries about using relays for the ladder-line length
> selector. Relays will work but they have the disadvantage of consuming
> power in order to perform their function.

3838. Re: Need 40/80M Antenna Advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 13:38:30 UTC
From: Ken Ashcroft <ken@g3msw.demon.co.uk>
Message-ID: <SOn2CnBWzOe8Ew7C@g3msw.demon.co.uk>
Source record: 147926

Forget 80m with a vertical, unless your water table is high
In article <230220021549494265%2k-plus@2k-plus.com>, Richard Lubash
<2k-plus@2k-plus.com> writes
>I live on a wooded 1 acre lot that makes it very difficult to put up
>wire antennas (lots of 2nd, 3rd growth scruffy trees between the tall
>ones). I have a 50 foot tower mounted to the house with an Alpha Delta
>40, 80, 160 double sloper on the tower with a Tennadyne 10 el log
>periodic for a top hat and a separate Fritzel FD4 Windom that I switch
>between for 40 and 80. I do Ok with these antennas but I am looking to
>do better. I have thought about the Force 12 vertical dipole for 40 or
>possibly the Butternut HF2V with a medium radial system for 40 and a
>little bit of 80. My question, would either of these be an improvement
>(receive & transmit) over my existing antennas or if not any
>suggestions that don't involve stringing long lengths of wire through
>the dense foliage.
>
>Thanks,
>
>
>Richard / N1VXW

--
Ken Ashcroft

3839. Re: building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 14:15:21 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0202240615.28ca8bbd@posting.google.com>
Source record: 147927

tucansam@whodis.org wrote in message news:<a59aafmvl1@reader2.panix.com>...
> Hi everyone.
>
> This is my first dive into antenna building, thus I am very green. Please
> forgive the simplistic nature of my questions.
>
> I am trying to build an antenna to grab 118.5Mhz, the tower frequency of
> an airport about 17 miles from me. I have a stick of PVC and some RG58
> and want to build a simple, vertical ground plane (based on a response I
> got to a previous post).
>
> I have one now cut to 26" and it performs reasonably well in grabbing
> stuff out of the air that my rubber duck never got. But I still can't get
> the tower.
>
> Rather than cutting the coax to the center of the band I want to get, can
> I cut it to 1.97 ft (243/118.5) and hope to get any better gain?

Hi Jason,
Your ground plane should be resonant, or pretty close to it, so you
don't need to cut the coax to a certain length. At one time I had a
ground plane up on a mast made from 2x2's, and it had pretty good
coverage (contacts up to 75 miles during a 2 meter contest). If you
can't add a mast to your place, see if you can get a rope high up in a
tree, tie the rope to the vertical on the ground plane, and hoist it
up. You might want to get less lossy coax like RG-8 or RG-8X to
decrease the line loss when you increase the length of the line. 73 es
GL,
Bill N3WK

3840. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 14:24:25 UTC
From: k1bqt@aol.com
Message-ID: <20020224092425.19745.00000337@mb-fs.aol.com>
Source record: 147928

>>The bummer part is one tower might be on 118.7, and the next on 127.3, etc. Quite a spread...Not to mention the 132-134,etc
mhz center freqs....<<

That's the flip side of the coin. While I get good gain performance and a decent match over a 10-12 MHz segment of the band with the 8-element Yagi, its pattern falls apart pretty fast after that. A LPDA could provide full-band coverage with a bit less gain. LB Cebik's recent work is probably good resource for designing an airband log. When it comes to antennas, there ain't no free lunch.

>Luckily you don't need the high gain for planes in flight<

At times, high gain is a liability for monitoring planes in flight. My Standard C-108A HT has an incredibly hot front-end in the airband (<.3 uV for 10-dB s/n), but blocks on strong signals when connected to the yagi. Fortunately, my desk-top scanner has better dynamic range.

Rick K1BQT

3841. Re: TV signal vert. or horiz....?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 14:30:15 UTC
From: Marvin Born <mborn@k8xu.com>
Message-ID: <3C78F8F7.E595F511@k8xu.com>
Source record: 147929

There is not a simple answer, but

TV signals are normally horz. In the 1940's all were horz., they are never only vertical. However, many years ago many stations stared to add a vertical component with power equal to the horz but 90 degrees out of phase. This made it circular, which was to help with ghost reduction. Even later stations only added 20% vertical, because the high vertical component caused its own form of reflections, CP receive antennas could only be channel specific and people wanted multi channel receive antennas. Also the additonal power ran up the electric bill and tube costs.

The vertical component is more common to VHF stations than UHF due to the power requirements at UHF.

Hope this helps.

Lee Carkenord wrote:

> The signal transmitted (the video part) from a television station
> (channels 2 thru 12).....is that signal vertically or horizontally
> polarized?
>
> Lee Carkenord KA0FPJ

3842. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 14:53:05 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c78fe51@news.bnb-lp.com>
Source record: 147930
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Walt,
The minimum screen size I test for is 800x600. If your screen is
smaller than that - or - you have additional menus or browser add-ons,
or ISP ads on the side, that claim part of that space you may have to
use the horizontal scrollbars.
BTW whichever browser one uses has nothing at all to do with the
screen size. That is a Windows function setup in Display / Properties

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3843. WTB Bendix King HT antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 14:54:56 UTC
From: Dan Yemiola <ai8o@Yahoo.com>
Message-ID: <a5aurv$862a$1@news3.infoave.net>
Source record: 147931

I have a Bendix -King LPU-4991 UHF HT.
The 1/4 wave whip has broken off where the flexible part of the antenna connects to the connector fixture that screws into the HT case.
It looks similar to the antenna connector used by Motorola on HT-220's. I think they may be called 1/4-20 connectors, but I am not sure.

I am looking for two antennas:
One 1/4 wave whip,
and one "stubby" helically wound antenna.

If you have either of these items for sale please e-mail to:
aga4fl@yahoo.com

TIA
Dan Yemiola
ai8o

3844. Re: Security in computing (was: Re: W9INN Antennas web page is now ONLINE)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 14:57:56 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <svt4PAi2ac6+crtXbOCRWvpJ9ztV@4ax.com>
Source record: 147932

ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote:

>In article <3c783124$1@news.bnb-lp.com>, "Charles Johnston"
><ctj92@cableone.net> wrote:
>
>> Peter said..
>> >thus ignoring all the Mac, Unix, Linux users, or those with the latest
>> >stable Netscape.
>> -----------
>>
>> All of those users you mentioned (combined!) make up less than 5% of the
>> total number
>> of "world wide web surfers".
>
>Could it be that those 5% know something that the other 95% either don't
>know, or know but ignore?
>
>David, using a nearly Microsoft-free* and very secure 1.5 gigaflop/s Mac G4
>
>*Exceptions: 9 year old versions of Word and Excel, both so ancient they
>are ignorant of macros,

Actually, versions of Word I used back in the mid-80s had built-in macro
capability. Don't know if they would respond to modern-day macros, but they did
have macros back in the dark ages :-)

Bob
k5qwg

> and thus immune to macro viruses. Conversion
>utilities allow these programs to cope with documents created by more
>recent versions; the conversion process discards the macros, and any
>viruses the macros may contain.

3845. Re: building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 15:13:24 UTC
From: k1bqt@aol.com
Message-ID: <20020224101324.19745.00000358@mb-fs.aol.com>
Source record: 147933

Quickie 118.5 MHz sidemount:

1. Take two 24" rods (brass welding or aluminum) and tread one end of each. For a boom, take a 15" length of plastic pipe.

2. Drill opposing clearence holes at one end of the pipe and install the two rods dipole style, securing with nuts. Drill holes for--and Install--a U-bolt/mast clamp at the opposite end 90-degrees offset from the dipole.

3. Take a length of RG-8M, make 1-1/2" pigtails at one end and install spade lugs. Connect this feedline to the dipole, securing pigtail lugs under the elelment nuts.

Side mount this antenna on an existing antenna mast with the dipole facing in the direction of the airport you want to receive. The mast will act as a reflector and the spacing should be about right for a 50-ohm match.

Alternatively, if you're really fanatical, make a second identical dipole, connect 78" of foam 75-ohm coax to each antenna (TFE insulation Vf = .78), splice the free ends of the 75-ohm feedlines together at your 50-ohm line inside a 35mm plastic film can or pill bottle, and mount the antennas with their booms about 95 inches apart. Voila--instant 5-dB collinear.

Rick K!BQT

3846. Re: Security in computing (was: Re: W9INN Antennas web page is now ONLINE)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 15:14:08 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <3r7e8.111$it5.115198@news20.bellglobal.com>
Source record: 147934
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"David or Jo Anne Ryeburn"
> *Exceptions: 9 year old versions of Word and Excel,
> both so ancient they are ignorant of macros, and thus
> immune to macro viruses.

MS-Word 2000 (even the included-with-most-PCs SR-1 version) can be set to disable unsigned, untrusted macros. The option is under Tools, Macro, Security, High or Medium.

Of course, anyone that is concerned with security and viruses would have Norton AntiVirus 2002 (or equivalent) running and keep it (and everything else) up to date. It will also eliminate the threat without throwing the baby out with the bathwater.

Crume's book 'Inside Internet Security' advises that it is generally more secure to be up to date than to be on the trailing edge. Generally more old holes are being closed than new holes created. And the new holes are generally less well known. Good book.

Let me repeat - I see both approaches.

At my workplace they run Win 95 on the desktops and Win 2000 on the servers. The went cheap and use McAfee junk for AV. The place is a Help Desk disaster area. Blue Screens of Death left, right and centre on a daily basis. Even had a big virus mess a few months ago (things not up to date). Stupid.

At home (having seen the mess at work) I try to take the opposite approach and generally keep things up to date. Try to get the latest SW on sale (XP Cdn$99) or with a fat rebate (Norton 2002 Cdn$30). Never looked back. When we get a virus by e-mail , Norton pops up and offers to nuke it. Stable as all get out. Close to a perfect PC experience.

Of course, everyone is free to choose their own path through life. Best wishes.

3847. Re: Relays for the Ladder-Line Length Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 15:14:28 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C790354.1E077046@IEEE.org>
Source record: 147935

AB Brown wrote:
> I wonder if your design would
> tolerate using loading coils, with the center frequency set at 3.7 Mhz, and
> still allow all band operation?

My method works for any 450 ohm SWR between 4.5:1 and 18:1. That's quite
a range but some antennas are out of that range including very short
antennas.

> I've read that antennas of similar design generate higher than normal
> harmonics.

My antenna is resonant on only one frequency at a time and therefore
attenuates harmonics. But linear antennas cannot *generate* harmonics.
If the transmitter is clean, a linear antenna will be clean.
--
cheers, CAM http://www.qsl.net/w5dxp

3848. Re: MIRACLE ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 15:23:13 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Az7e8.114$it5.120180@news20.bellglobal.com>
Source record: 147936

"dave" SHOUTED:
> HAS ANY BODY HAD ANY EXPERIENCE
> WITH THIS ANTENNA. I WILL BE GREATFUL
> FOR ANY ADVISE or advice.

Is that a modification to the 'Halo' antenna ;-) ?

3849. Re: Security in computing (was: Re: W9INN Antennas web page is now ONLINE)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 15:40:25 UTC
From: arrow146@aol.com
Message-ID: <20020224104025.23005.00000399@mb-fy.aol.com>
Source record: 147937

```
>> All of those users you mentioned (combined!) make up less than 5% of the
>> total number
>> of "world wide web surfers".
>
>Could it be that those 5% know something that the other 95% either don't
>know, or know but ignore?
>
>David, using a nearly Microsoft-free* and very secure 1.5 gigaflop/s Mac
>G4

Shhhh, you will let out our secret.
I know someone that just bought a new 2 gig Pentium 4
My old G3 Mac will run circles around it.
I feel sorry for the other 95% having to put up with
Microsoft junk.
So keep it down, maybe Microsoft won't notice us.

73 Al Lowe N0IMW
```

3850. 2 element stacked J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 15:45:18 UTC
From: Michel de Ruiter <pd1aiw@amsat.org>
Message-ID: <3c790a8e$0$222$6c4e9a8c@reader.news.uudial.eu.uu.net>
Source record: 147938

I want to build myself a 2 element stacked J-pole for 2 meters. Now I am looking for the correct dimensions for the phasing stub, must this be a half wave or quarter wave? I see many designs but not always with the same phasing stub?

Who knows?

Regards,

Michel

3851. Re: 2 element stacked J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 16:31:48 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C791572.F6A6665E@tampabay.rr.com>
Source record: 147939

i am not sure what to use with stacking Jpoles but when stacking yagis i always used ODD multiples of a quarter wavelenght
good luck

Michel de Ruiter wrote:

> I want to build myself a 2 element stacked J-pole for 2 meters. Now I am
> looking for the correct dimensions for the phasing stub, must this be a half
> wave or quarter wave? I see many designs but not always with the same
> phasing stub?
>
> Who knows?
>
> Regards,
>
> Michel

3852. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 16:49:54 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <JBd5PBoccdIM5N+JMjTTa8Hr+zFp@4ax.com>
Source record: 147940

"Jim Ek" <jim-ek@worldnet.att.net> wrote:

>(finally). Who makes a good SWR meter? I don't
>know how thoroughly this antenna bug is going to
>bite, so I'm going to limit my search to those SWR
>for VHF and UHF, and not spend the extra money for
>HF capabilities.

Daiwa makes good cross-needle swr meters. They have a vhf version. AES has them.

I use a Bird 43, and it does a decent job, but it's a little pricey compared to
others.

Reg is right, you may want to know more than just the swr, but as far as
measuring swr goes, there are plenty of good meters for that.

Bob
k5qwg

>
>Thanks,
>
>Jim Ek - KB9VEZ
>Bloomington, IN
>

3853. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 17:22:03 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c79213c$1@news.bnb-lp.com>
Source record: 147941
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Jim,
Here is a link for reviews on about 25 different Ham Radio watt meters / swr meters
http://www.eham.net/reviews/products/40

Here is a link for reviews on nearly a dozen "Antenna Analyzers - SWR meters"
http://www.eham.net/reviews/products/31

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3854. Re: Security in computing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 17:28:16 UTC
From: peter@strg-alt-entf.org
Message-ID: <a5b7rg$5kppe$1@ID-31.news.dfncis.de>
Source record: 147942
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.dx J. Harvey <JM001.Harvey@sympatico.ca> wrote:
> "David or Jo Anne Ryeburn"
>> *Exceptions: 9 year old versions of Word and Excel,
>> both so ancient they are ignorant of macros, and thus
>> immune to macro viruses.

[Security Nightmare]

> Of course, everyone is free to choose their own path through life. Best
> wishes.

Don't use any Micro$oft products and be rid of all those problems mentioned above. I f you decide to use Non-Microsoft products for any internet-based applications, your risk of running a compromised machines is reduced to an amazing extent.

All severe security holes related to trojan horses and viruses are Microsoft security holes. What does that tell us? I don't run a firewall, virus wall, trojan horse scanner or other crufty pieces of software and yet my system is secure. Wanna bet?

Peter Lemken
DF5JT
Berlin

--
Yes, it works!

3855. BigHornDeltaLoop Wnated

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 17:37:37 UTC
From: Joe Caluda <jkcal@prodigy.net>
Message-ID: <3C7925D1.D4B237A6@prodigy.net>
Source record: 147943

I am trying to find a used Big Horn Delta Loop antenna as manufactured
in the 1980's by Delta Loop Antennas inc.
If I can't find one I am looking for help with fabricating the clamps
which the aliminum spreader arms connect to the boom. Angle, separation
distance etc...
Any help would be appreciated.
Thanks
Joe AA5HP

3856. Re: Security in computing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 18:19:38 UTC
From: Glenn <ggrrhh@hotmail.com>
Message-ID: <beae8.150$qM6.174517@newsfeed.slurp.net>
Source record: 147944
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In article <a5b7rg$5kppe$1@ID-31.news.dfncis.de>, peter@strg-alt-entf.org says...
> In rec.radio.amateur.dx J. Harvey <JM001.Harvey@sympatico.ca> wrote:
> > "David or Jo Anne Ryeburn"
> >> *Exceptions: 9 year old versions of Word and Excel,
> >> both so ancient they are ignorant of macros, and thus
> >> immune to macro viruses.
>
> [Security Nightmare]
>
> > Of course, everyone is free to choose their own path through life. Best
> > wishes.
>
> Don't use any Micro$oft products and be rid of all those problems mentioned
> above. I f you decide to use Non-Microsoft products for any internet-based
> applications, your risk of running a compromised machines is reduced to an
> amazing extent.

If you learn to use Microsoft you end up with the same results.

> *All* severe security holes related to trojan horses and viruses are
> Microsoft security holes. What does that tell us? I don't run a firewall,
> virus wall, trojan horse scanner or other crufty pieces of software and yet
> my system is secure. Wanna bet?

So Peter doesn't run MS products due to its security issues. I suspect Peter walks (only when streets are deserted) and won't use motor vehicles because they are involved in so many accidents. Peter must not fly, airplanes are related to most air fatalities. No boats, you could drown. No sex, STDs and heart attacks. Peter should pull the plug on his computer, fire hazard!

MS products ROCK if you know how to use them. Oh, you wouldn't know, you don't. To each his own.

Glenn

3857. Re: building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 18:29:06 UTC
From: richardharrison@webtv.net
Message-ID: <28176-3C7930F2-107@storefull-116.iap.bryant.webtv.net>
Source record: 147946

Reg Edwards wrote:
"Perhaps "more gain" should be replaced with less loss."

Gain should not be confused with loss.

I am going to drive Reg up the wall again by quoting Terman:

"Directive gain depends entirely on the distribution in space of the RADIATED power (Terman`s emphasis, not mine). The power input to the antenna, the antenna LOSSES, (emphasis mine, not Terman`s) or the power consumed in a terminating resistance have nothing to do with DIRECTIVE gain (Terman`s emphasis, not mine). Such factors are taken into account in terms of the POWER gain of the antenna which is defined as the ratio of the power INPUT that must be delivered to the directional antenna to obtain the same field strength in the same direction. Unless otherwise specified the comparison antenna is a LOSSLESS isotropic radiator."

Terman says there are two gain figures, the directive gain figure, and the the power gain figure. The directive gain does not include loss. The power gain takes loss into consideration. We get ERP from power gain, not from lossless directional gain. I`d wager that is what Reg intended in his statement which should not be taken the wrong way.

Power gain is just the power in an isotropic versus the power in a gain antenna to produce the same signal at a distant point in the same direction. It does include loss in the gain antenna as Reg said.

Terman`s definitions above can be found starting on page 870 of the 1955 edition of "Electronic and Radio Engineering".

I would discuss the scripture quoted above but not add to nor subtract from it except for the said capitalization of LOSSES, for purposes of emphasis and illustration.

A ground plane antenna has directional gain versus an isotropic antenna. The ground plane probably has a power gain over an isotropic antenna, but could have enough loss to nullify its directional gain.

Best regards, Richard Harrison, KB5WZI

3858. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 18:39:45 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7icqtrilbar01@corp.supernews.com>
Source record: 147945

Since aircraft COM antenna standards require VERTICAL polarization, I'm presuming both of you gentlemen have VERTICALLY polarized gain antennas, yes?

Jim

"Rick Littlefield" <k1bqt@aol.com> wrote in message news:20020224092425.19745.00000337@mb-fs.aol.com...

> That's the flip side of the coin. While I get good gain performance and a
> decent match over a 10-12 MHz segment of the band with the 8-element Yagi,

> s/n), but blocks on strong signals when connected to the yagi.

3859. Re: building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 19:33:34 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5bfh5$5n8qg$1@ID-124126.news.dfncis.de>
Source record: 147947

Richard wrote -

I am going to drive Reg up the wall again by quoting Terman:
==========

Ric, I wrote what I did to drive YOU up the wall. It works every time !
;o))

Reg, G4FGQ.

3860. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 21:10:38 UTC
From: k1bqt@aol.com
Message-ID: <20020224161038.25628.00000489@mb-fq.aol.com>
Source record: 147948

>Since aircraft COM antenna standards require VERTICAL polarization, I'm presuming both of you gentlemen have VERTICALLY polarized gain antennas, yes?<

Geeez, Jim! Your question does, however, raise the issue of decoupling a single vertically polarized Yagi from its mast and feedline.

For the 12-foot yagi, the top 5-feet of the mast is non-conductive fiberglass (painter's pole), and my feedline drops down at the mast mid-way between elements with four #43 ferrite sleeves spaced along the first 3 feet of the drop. I was a little skeptical of doing it this way, but according to the analyzer, SWR was virtually unimpacted by the feedline drop when I installed the sleeves as described. Take 'em off, and it's whole different story!

I did get lost walking home from the bar the other night. I forgot to hold my IC-A23 on its side, and the CDI wouldn't work.

Rick K1BQT

3861. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 21:15:06 UTC
From: Zoran Brlecic <WA7AA@attbi.com>
Message-ID: <3C7957D9.6FB0E3B2@attbi.com>
Source record: 147949
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Charles Johnston wrote:

> Here is a link for reviews...

The guy clearly posted only on rec.radio.amateur.antenna. Why cross-post to all these other groups?

73 .... Zoran WA7AA

3862. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 21:53:02 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c7960c6$1@news.bnb-lp.com>
Source record: 147951
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Zoran,
Ok then sue me....but tel me this...what are your damages if I post to
one group or twenty? How in the world does that ruffle your feathers?
Holy cow man...take a f__king Valium for Pete's sake...

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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3863. Software - Text to CW ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 21:53:09 UTC
From: Pete Holden <peholden@attbi.com>
Message-ID: <9hde8.135088$Pz4.591225@rwcrnsc53>
Source record: 147950

Does anyone know where I can download software which will generate code at a speed I specify from a text file. In other words, from a paragraph or two of text that I paste in from the clipboard.

Thanks, Pete KA�TZK

3864. Re: Software - Text to CW ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 22:01:14 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c7962b4@news.bnb-lp.com>
Source record: 147952
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Hello Pete,
Yes I sure do! Morse Tutor Gold will do that and a lot more. While learning CW myself I tried several freeware - and - commercial CW software tutor programs. Morse Tutor Gold is the Cadillac of all of them IMHO. Here is the link to their homepage and from there you can order.

GGTE Amateur Radio Software
http://www.ggte.com/

It is also available through HRO outlets and the ARRL organization....good luck. Morse Tutor Gold took me well past 20wpm with great ease and flexibility in lesson structure....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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www.ab7sl.com

3865. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 22:41:34 UTC
From: axolotl <kevin@shorecomp.com>
Message-ID: <3C796C27.29D17FC3@shorecomp.com>
Source record: 147953

Jim Ek wrote:

>
> I'm viewing this as an elementary exercise in
> antenna experimentation, with an eye on moonbounce
> using a 5 watt handheld <grin>. Not a new career.

> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote:
my
> advice is don't get an SWR meter
> > described as such - get an impedance measuring
> device. Set off on the
> > right foot!

Fellows, pardon a lurker squeaking up.

I agree with Reg, the number a "SWR" meter will give you is limited in usefulness. You don't mention what other test equipment you have. A signal generator, a 'scope and a reflectometer built from the the plans in the ARRL antenna book will give more information than you can get by firing up a transmitter and reading a number off a meter. Of course the equipment will have other applications in the shop.

Kevin Gallimore

3866. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 22:45:22 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C796D02.6181666D@IEEE.org>
Source record: 147954

axolotl wrote:
> I agree with Reg, the number a "SWR" meter will give you is limited in
> usefulness.

Use an SWR meter with my ladder-line length selector and it is amazing
what information it yields to the initiated. If a parallel cap and
increasing the frequency slightly doesn't yield an SWR of 1:1, the
impedance at resonance was higher than 50 ohms. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

3867. Re: Security in computing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 23:04:01 UTC
From: peter@strg-alt-entf.org
Message-ID: <a5brh1$63v83$1@ID-31.news.dfncis.de>
Source record: 147955
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.dx Glenn <ggrrhh@hotmail.com> wrote:
>
> So Peter doesn't run MS products due to its security issues.

Yep. So does the NSA.

> I suspect
> Peter walks (only when streets are deserted) and won't use motor
> vehicles because they are involved in so many accidents.

No.

> Peter must
> not fly, airplanes are related to most air fatalities.

No.

> No boats, you
> could drown. No sex, STDs and heart attacks. Peter should pull the
> plug on his computer, fire hazard!

No. No. No.

> MS products ROCK if you know how to use them.

Maybe. But the one who knows how to use them hasn't been seen for a long
time.

> Oh, you wouldn't know,
> you don't. To each his own.

Right.

Peter Lemken
DF5JT
Berlin

--
Yes, it works!

3868. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 23:05:14 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5bru5$5v4ip$1@ID-124126.news.dfncis.de>
Source record: 147957

Cecil, it is not the SWR meter which tells you anything - it is the
parallel capacitor and the increase in frequency.

Regards, Reg G4FGQ
http://www.g4fgq.com

==========

> If a parallel cap and
> increasing the frequency slightly doesn't yield an SWR of > 1:1, the
impedance at resonance was higher than 50 ohms. > :-)
> cheers, CAM http://www.qsl.net/w5dxp

3869. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 23:08:22 UTC
From: peter@strg-alt-entf.org
Message-ID: <a5brp5$63v83$2@ID-31.news.dfncis.de>
Source record: 147956
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.dx Charles Johnston <ctj92@cableone.net> wrote:
> Holy cow man...take a f__king Valium for Pete's sake...

Most of us prefer life without drugs, Charles. I know that this sounds like
a strange concept to you, but for most of us it actually works.

Peter Lemken
DF5JT
Berlin

--
Yes, it works!

3870. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 23:11:56 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c79734d$1@news.bnb-lp.com>
Source record: 147958
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Peter,
Thanks for the guidance Peter....
Will you please be my " Big Brother "?
bye bye Peter....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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Official W9INN Antennas Page
www.ab7sl.com

3871. Re: Software - Text to CW ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 23:27:17 UTC
From: peter@strg-alt-entf.org
Message-ID: <a5bssl$6478a$1@ID-31.news.dfncis.de>
Source record: 147959
Cross-posted to: news.admin.net-abuse.usenet,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

[x] Crosspost and follow up to news.admin.net-abuse.usenet

Your provider has been notified about your constant abuse of usenet.
Constantly crossposting as default behaviour of your news-client is
unacceptable behaviour by usenet standards. This is clearly stated in your
provider's terms of use, which can be read here:

http://www.bnb-lp.com/terms_of_service.html

Explicitly the following two paragraphs should make things rather clear to
you:

"Sending a message to many different off-topic newsgroups (Cross Posting),
is particularly unacceptable and will be treated as inappropriate posting
which may result in account suspension or cancellation.. You agree to abide
by BnB's policies concerning use of BnB's Internet Services. BnB reserves
the right to suspend access to service for your account(s) upon an
indication of disallowed use."

and

"You agree to pay a fine of $500 for flagrant disregard of allowable use
policies including sending unsolicited commercial email, spam, or via
posting commercial messages to Usenet discussion groups whose charter does
not explicitly allow advertisements. You also agree to reimburse BnB for any
costs involved in dealing with such incidents. BnB staff time will be billed
at $ 50.00 per hour. It is at BnB's sole discretion what constitutes such
flagrant disregard of allowable use."

A formal complaint has already been filed with abuse@bnb-lp.com.

Peter Lemken
DF5JT
Berlin

--
Yes, it works!

3872. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 23:30:05 UTC
From: axolotl <kevin@shorecomp.com>
Message-ID: <3C797786.EB94D5C6@shorecomp.com>
Source record: 147960

CAM wrote:
it is amazing
> what information it yields to the initiated.

Jim Ek <jim-ek@worldnet.att.net> wrote in message
>At this point I am electrically unsophisticated

There are all kinds of ways to get an answer, and your method is a good one. The gentleman, however, stated that he had not yet been initiated. Hence my suggestion to get general purpose test equipment and the ARRL antenna handbook. I'm sure everyone on the newsgroup has a different preception of the minimum equipment requirement. My friend with a VNA (he designs antennas for a living) keeps asking me why I fool with bridges. :-)

Kevin Gallimore

Kevin Gallimore

3873. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 23:33:00 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C79782C.37B6853B@IEEE.org>
Source record: 147962

Reg Edwards wrote:
> Cecil, it is not the SWR meter which tells you anything - it is the
> parallel capacitor and the increase in frequency.

Reg, my SWR meter tells me more than my MFJ-259B. For instance, the SWR meter reads 2:1 at system resonance. We know we are looking at either 25 ohms or 100 ohms. Hang a parallel capacitor at the match point and increase the frequency slightly. If the SWR goes down, we are looking at less than 50 ohms. If the SWR goes up, we are looking at more than 50 ohms. And not only do I know the resistance, I also know the sign and magnitude of the reactance by knowing where I am on the Smith Chart. The admonition, "Work Smarter, Not Harder!", comes to mind.

Note that the SWR meter is the only 'input', i.e. the only reading. Everything else, including the capacitor, is an 'output'. This is the kind of Rube-Goldberg thing that hams have been famous for. I also have a 'Ladder-Lizard' that I can slide up and down the ladder-line to locate the current-maximum/voltage-minimum points and the current-minimum/voltage-maximum points. I'm talking cheap stuff here. Anyone who wants a 'Ladder-Lizard' for $10, send me an email. It works with magnetic toroidal pickups to give one a DC voltage reading. My CA pardner developed liver cancer and left me holding a bunch of useful stuff.
--
cheers, CAM http://www.qsl.net/w5dxp

3874. Re: Software - Text to CW ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 23:37:33 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c79795f$1@news.bnb-lp.com>
Source record: 147963
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Peter,
Ok wow...gee..guess you feel pretty good now huh? Hahaha..you slay me.
How many other times have you already complained? Don't forget to
include full headers OK? What a chump!

I bet you were "class monitor" in grade school too weren't you?
Then Peter said " Hey..I'm gonna tell the teacher on you!" Grow up
pea-brain....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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www.ab7sl.com

3875. Re: Q-TEK

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-24 23:57:45 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c797e1e$1@news.bnb-lp.com>
Source record: 147964
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Hello Steve,
I was unable to find a Q-Tek website. here is a URL though that lists
the Penetrator and has some additional info on it....

http://home.clara.net/merv/restsite.htm

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3876. Re: 2 element stacked J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 00:18:41 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <5rfe8.11429$mh1.172588053@news.inreach.com>
Source record: 147965

Michel:

The stub length is 1/4 wave.

Roger K6XQ

3877. Re: building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 00:49:45 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0202241649.24cc1abd@posting.google.com>
Source record: 147966

richardharrison@webtv.net (Richard Harrison) wrote in message news:<28176-3C7930F2-107@storefull-116.iap.bryant.webtv.net>...
> A ground plane antenna has directional gain versus an isotropic antenna.
> The ground plane probably has a power gain over an isotropic antenna,
> but could have enough loss to nullify its directional gain.

Richard,
What loss are you referring to here? At the frequency that he is interested in, any practical ground plane should be far enough from the surface that any ground effects should be negligible. 73,
Bill N3WK

3878. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 00:53:13 UTC
From: axolotl <kevin@shorecomp.com>
Message-ID: <3C798B18.F1E803FF@shorecomp.com>
Source record: 147967

CAM wrote:
I
> also have a 'Ladder-Lizard' that I can slide up and down the ladder-
> line to locate the current-maximum/voltage-minimum points and the
> current-minimum/voltage-maximum points.

Excellent suggestion. With Lechter wires, a diode and a meter he
wouldn't need an SWR meter. There are a lot of ways to skin a cat.

Kevin Gallimore

3879. Confused

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 00:58:03 UTC
From: Jim Ek <jim-ek@worldnet.att.net>
Message-ID: <v_fe8.12225$lm1.823882@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147968

On building antennas for the neophyte. If I am going to be following 'well established' plans for building a J-pole, or Yagi. An SWR meter will give me a sufficient reading to tell me that using the antenna that I construct, won't burn up my HT, correct?

Then maybe a couple of months down the line purchase a field strength meter, which will confirm why I'm not able to hit the repeater in the next block, with the antenna I built <sick grin>.

Later still, if I decide that antenna experimentation with some of my own creations is something that I want to pursue. Then I should be looking at acquiring more sophisticated equipment for impedance measurement, and signal generation.

Or am I just completely on the wrong page and need impedance measuring capabilities from the start?

Jim Ek - KB9VEZ
Bloomington, IN

3880. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:16:02 UTC
From: Zoran Brlecic <WA7AA@attbi.com>
Message-ID: <3C79903B.205B7A91@attbi.com>
Source record: 147869
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Charles Johnston wrote:

> Ok then sue me....but tel me this...what are your damages if I post to
> one group or twenty? How in the world does that ruffle your feathers?
> Holy cow man...take a f__king Valium for Pete's sake...

No, thanks, I'll take some pot if you're selling, though...

Otoh, cross-posting is almost never justified and always brings trouble with it. I am simply questioning the wisdom of doing so when it's clearly unnecessary.

73 ..... Zoran WA7AA

3881. Re: Confused

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:18:22 UTC
From: John Buck <kh7t@arrl.net>
Message-ID: <3C7990E9.9070603@arrl.net>
Source record: 147870

SWR meter is a form of impedance measuring device. It just takes longer to sweep the frequencies of interest.

Field strength is not of much use except to know that your rig is transmitting something. And SWR meter forward power into a matched antenna does that too.

Aloha,
John KH7T

3882. Re: Call Sign as your Dot.com name $11.95

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:30:02 UTC
From: News Editor <news@ez-domainnameregistration.com>
Message-ID: <u7j4vj5c9p2b9e@corp.supernews.com>
Source record: 147871
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.morse,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

You're correct Charles... if you need domain forwarding, our fee is more than you might pay at others... but then you don't get our outstanding, personalized support. And, you forgot to mention that our registration fee of $11.95 is $4.05 cheaper than the other company... if you don't need forwarding, why pay more?
www.Ez-DomainNameRegistration.com

> Hello News Editor,
> I have used domain forwarding for years and it is very useful. However
> I pay only $16 / year for the domain registration, the email forwarding,
> URL forwarding, full-frame forwarding, toll-free tech support, domain
> parking, and full-featured DNS....all found at.....
> http://www.buydomains.com/
>
> Your price (from your site) is $23. IMHO if smart people shop around
> for these kinds of services they won't be contacting you.....your
> competition has already got you whipped but good.....
>
> --
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

3883. Small Rotator Purchase

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:31:06 UTC
From: rons533@dejazzd.com
Message-ID: <3C799348.4BF0@dejazzd.com>
Source record: 147874

Who other than Radio Shack sells the small tv type antenna rotators? I want to turn a small beam with it but I have never had too much luck with Radio Shack quality. Couldn't locate it in any retail store such as Wall Mart or Target.

3884. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:34:44 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <wpB5PMbFf22qLqVdYEJMgaKkb+KB@4ax.com>
Source record: 147872

"Charles Johnston" <ctj92@cableone.net> wrote:

>Hello Zoran,
> Ok then sue me....but tel me this...what are your damages if I post to
>one group or twenty? How in the world does that ruffle your feathers?

Here are a few ways you ruffle:

One, we end up with subject matter unrelated to a particular group's reason for being. Such posts come out of the blue, and simply confuse.

Secondly, it clutters up the groups with superfluous headers and messages.

Third, it ticks people off.

Fourth, you end up insulting people.

And fifth, you already irritate people enough, with constant spamming for your website.

So, if you want to come off as a doofus, you're doing that fine.

And you're doing it all over Usenet.

Have a good day.

Bob
k5qwg

>Holy cow man...take a f__king Valium for Pete's sake...

Maybe you should take your own advice :-)

3885. Re: Software - Text to CW ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:37:26 UTC
From: Pete Holden <peholden@attbi.com>
Message-ID: <qzge8.20104$vP.66370@rwcrnsc51.ops.asp.att.net>
Source record: 147873
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Thanks, Charles, for your first post.... Very helpful.

As for your second post,... What the hell was that about???

Pete

"Charles Johnston" <ctj92@cableone.net> wrote in message
news:3c79795f$1@news.bnb-lp.com...
> Hello Peter,
> Ok wow...gee..guess you feel pretty good now huh? Hahaha..you slay me.
> How many other times have you already complained? Don't forget to
> include full headers OK? What a chump!
>
> I bet you were "class monitor" in grade school too weren't you?
> Then Peter said " Hey..I'm gonna tell the teacher on you!" Grow up
> pea-brain....
>
> --
>
> 73 / DX
>
> Charles T Johnston
> Prescott, Arizona - U.S.A.
> charles@ab7sl.com
>
> AB7SL - Ham Radio Pages
> Official W9INN Antennas Page
> www.ab7sl.com
>
>
>
>

3886. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:42:41 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c7996be$1@news.bnb-lp.com>
Source record: 147875
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Zoran,
Sorry but I have no pot to sell you. If I - did - have some I would be willing to share with you for free.

The idea of cross-posting IMHO is misunderstood by many. It is a very effective way to disseminate information while only needing to compose a single message. I have to disagree that cross-posting is never "justified". That is just your opinion.....

Some people when they see any message at all that is either not to their liking for content - or - posted to more than 1 newsgroup immediately put on their Spam Cop / Cross-Posting Marshall hats and lead a one-person crusade against the perceived "offender" Many times reply-after-reply get repeatedly cross-posted because the original addressed groups never get edited.....so at one time or another almost all Usenet users are "guilty" of the dreaded scourge of "cross-posting" and many do not even realize it.

Bob Dylan said it best I think..
" ....and don't criticize what you can't understand"

Now this is not directed at you Zoran personally..but at those type of people I have just mentioned

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

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Official W9INN Antennas Page
www.ab7sl.com

3887. Re: On SWR meters and suppliers

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:51:20 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c7998c6$1@news.bnb-lp.com>
Source record: 147876

Hello Bob,
Thanks for your nice Usenet post. Your concerns regarding my posting practices are fully addressed on the FAQ Page of my web site which is listed below.

Have a great week coming up Bob...and remember I am always here for you any time day or night....

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3888. Re: Software - Text to CW ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:53:33 UTC
From: Charles Johnston <ctj92@cableone.net>
Message-ID: <3c79994b$1@news.bnb-lp.com>
Source record: 147877
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hello Pete,
You are welcome for the first post..my pleasure. The second post was a directed response to my old friend Peter Lemken ...who trails me around Usenet while attempting to bait me with sarcasm, insult, and generally silly remarks. But you know what.....I think he really likes me.

Maybe see you on the air one of these days...

--

73 / DX

Charles T Johnston
Prescott, Arizona - U.S.A.
charles@ab7sl.com

AB7SL - Ham Radio Pages
Official W9INN Antennas Page
www.ab7sl.com

3889. Re: Small Rotator Purchase

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:56:30 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <iRge8.8345$jC3.290289@news1.east.cox.net>
Source record: 147878

Channel Master makes rotators... You can view them here:
http://www.accessorywarehouse.com/index.html

<rons533@dejazzd.com> wrote in message news:3C799348.4BF0@dejazzd.com...
> Who other than Radio Shack sells the small tv type antenna rotators? I
> want to turn a small beam with it but I have never had too much luck
> with Radio Shack quality. Couldn't locate it in any retail store such as
> Wall Mart or Target.

3890. Re: Small Rotator Purchase

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 01:57:01 UTC
From: Will Rogers <nospamw4wlrnospam@nospambellsouthnospam.nospamnetnospam>
Message-ID: <GIge8.39209$2v1.1209057@e3500-atl1.usenetserver.com>
Source record: 147879

Hi!

Found a rotator with a calibrated controller (in degrees and channels can be programmed) at Lowe's in South Florida... try it if you have one in your area. Cost around 96 bux... AES has same rotor for 100 bux

Hope this helps!

Will Rogers
<rons533@dejazzd.com> wrote in message news:3C799348.4BF0@dejazzd.com...
> Who other than Radio Shack sells the small tv type antenna rotators? I
> want to turn a small beam with it but I have never had too much luck
> with Radio Shack quality. Couldn't locate it in any retail store such as
> Wall Mart or Target.

3891. Re: Confused

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 02:01:11 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <9s3j7u4299ifjluc1bovl825cp023ltrem@4ax.com>
Source record: 147880

On Mon, 25 Feb 2002 00:58:03 GMT, "Jim Ek" <jim-ek@worldnet.att.net>
wrote:

>
>Or am I just completely on the wrong page and need
>impedance measuring capabilities from the start?
>
>
>Jim Ek - KB9VEZ
>Bloomington, IN
>

Hi Jim,

You are doing OK (to ignore those who babble on).

When push comes to shove, its not the equipment, its the user (much like the admonition of the poor carpenter blaming his tools). Cecil has offered several means to accomplish all that you seek without spending more than $25 and THAT is the bottom line (you can even do better by finding one at a swap meet). The fact is, you could end up paying more to build it by parts from scratch (which is not a bad idea, in and of itself).

Don't fall for the analyzer trap that drains your wallet only to give you marginal answers, or more cash for more digits of noise. A digital readout is no more accurate than a 1" meter they replace. For some, the digital watch is the height of civilization. Skip the fanciful discussion of obtaining the sign of the reactance - it isn't worth the cash outlay for something so simply determined within a minute of use (already discussed by Cecil). Also ignore the academic discussion of "you aren't actually measuring SWR" (or fill in the fanciful equivalent for SWR). Another troll that surfaces too regularly.

Also skip the discussion of quality of construction or actual accuracy. These are things you can determine and correct for yourself without too much grief (and are NOT guaranteed for the premium analyzers touted here). For instance, you might mistakenly pick up a VHF/UHF SWR indicator that simply looks broke at HF. This is a sensitivity problem, nothing more. It only demands a resistor change or the use of an external meter (something that you should have in your shack, not something you should buy solely to fix your mistake however).

You can calibrate your meter yourself using known loads (resistors that can support the power applied long enough to note a reading). In this regard, you can make your own calibrated scales to replace the original (but this too will be unlikely).

Without shopping for the benchtop network analyzers, every SWR meter you consider will have the same design (and even so those premium analyzers touted here). There will be variations between them, but these will be insubstantial, amounting to a cap or a resistor (something you can buy for replacement, but that too is unlikely required).

You might be tempted to buy a cheap meter and gut it to rebuild it with precision components and quality methods. Even there, you are not likely to improve on something that was in all likelihood working quite well. However, this is the better philosophy (short of arbitrary gutting that is). In other words, a cheap Radio Shack SWR meter for CB use could be pressed into general service. It may exhibit some problems already discussed, but guess what? That $300 analyzer could do worse. One of my SWR meters is from Radio Shack and it exhibits rather marginal metering, but the sensor head is very well designed (and is the part that really matters).

In other words, consider it a project, not a purchase. Test it for general application (is it sensitive enough?). Test it for balance (reverse the input/output and check for null readings into a 50 Ohm load). Test it for accuracy (using 25 and 100 Ohm non-inductive resistors - other values too if you wish). Correct those tests that fail or do not perform well (easily within the scope of the meter and your talent - if you know which end of the soldering iron to pick up ;-)

73's
Richard Clark, KB7QHC

3892. OT: older browers and loss of business

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 02:01:19 UTC
From: n7ws@yahoo.com
Message-ID: <3c79915f.35015998@news.triconet.org>
Source record: 147881

On Sat, 23 Feb 2002 18:33:58 GMT, "paul friedman" <pfriedman8426@attbi.com>
wrote:

Paul;

|I am not trying to talk you in to upgrading your software or your processor.

Where I live the best I can get is a 28.8K dialup connection. (No cable, no DSL, no Sprint) No amount of processor upgrade (I have a PIII-450) or software "upgrades" will do a damned thing about increasing web throughput.

I have already stated that I am not an on-line buyer, however, I *am* an on-line shopper. I am also manage three IRAs on-line. So I have had similar discussions with the tech people at Charles Schwab. I have pointedly told them that if they wish to keep my business then they should stop demanding that I continually upgrade to the latest browser and Java everytime one of their web page designers gets a new wild hair up you know where and wants to add a "feature" to their site that requires me to spend a couple of hours on Microsoft's site updating my Java. (They tried to get me to do this so I could look at one PDF format analysist's report.)

In my last telephone call I pointed out that I can (using my "obsolete" Netscape Communicator 4.5) go to Yahoo Finance and download in CSV form, a list of my holdings, their prices, historical data, etc, and import it directly into my Excel spreadsheet where I track such things. Furthermore, this is free. If I want similar history data from Schwab, I get an HTML form, that can take minutes to download and format and then there is nothing I can do with it other than print it out which takes a few more minutes. They have agreed to "look into this."

In my opinion, and I told them so, their web page designers should have to design their page, send it to a server via a 28.8K connection and then download it back to their browser the same way and see if it works.

Web designers do things for the same reason mountain climbers climb mountains, because they are there and it can be done. If they don't keep changing things, they're out of a job. Sort of like lawmakers, if they don't keep coming up with new lamebrained legislation, they might as well go home and give us a rest. For both groups that would be a good idea.

|You might find this interesting, however. I asked a company which is a
|fairly major vendor of out-sourced web design why they ignored older
|browsers. The answer was that folks with older browsers tend to NOT be
|on-line buyers (they gave me some comparative statistics which I do not
|remember and never knew from whence they came). If this is true and the
|purpose of the site is to sell stuff (as opposed to merely increasing hits),
|then ignoring older browsers might well make business sense.

I'll tell you what. My son is the IT manager for a vehicle rental company that has offices nationwide and does over 50% of its business with foreign visitors to the US. I know for a fact that I can fully utilize his site with my "obsolete" browser. I'll talk to him and ask whether they are willing to pass up business that might be from people that don't use the latest version of IE.

Regards,

Wes

3893. antenna 1.2 ghz

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 02:02:37 UTC
From: jean-claude morin <ve2uam@videotron.ca>
Message-ID: <l_ge8.17139$pZ3.313641@wagner.videotron.net>
Source record: 147882

some body have a schema to a beam 1.2 ghz cross yagi or yagi

send me them if you have some

tank in advance

73` jean claude ve2uam

il a t`il quelqu`un qui a en sa possession un schema d`une antenne en 1.2 ghz

soit en cross yagi ou yagi

3894. Re: older browers and loss of business

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 02:41:46 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Jvhe8.68289$JZ.7927317@news20.bellglobal.com>
Source record: 147883

"Wes Stewart"
> Where I live the best I can get is a 28.8K dialup
> connection. (No cable, no DSL, no Sprint)

http://www.direcpc.com/index2.html

:-)

3895. Re: older browers and loss of business

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 03:21:14 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <K4ie8.476$bZ4.210@nwrddc02.gnilink.net>
Source record: 147884

HMMMmmm - so NOW, instead of merely having to upgrade his SOFTWARE - which he is opposed to, hen
can:

1. Get a sattelite system he probably doesn't want or need,
2. Be sure his PC meets stiffer requirements than plain 'ol landline ISP require - especially at
speeds og 56K or less,
3. Pay considerably MORE than the $19.95 or less that's pretty common to mose ISP...

All THIS, in "preference" to software upgrades that are ALREADY objectionable to him?

You weren't really paying attention, were you!

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:Jvhe8.68289$JZ.7927317@news20.bellglobal.com...
> "Wes Stewart"
> > Where I live the best I can get is a 28.8K dialup
> > connection. (No cable, no DSL, no Sprint)
>
> http://www.direcpc.com/index2.html
>
> :-)
>
>
>

3896. Re: older browers and loss of business

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 03:53:08 UTC
From: n7ws@yahoo.com
Message-ID: <3c79b51d.44167026@news.triconet.org>
Source record: 147885

On Sun, 24 Feb 2002 21:41:46 -0500, "J. Harvey" <JM001.Harvey@sympatico.ca>
wrote:

|"Wes Stewart"
|> Where I live the best I can get is a 28.8K dialup
|> connection. (No cable, no DSL, no Sprint)
|
|http://www.direcpc.com/index2.html

No uplink.
|
|:-)
|
|
|

3897. Re: building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 04:16:43 UTC
From: richardharrison@webtv.net
Message-ID: <28176-3C79BAAB-149@storefull-116.iap.bryant.webtv.net>
Source record: 147886

Bill Klocko, N3WK wrote:
"What loss are you referring to here?"

I completely agree with Bill that:
"At the frequency that he is interested in, any practical ground plane should be far enough from the surface that any ground effects should be negligible."

Line of sight antennas must be elevated to 'make the trip" of any great distance. Terman`s definitions which I quoted were for "directional gain","power gain", and losses. These were general for any type of antenna so I wasted bandwidth with a comment that: "The ground plane probably has a power gain over an isotropic antenna, but could have enough loss to nullify its directional gain."

I wanted to be general too and was thinking of an antenna close to the ground losing energy from the displacement current in its return through the earth to the antenna drivepoint. Agreed this is an impractical situation in most cases at VHF and higher frequencies.

Best regards, Richard Harrison, KB5WZI

3898. Q-TEK

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 04:30:32 UTC
From: Steve Bainbridge <Steve.Bainbridge@m1swb.freeserve.co.uk>
Message-ID: <MSGID_2=3a250=2f220=40fidonet_1b9778e2@fidonet.org>
Source record: 147961

Hi
does anyone know if Q-TEK has a website, I want to find out just what is in the metal box on the penertrator vertical

73's

Steve

3899. Re: Software - Text to CW ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 04:49:00 UTC
From: David Cook <nospam.davepc2@oz.net>
Message-ID: <0nje8.20056$dK1.79262@rwcrnsc54>
Source record: 147887

Hi Pete, I've got a little demo for an CW generator that I was working on a few months ago. It's just a demo, but you might find it useful. I gave up on it because I had other priorities. It only does a line's worth of text, but if it looks like it might suit your needs, let me know and I'll fix it so you can paste multiple lines into it. You can download the demo at:

http://www.netdave.com/wa0ttn/demos/cwtest.zip

If you're interested in PSK31 software, or my other feats of daring do :-), you can visit my other ham pages at:

http://www.netdave.com/wa0ttn

73,
Dave, WA0TTN

"Pete Holden" <peholden@attbi.com> wrote in message
news:9hde8.135088$Pz4.591225@rwcrnsc53...
> Does anyone know where I can download software which will generate code at
a
> speed I specify from a text file. In other words, from a paragraph or two
> of text that I paste in from the clipboard.
>
> Thanks, Pete KATZK
>
>

3900. Re: Software - Text to CW ??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 04:51:01 UTC
From: David Cook <nospam.davepc2@oz.net>
Message-ID: <Voje8.28876$%D5.99102@rwcrnsc52.ops.asp.att.net>
Source record: 147888

p.s. I assume you're looking for something for code practice, not for keying a transmitter.

"David Cook" <nospam.davepc2@oz.net> wrote in message news:0nje8.20056$dK1.79262@rwcrnsc54...
> Hi Pete, I've got a little demo for an CW generator that I was working on a
> few months ago. It's just a demo, but you might find it useful. I gave up on
> it because I had other priorities. It only does a line's worth of text, but
> if it looks like it might suit your needs, let me know and I'll fix it so
> you can paste multiple lines into it. You can download the demo at:
>
> http://www.netdave.com/wa0ttn/demos/cwtest.zip
>
> If you're interested in PSK31 software, or my other feats of daring do :-),
> you can visit my other ham pages at:
>
> http://www.netdave.com/wa0ttn
>
> 73,
> Dave, WA0TTN
>
> "Pete Holden" <peholden@attbi.com> wrote in message
> news:9hde8.135088$Pz4.591225@rwcrnsc53...
> > Does anyone know where I can download software which will generate code at
> a
> > > speed I specify from a text file. In other words, from a paragraph or two
> > > of text that I paste in from the clipboard.
> > >
> > > Thanks, Pete KA�TZK
> > >
> > >
> >
> >

3901. Re: older browers and loss of business

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 05:11:11 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <QHje8.68440$JZ.8005458@news20.bellglobal.com>
Source record: 147889

"Wes Stewart"
> | > Where I live the best I can get is a 28.8K dialup
> | > connection. (No cable, no DSL, no Sprint)
> | http://www.direcpc.com/index2.html
> No uplink.

No uplink ???? Click on "-How it works". You can use your dialup modem
for the "uplink", or get the 2-way DirectPC.

"Gary - KJ6Q"
> 3. Pay considerably MORE than the $19.95
> You weren't really paying attention, were you!

Calm down. Wes *did* imply a desire for DSL or Cable and seemed to think
that there was no other option. DirectPC is in *roughly* the same ballpark
as those other "land locked" hi-speed providers. The set-up cost for
DirectPC might be steeper, but the monthly cost is the real long term cost
anyway. There is a delta (obviously), but it isn't huge (compared to DSL or
Cable).

The only "stiffer" requirement might be a USB port (assuming his PC isn't
too stale). That's a $20 problem.

I'll probably be using the Canadian equivalent to DirectPC in a couple of
years.

3902. Re: Will a 80 meter dipole work up only 30 feet?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 06:14:59 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202242214.4c21876a@posting.google.com>
Source record: 147890

Robert Lyons <boblyons@umich.edu> wrote in message news:<3C7514B6.D1B521D5@umich.edu>...
> John Passaneau wrote:
> >
> > Have you looked in the right place for the DX. The DX window is 3.790 to
> > 3.8MHz. These days I'm seeing 2 to 3 DX stations each night.
>
>
> Yes, I've looked there, and at what should be ideal greyline times. Nothing
> from outside US borders. Well, it's been quite a while since I tried, so maybe
> I'll try again. I've been getting more serious about DXing in the last few
> months.
>
> 73 - Bob, KI8AB

I find the late shift seems to do better to EU for 80/40m. You can
begin to work EU or Africa when it gets dark local time, but I find
this a bad time usually. But the first shot is usually ok to Africa. I
find if I wait until the sun is almost up in EU, and about midnight
here, I do better. I start looking for Pacific about 3-4 AM local. I
work the VK's and JA's early in the morning after EU is pretty much
out of the pix. EU on 40m is quite easy. Just get on at midnight,
about 7028 +,- and listen around. One will usually pop up before too
long. I don't really work much dx on 75m, but I do hear quite a bit
down in the window when the band is quiet. Also in the low end
3500-3550. MK

3903. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 06:37:11 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a5cm2n$1gg$7@quark.scn.rain.com>
Source record: 147891

J. Harvey <JM001.Harvey@sympatico.ca> wrote:

> Unlike the "1 GHz processor with 1 Gbyte RAM, a 35" monitor, a dedicated T1
> line..."
> ...IE 6.0 is a free download. I suspect that Nutscape updates are free too.

But why should we be required to go through the sometimes several hours
required to do the download on a slow modem?

> Excuse me for putting it so simply: Old software sucks. New software
> sometimes sucks too, but old software sucks more.

> At work: Windows 95, etc. Pure hell. Constant crashes. Garbage.
> At home: Windows XP, etc. Easy. Stable.

Windows XP is full of security holes - as well as having many other
problems.

As far as browsers - Internet Explorer 4.x is more troublefree than
the new IE 6.x software - which also is loaded with security holes.

--
Bill Nelson (billn@peak.org)

3904. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 06:46:04 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a5cmjb$1gg$8@quark.scn.rain.com>
Source record: 147892

J. Harvey <JM001.Harvey@sympatico.ca> wrote:

> Telephone Billing Systems are pretty ugly too... Telephone Companies might
> be happy, but their customers may be less happy. I guess you know that
> foreign operators can put items on your bill that will take you months of
> begging to have 'forgiven just this once' ? There is often no practical way
> to deal with billing errors or bogus charges.

Sure there is - you call the phone company up and tell them to remove the
charges/errors. If they don't, you just find a new company - there is plenty
of competition out there.

Telling a person they need to use the latest internet browser is like
telling a long time unix user that he cannot use tin as a newsgroup
reader - but will have to use MS's latest browser instead. That is the
same as telling the people that they must use virus/worm susceptable
software - just so the web designer can show of his/her latest whiz-bang
byte/time/cpu hungry trash.

Sorry, Charlie. If I cannot read a site with the old browser I have, then
I won't visit the site again. There are plenty of others that are just as
good.

--
Bill Nelson (billn@peak.org)

3905. Re: older browers (was W9INN Antennas web page is now ONLINE)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 06:53:36 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a5cn1g$1gg$9@quark.scn.rain.com>
Source record: 147893

paul friedman <pfriedman8426@attbi.com> wrote:
> You might find this interesting, however. I asked a company which is a
> fairly major vendor of out-sourced web design why they ignored older
> browsers. The answer was that folks with older browsers tend to NOT be
> on-line buyers (they gave me some comparative statistics which I do not
> remember and never knew from whence they came). If this is true and the
> purpose of the site is to sell stuff (as opposed to merely increasing hits),
> then ignoring older browsers might well make business sense.

Well, they are wrong about some of us. I spent over $40,000 online last
year. A close friend spent over $15000. Both of us use old browsers, and
are not about to upgrade.

None of my friends have IE 6x, nor do they plan on getting it.

It is only the people who just MUST have the latest and greatest that
upgrade or buy new machines. The vast majority of consumer PCs are old
Pentiums with minimal RAM and the same software that came with it.

--
Bill Nelson (billn@peak.org)

3906. Re: Security in computing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 07:07:44 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a5cnrv$1gg$10@quark.scn.rain.com>
Source record: 147894
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

In rec.radio.amateur.antenna J. Harvey <JM001.Harvey@sympatico.ca> wrote:

> Of course, anyone that is concerned with security and viruses would have
> Norton AntiVirus 2002 (or equivalent) running and keep it (and everything
> else) up to date. It will also eliminate the threat without throwing the
> baby out with the bathwater.

Norton AV can only catch viruses after they have been out long enough to
be captured and analyzed - then a patch created. In the meantime, thousands
of PCs catch the bugs - and often don't know that they are there.

It, just like any other AV software, works "after the fact". It can only
prevent you against future occurances of the same attack.

And if you don't have the capability to scan all incoming files etc before
they are opened, then you are still vulnerable.

> Crume's book 'Inside Internet Security' advises that it is generally more
> secure to be up to date than to be on the trailing edge. Generally more old
> holes are being closed than new holes created. And the new holes are
> generally less well known. Good book.

This is true for software/firmware that has been around for a while. It is
NOT true for relatively new releases. IE 6.x is still in diapers. It will
need many "fixes" before its holes are plugged as well as those in IE 4.x

--
Bill Nelson (billn@peak.org)

3907. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 07:20:39 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a5cok7$1gg$11@quark.scn.rain.com>
Source record: 147895

Jim Weir <jim@rst-engr.com> wrote:
> Put a BNC connector on one end of the coax. Strip the outer black sheath
> 22" back from the open end. Use an icepick to open a hole in the braid
> (without breaking too many of the braid wires). Snake the center
> conductor/insulation out this hole. Get yourself a piece of dry wood or
> plastic pipe about 4' long. Staple (or cable tie) the end of the center
> conductor/insulation to one end of the wood/pipe. Staple the end of the
> braid to the opposite end of the wood/pipe.

You forgot the bit about sealing the coax at the place where the center
conductor is pulled through the braid.

The antenna/coax will not work well for very long, without doing so.

--
Bill Nelson (billn@peak.org)

3908. Re: Confused

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 07:59:29 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a5cqt1$1gg$12@quark.scn.rain.com>
Source record: 147896

John Buck <kh7t@arrl.net> wrote:
> SWR meter is a form of impedance measuring device. It just takes longer
> to sweep the frequencies of interest.

But it does not tell you the resonant frequency of the antenna. All it
tells you is when the antenna is closest to a 50 ohms impedance.

> Field strength is not of much use except to know that your rig is
> transmitting something. And SWR meter forward power into a matched
> antenna does that too.

Connect that SWR meter in front of a dummy load. You are not radiating
very little RF, the rest as heat. This tells us little about the usefulness
of the antenna. That is where a field strength meter is useful.

--
Bill Nelson (billn@peak.org)

3909. Re: Anyone know where to get Isotron plans??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 08:37:01 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0202250037.a1772a5@posting.google.com>
Source record: 147897

Hi Paul,
look at http://www.s-line.de/homepages/dl4sz/isotron.html
(in German).

73 de Ivan

3910. Re: Call Sign as your Dot.com name $11.95

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 09:31:04 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u7k12sg2a9pbe9@corp.supernews.com>
Source record: 147898
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.morse,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

I register many domains of my own, all at a cheaper cost of $8.95 or less per year.
And I use www.godaddy.com for mine, which is less than what you charge.
BTW, why is this crossposted to so many groups anyway?
I don't do business with spammers, and I class you there.

"News Editor" <news@ez-domainnameregistration.com> wrote in message news:u7j4vj5c9p2b9e@corp.supernews.com...
> You're correct Charles... if you need domain forwarding, our fee is more than
> you might pay at others... but then you don't get our outstanding, personalized
> support. And, you forgot to mention that our registration fee of $11.95 is
> $4.05 cheaper than the other company... if you don't need forwarding, why pay
> more?
> www.Ez-DomainNameRegistration.com
>
> > Hello News Editor,
> > I have used domain forwarding for years and it is very useful. However
> > I pay only $16 / year for the domain registration, the email forwarding,
> > URL forwarding, full-frame forwarding, toll-free tech support, domain
> > parking, and full-featured DNS....all found at.....
> > http://www.buydomains.com/
> >
> > Your price (from your site) is $23. IMHO if smart people shop around
> > for these kinds of services they won't be contacting you.....your
> > competition has already got you whipped but good.....
> >
> > --
> >
> > 73 / DX
> >
> > Charles T Johnston
> > Prescott, Arizona - U.S.A.
> > charles@ab7sl.com
> >
> > AB7SL - Ham Radio Pages
> > Official W9INN Antennas Page
> > www.ab7sl.com
> >
> >

> >
> >
>
>

3911. Re: Confused

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 12:22:59 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a5daap076s@enews1.newsguy.com>
Source record: 147900

you only need one method of measuring the feed point impedance of an antenna. an swr meter is the easiest(though it doesn't measure impedance) , impedance bridges, 'analyzers', etc just give you more detail but aren't that useful unless you really understand what they are showing you. and none of them give you any idea about the antenna pattern, only about how close the impedance of the feed point is to your coax.

a field strength meter can help you determine an antenna pattern, though doing that right is much harder than it sounds.

"Jim Ek" <jim-ek@worldnet.att.net> wrote in message news:v_fe8.12225$Im1.823882@bgtnsc05-news.ops.worldnet.att.net...
> On building antennas for the neophyte. If I am
> going to be following 'well established' plans for
> building a J-pole, or Yagi. An SWR meter will
> give me a sufficient reading to tell me that using
> the antenna that I construct, won't burn up my HT,
> correct?
>
> Then maybe a couple of months down the line
> purchase a field strength meter, which will
> confirm why I'm not able to hit the repeater in
> the next block, with the antenna I built <sick
> grin>.
>
> Later still, if I decide that antenna
> experimentation with some of my own creations is
> something that I want to pursue. Then I should be
> looking at acquiring more sophisticated equipment
> for impedance measurement, and signal generation.
>
> Or am I just completely on the wrong page and need
> impedance measuring capabilities from the start?
>
>
> Jim Ek - KB9VEZ
> Bloomington, IN
>
>

3912. Re: Confused

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 12:28:44 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7A2DFC.744561EA@IEEE.org>
Source record: 147899

Bill Nelson wrote:
>
> John Buck <kh7t@arrl.net> wrote:
> > SWR meter is a form of impedance measuring device. It just takes longer
> > to sweep the frequencies of interest.
>
> But it does not tell you the resonant frequency of the antenna. All it
> tells you is when the antenna is closest to a 50 ohms impedance.

At minimum SWR, you are at a current maximum point. The SWR gives
one of two values of resistance. A parallel cap will tell you
which of those two values of resistance is true. Knowing the
length and characteristics of the transmission line will yield
the antenna feedpoint impedance as an indirect measurement.
--
cheers, CAM http://www.qsl.net/w5dxp

3913. Re: Security in computing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 12:59:39 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <%yqe8.4133$tA.685322@news20.bellglobal.com>
Source record: 147901
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Bill Nelson"
> It, just like any other AV software, works "after the fact".
> It can only prevent you against future occurances of the
> same attack.

Wrong (at least 80% wrong ?). From the Norton AntiVirus 2002 Help file for your education:

"All computer viruses fall into two groups:

Known viruses: <snip>

Unknown viruses: An unknown virus is one that does not yet have a virus definition. Norton AntiVirus includes an advanced heuristic technology called Bloodhound to detect unknown program and macro viruses. Bloodhound isolates and locates the various logical regions of a file and then analyzes the program logic for virus-like behavior. Bloodhound detects a very high percentage of unknown viruses. In addition, Norton AntiVirus detects unknown viruses by monitoring activity on your computer for behaviors that viruses typically perform. When a suspicious activity is detected, Norton AntiVirus prevents the action.

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> And if you don't have the capability to scan all incoming files etc
> before they are opened, then you are still vulnerable.

Wrong. That feature is called 'Autoprotect' and it is recommended that it be left in its default setting, ON. That is exactly what it does.

3914. Radiating pattern for vertical delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 13:48:01 UTC
From: Larry Gauthier <larryg5099@chartermi.net>
Message-ID: <u7kg4pdjh1t672@corp.supernews.com>
Source record: 147902

Following some advice from folks on this reflector, I built a full-wave vertical delta loop for 30 meters, and it works great (by simple comparison to a dipole which is actually higher). The antenna is fed with an RG6 1/4 wave balun, and is built as an equilateral triangle (all sides same length). For vertical polarity, the driven side is perfectly vertical (held at its apex by the tower), with the feed point 1/4 wavelength down from the apex. The other two sides form a horizontal arrow that is pointed South.

Because this antenna "points" in one direction, I wonder if it has some directional characteristics. Perhaps I could aim it in a specific direction or put up a second one that favors Europe or Asia? Unfortunately, my collection of antenna books does not cover vertical loops. I tried modeling it in EZNEC but still do not understand EZNEC well enough to model anything but simple dipoles. <sigh>

What are the propagation characteristics for a vertical delta loop? Has anyone modeled one of these antennas? Thanks in advance for your responses,

-larry
K8UT

3915. Re: mq2 OR Alternative

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 13:55:32 UTC
From: G&R <"stop the spam"@limbo.hell>
Message-ID: <Nore8.70376$JZ.8089321@news20.bellglobal.com>
Source record: 147903

Another antenna that you may wish to consider is the Baby Boomer Quad.

To best give you the details check out my site at:

www.degendesigns.com

Or feel free to contact me at info@degendesigns.com

73

Guenther
info@degendesigns.com

"Andy M" <andrew.markham@virgin.net> wrote in message
news:nEtd8.14437$Ah1.1635151@news2-win.server.ntlworld.com...
> Hi Mike
>
> review of the MQ2 I thought you might like to read.
>
> Andy
>
> ----------
>
> Ron
>
> I have an MQ2 on the roof of my house. It doesn't work as well as a bigger
> aerial and is probably only marginally better than a dipole. It has
> disadvantages as any compact, loaded aerial does. I have had plenty of
> contacts with mine however including all continents on 20m, 17m and 15m.
>
> It has a fairly narrow bandwidth but my autotuner can match the feeder OK
> across the bands - works best at resonance as you would expect.
>
> If your expectation are slightly above a wire dipole you will be happy. If
> you expect the thing to function as well as a full sized two element you
> will be disappointed. The MQ2 is however a LOT smaller than a full sized
two
> element. I also have a Force 12 C-3SS and this is more than two times
bigger
> in length and width than the MQ2 - the Force 12 works great but I couldn't
> put it on top of my house!! If the MQ2 is the biggest thing you can have
> then it will probably be fine for you.
>
> Oh and by the way, I worked a fellow in the states (I'm in England) who
also
> had an MQ2 except his was only 12 feet off the ground on a temporary pole

> and mine at about 45 feet! So they do work.
>
> Good luck with your decision.
>
> Nick G4FAL
>
> <rons533@dejazzd.com> wrote in message news:3C7515CA.6FAA@dejazzd.com...
> > Finally got the A99 vertical running and now I am going to try the MQ2
> > Hybrid Quad since I am limited on space. I remember these antennas from
> > years back when I though they looked like they wouldn't work. After
> > research I find that they do work very well. I have not been able to
> > find anyone who can say anything bad about this antenna in the reviews.
> > Thought I would see what all here know about this antenna before I
> > purchase it. Anyone dissatisfied?
> >
> > Thanks
>
>
>
>

3916. Re: EZNEC modeling of GAP Voyager DX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 14:12:52 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <a5dgp1$dpa@r02n01.cac.psu.edu>
Source record: 147904

Hi Jim:

I can't help with the EZNEC questions, but the people at "GAP" tell me, the coax with the capacitor can be looked at as an inductor. As for why its inside the tubing, it is just a good place to put out of the way.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"Jdicso" <jdicso@aol.com> wrote in message
news:20020222230042.18464.00000124@mb-mk.aol.com...
> I need help modeling the subject antenna. I'd appreciate advice on
modeling
> the following:
> 1. Spacing of linear loading rods don't meet minimum criteria for
segment
> lengths. Any work arounds?
> 2. Source coax is inside lower vertical tubing and connected to
terminals
> in the gap. Can this be handled by Transmission Line only?
> 3. A coax stub is inside the upper vertical tubing. Length is increased
by
> adding a capacitor at the top. How is the coax modeled? How is the
capacitor
> modeled?
>
> Thanks, Jim K2SZ

3917. Re: Need 40/80M Antenna Advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 14:37:30 UTC
From: Richard Lubash <2k-plus@2k-plus.com>
Message-ID: <25022002093730614 4%2k-plus@2k-plus.com>
Source record: 147906

Hi Mark,

Thanks for the reply to my post. by "loopy", do you mean like a diamond or square shape loop suspended from the tower? If you could clarify I would appreciate it.

Thanks again,

Richard / N1VXW

In article <3C78E1C8.B20BE26F@bellatlantic.net>, Mark Hall <vze2mhvc@bellatlantic.net> wrote:

> If you have a 50' tower, I'd go "Loopy".
>
> Richard Lubash wrote:
>
> > I live on a wooded 1 acre lot that makes it very difficult to put up
> > wire antennas (lots of 2nd, 3rd growth scruffy trees between the tall
> > ones). I have a 50 foot tower mounted to the house with an Alpha Delta
> > 40, 80, 160 double sloper on the tower with a Tennadyne 10 el log
> > periodic for a top hat and a separate Fritzel FD4 Windom that I switch
> > between for 40 and 80. I do Ok with these antennas but I am looking to
> > do better. I have thought about the Force 12 vertical dipole for 40 or
> > possibly the Butternut HF2V with a medium radial system for 40 and a
> > little bit of 80. My question, would either of these be an improvement
> > (receive & transmit) over my existing antennas or if not any
> > suggestions that don't involve stringing long lengths of wire through
> > the dense foliage.
> >
> > Thanks,
> >
> > Richard / N1VXW

3918. Re: Confused

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 14:46:35 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <QUp6PO==g+sfoiQgPG9ZFYfsRbC+@4ax.com>
Source record: 147905

"Jim Ek" <jim-ek@worldnet.att.net> wrote:

You're on the right track. Just buy an swr meter that measures your vhf frequencies. There are many good brands. The ones MFJ makes work fine. I have one on my antenna tuner, and it does a good job.

If you're getting one to measure the output on your ht, make sure it has a scale that will give you a measurement at the 5 watt-or-so level. In other words, if the scale is for, say, 0 to 200 watts, you may not get enough deflection to get an accurate reading.

Other than that, you can look at what is available at the MFJ web site, or just call AES or HRO or Texas Towers or whomever and see what they have in stock.

Later, when you get more advanced, you may want to move up to the antenna anylyzer that MFJ makes, the 259B, but for now, a basic swr meter will make you good to go for your antenna experimentation.

Bob
k5qwg

>On building antennas for the neophyte. If I am
>going to be following 'well established' plans for
>building a J-pole, or Yagi. An SWR meter will
>give me a sufficient reading to tell me that using
>the antenna that I construct, won't burn up my HT,
>correct?
>
>Then maybe a couple of months down the line
>purchase a field strength meter, which will
>confirm why I'm not able to hit the repeater in
>the next block, with the antenna I built <sick
>grin>.
>
>Later still, if I decide that antenna
>experimentation with some of my own creations is
>something that I want to pursue. Then I should be
>looking at acquiring more sophisticated equipment
>for impedance measurement, and signal generation.
>
>Or am I just completely on the wrong page and need
>impedance measuring capabilities from the start?
>
>
>Jim Ek - KB9VEZ
>Bloomington, IN

>

3919. Tower setup now for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 15:08:43 UTC
From: Andre <aswal@optusnet.com.au>
Message-ID: <3c7afb46$0$26163$afc38c87@news.optusnet.com.au>
Source record: 147788

Thanks for all who replied, but after some thought I have decided to stay with the pole and guy wires.
If anyone is interested the tower is now for sale..

Approx 26ft triangular cut into two sections , but will be easy to sleeve and weld.
Best offer
Buyer to collect.
Geelong Victoria

Cheers all
Andre

3920. Re: Radiating pattern for vertical delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 15:11:34 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7A5423.3CC7FF4E@icok.net>
Source record: 147907

Larry,
The 'normal' direction of radiation for a vertical
loop (no matter the shape) is broadside to the loop.
There's usually a 'null' in the sides in the plane of
the loop. This isn't 'set in stone', though. Depending
on what's around the antenna, the radiation pattern can
be skewed so that you really can't predict exactly where
it's 'pointing'. It sounds like your antenna should
'hear' best East and West. Does that 'fit' what your
'seeing'?
'Doc

3921. Re: Radiating pattern for vertical delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 15:30:54 UTC
From: richardharrison@webtv.net
Message-ID: <4689-3C7A58AE-5@storefull-113.iap.bryant.webtv.net>
Source record: 147909

Larry, K8UT wrote:
"Unfortunately, my collection of antenna books does not cover vertical loops."

Delta loops are covered in chapter 10 of "Low-Band DXing" by ON4UN, published by ARRL. Borrow a copy.

Figure 10-9 shows an antenna more or less like Larry`s. "The delta loop can be seen as two quarter-wave sloping verticals, each using one radial."

Figure 10-10 shows radiation patterns. In the horizontal plane, the pattern is slightly oval but is almost omnidirectional. In the vertical plane, of course, the angle of maximum radiation depends on height of the antenna.

Best regards, Richard Harrison, KB5WZI

3922. Re: Radiating pattern for vertical delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 15:39:33 UTC
From: Larry Gauthier <larryg5099@chartermi.net>
Message-ID: <u7kmm44pb0g611@corp.supernews.com>
Source record: 147908

Doc,

Yes, that seems to be what I am hearing. But again, my only comparison is vs the dipole, and the loop beats the dipole in every direction. My only clear example was the TI9M DXpedition, which is broadside to my dipole and off the end of this loop. But, the loop was better there as well even though the dipole is higher (of course, there is probably some vertical take-off angle benefit from the vertical polarity of the loop.)

I did not know if the "arrow" (the two legs that point south) would give this some preference to south versus north, which might have explained why the TI9M signals, due south of me, were so good. Also, the tower is 4 feet behind the loop, to the north of it, so I have a natural null going over the pole.

If this is bi-modal as you say (favoring the sides and not the front vs back) then I will put up another one and place it at 90 degrees to this one. I would expect to see better signals into Europe/Africa and the Pacific rim from this loop, and better South Americans with the new loop. Even as it is, I'm having a great time working 30m DX with the one I have.

Thanks for the response,

-larry
K8UT

"'Doc" <w5lz@icok.net> wrote in message news:3C7A5423.3CC7FF4E@icok.net...
> Larry,
> The 'normal' direction of radiation for a vertical
> loop (no matter the shape) is broadside to the loop.
> There's usually a 'null' in the sides in the plane of
> the loop. This isn't 'set in stone', though. Depending
> on what's around the antenna, the radiation pattern can
> be skewed so that you really can't predict exactly where
> it's 'pointing'. It sounds like your antenna should
> 'hear' best East and West. Does that 'fit' what your
> 'seeing'?
> 'Doc

3923. Re: Radiating pattern for vertical delta loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 16:41:14 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7A6929.DE2B68B4@IEEE.org>
Source record: 147910

Larry Gauthier wrote:
> What are the propagation characteristics for a vertical delta loop? Has
> anyone modeled one of these antennas? Thanks in advance for your responses,

On it's resonant frequency, the major figure-8 lobes are broadside
to the vertical loop, somewhat like a dipole (but not identical).
--
cheers, CAM http://www.qsl.net/w5dxp

3924. Re: Confused

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 16:45:50 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C7A6A50.3FFB5E38@worldnet.att.net>
Source record: 147911

Jim Ek wrote:

> confirm why I'm not able to hit the repeater in
> the next block, with the antenna I built <sick
> grin>.

If you're not able to hit the repeater in the next block you have something more than an antenna problem, you may have a direct short circuit in your feedline. Almost
any RF radiated at all would accomplish that. Check your coax connectors, they are
a usual source of short circuits if whoever installed them was not experienced.

3925. Hairpin design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 16:59:43 UTC
From: Scott McClements <yetbbwa@grove.iup.edu>
Message-ID: <3C7A6D7F.7F3F4202@grove.iup.edu>
Source record: 147912

Hi,

Does anybody know of a good source for coming up with the right
dimensions for a hairpin match given the frequency and complex feedpoint
impedance of the antenna? Books, software, website? Anything?

Thanks,

Scott.

3926. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 17:11:20 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3C7A7038.3B2D50CD@sympatico.ca>
Source record: 147913

That explains why I can't hear the tower when I'm turning!

Dave

Jim Weir wrote:
>
> Since aircraft COM antenna standards require VERTICAL polarization, I'm
> presuming both of you gentlemen have VERTICALLY polarized gain antennas,
> yes?
>
> Jim
>
> "Rick Littlefield" <k1bqt@aol.com> wrote in message
> news:20020224092425.19745.00000337@mb-fs.aol.com...
>
> > That's the flip side of the coin. While I get good gain performance and a
> > decent match over a 10-12 MHz segment of the band with the 8-element Yagi,
>
> > s/n), but blocks on strong signals when connected to the yagi.

3927. Re: Hairpin design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 17:22:37 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7A72D9.4A46DF75@icok.net>
Source record: 147914

Scott,
It isn't the most comprehensive explanation but you
might take a look at the "Radio Handbook", 23rd edition,
by William Orr. Around page 21-19(?).
'Doc

3928. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 17:40:02 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7ktmsdb384pc1@corp.supernews.com>
Source record: 147915

I didn't forget it at all. This little design was a one-shot to see if anything was above the noise floor. It wasn't intended to be anything more than a one-week test at the most, and not much deterioration is going to happen in a week. When he proves or disproves that a simple outside antenna is going to do him some good, then we can talk about some serious permanent antenna designs.

Jim

>
> You forgot the bit about sealing the coax at the place where the center
> conductor is pulled through the braid.

3929. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 17:43:27 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7kttau01vp25@corp.supernews.com>
Source record: 147916

Not really. All FAA ground stations use a combination of vertical and horizontal polarization just to eliminate the effect that you are talking about, with the aircraft in something other than straight and level flight. Only in the smaller airports (unicom and such) will you find true vertical polarization. However, in trying to listen to an airplane on the ground, you will find predominantly vertical polarization -- unless, of course, it is a taildragger in a ground loop {;-)

Jim

"Dave Holford" <holford@sympatico.ca> wrote in message news:3C7A7038.3B2D50CD@sympatico.ca...

> That explains why I can't hear the tower when I'm turning!
>
> Dave
>
> Jim Weir wrote:
> >
> > Since aircraft COM antenna standards require VERTICAL polarization,

3930. Stainless steel tubing for elements & boom for UHF antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 18:59:52 UTC
From: joe <casavant@nucleus.com>
Message-ID: <3c7a7cd2@news.nucleus.com>
Source record: 147917

Hello,
I work in Varadaro, Cuba, and wish to make an UHF Yagi antenna to receive FOX ch. 29 from Miami, 100 miles away . I have a 30 db booster and coaxil which I brought from Radio Shack in Canada. The biggest problem I and having is making the antenna because all of the antenna designs call for aluminum tubing and I can not find any aluminum in Cuba. However, because of where I work at, I have access to loads of stainless steel tubing ranging from 1/4" to 2 " and a small amount of 1\4" and 1 " copper.
My Questions are:
1) Can I use Stainless steel for the Elements?
2) Can the boom be made of conductive material like stainless?
3) Any designs to get the best signal strength?

I'm not a hobbiest so less technical information is appreciated. Also, this antenna is illegal in Cuba so it should not be more than 10' long.
Thankyou
Andre

3931. Re: Stainless steel tubing for elements & boom for UHF antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 19:16:30 UTC
From: SAM <xxscottm@xxnetcommander.comxx>
Message-ID: <i4we8.221103$Re2.16143764@bin6.nnrp.aus1.giganews.com>
Source record: 147918

"joe" <casavant@nucleus.com> wrote in message
news:3c7a7cd2@news.nucleus.com...
> Hello,
> I work in Varadaro, Cuba, and wish to make an UHF Yagi antenna to receive
> FOX ch. 29 from Miami, 100 miles away . I have a 30 db booster and coaxil
> which I brought from Radio Shack in Canada. The biggest problem I and
> having is making the antenna because all of the antenna designs call for
> aluminum tubing and I can not find any aluminum in Cuba. However, because
> of where I work at, I have access to loads of stainless steel tubing
ranging
> from 1/4" to 2 " and a small amount of 1\4" and 1 " copper.
> My Questions are:

> 1) Can I use Stainless steel for the Elements?

Yes. Aluminum has been used because its cheaper, but some of the more
expensive antennas use stainless steel.

> 2) Can the boom be made of conductive material like stainless?

It depends on the type of antenna, but typically, yes.

> 3) Any designs to get the best signal strength?
>

Tough question. Receiving a UHF signal that is 100 miles away with an
antenna only 10 feet long is going to be tough. You will want to use a
Yagi, for sure. A Log will produce less gain although it has better
bandwidth. Keep the preamp as close to the feed of the antenna as possible.
This will give you the best possible C/N.

> I'm not a hobbiest so less technical information is appreciated. Also,
this
> antenna is illegal in Cuba so it should not be more than 10' long.
> Thankyou
> Andre
>
>
>

3932. Re: Hairpin design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 21:38:03 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <1hbl7ucek9u3nd0djpa9klujmfdatn5ctj@4ax.com>
Source record: 147769

Antenna Model, an antenna modeling program, has bundled with it a tool
for designing various matches including the hairpin match.

For further information you might check their web page at
http://www.antennamodel.com/

Danny, K6MHE

On Mon, 25 Feb 2002 11:59:43 -0500, Scott McClements
<yetbbwa@grove.iup.edu> wrote:

>Hi,
>
>Does anybody know of a good source for coming up with the right
>dimensions for a hairpin match given the frequency and complex feedpoint
>impedance of the antenna? Books, software, website? Anything?
>
>Thanks,
>
>Scott.

3933. antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 22:24:10 UTC
From: rsdalton1 <rsdalton1@earthlink.net>
Message-ID: <eQye8.15925$0C1.1379066@newsread1.prod.itd.earthlink.net>
Source record: 147770

Assuming I'm using copper tubing in beam construction,would you think
the green corrosion,would degrade
the electrical properties,and cause swr adjustment problems?

3934. Re: antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 22:33:32 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7ABBBC.2332BA08@IEEE.org>
Source record: 147771

rsdalton1 wrote:
>
> Assuming I'm using copper tubing in beam construction,would you think
> the green corrosion,would degrade
> the electrical properties,and cause swr adjustment problems?

If I remember correctly, copper oxide is conductive so not to worry.
--
cheers, CAM http://www.qsl.net/w5dxp

3935. Re: antenna 1.2 ghz

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 22:36:51 UTC
From: richardharrison@webtv.net
Message-ID: <29200-3C7ABC83-461@storefull-115.iap.bryant.webtv.net>
Source record: 147772

Jean Claude, VE2UN wrote:
"Sombody have a scheme for a 1.2 GHz yagi or cross yagi?"

You can scale a yagi of one frequency for another frequency and the performance will be the same for both antennas. Mechanically, things get better as size is scaled down. The antenna gets stiffer and stronger at the smaller size of the higher frequency.

Most amateur handbooks have yagis of some frequency which can be scaled to another frequency.

L. B. Cebik, W4RNL has yagi information and more on his webpages. Just search on : cebik.
W4RNL`s pages should be the first items to appear. Cebik has a 3-element example worked out with most details and several options.

Best regards, Richard Harrison, KB5WZI

3936. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 23:05:37 UTC
From: k1bqt@aol.com
Message-ID: <20020225180537.07929.00000397@mb-mn.aol.com>
Source record: 147773

> All FAA ground stations use a combination of vertical and horizontal polarization just to eliminate the effect that you are talking about, with the aircraft in something other than straight and level flight.<

I didn't know that. Now you've got my attention...and I'm curious to know what techniques the FAA uses to implement it.

Rick K1BQT

3937. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 23:10:50 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Yvze8.71947$JZ.8277557@news20.bellglobal.com>
Source record: 147774

"Rick Littlefield"
> > All FAA ground stations use a combination
> > of vertical and horizontal polarization...
>
> I didn't know that. Now you've got my attention...
> and I'm curious to know what techniques the
> FAA uses to implement it.

Bent mast. No budget to buy a new one.

3938. Magnetic antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 23:14:18 UTC
From: Tomasz Cudny <cudtom@poczta.onet.pl>
Message-ID: <a5h4vlgbn1@news.onet.pl>
Source record: 147814

I am looking for information about magnetic loop antennas. Please email me
cudtom@poczta.onet.pl
best regarts
Tomasz

3939. Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 23:20:53 UTC
From: Jim Ek <jim-ek@worldnet.att.net>
Message-ID: <pFze8.14481$Im1.972245@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147775

Will a short coax run of say 8 or 9 feet
significantly change the SIR of an antenna. That
is making the assumption that the coax is good
quality with no defect. I have a "Comet" antenna
on my HT that is good at getting the signal out.
I'd like to mount the antenna separate from my HT
when riding on my recumbent trike.

Have Trike, will Travel,

Jim Ek - KB9VEZ
Bloomington, IN

3940. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 23:21:17 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <MFze8.71997$JZ.8282786@news20.bellglobal.com>
Source record: 147776

"J. Harvey"
> Old 'Air Traffic Control' software is the worst of all.
> I've seen a website where someone had found a
> flaw in the overall design...

The link for those that might be interested:
http://home.columbus.rr.com/lusch/rtudslide00.html
It is an interesting presentation.

3941. Re: HELP: need Wilson 3 el tribander instructions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-25 23:46:35 UTC
From: rjmw0eax@aol.com
Message-ID: <20020225184635.26903.00000389@mb-ma.aol.com>
Source record: 147777

Hello Ray
I have a Wilson Sys 33 three element beam antenna (10, 15, 20)and also have the instructions which I could copy for you if you still need
If you do want the instructions, send an SASE (4"x9 1/2" size) to;

Ron Melancon W0EAX
1443 Roosevelt Drive
Woodland, Calif. 95776

3942. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 00:10:50 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7lkjl4ortr355@corp.supernews.com>
Source record: 147778

There are a few, but circular polarization using a form of biconical
turnstile seems to be the vogue. It is an ugly looking bastard.

Jim

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20020225180537.07929.00000397@mb-mn.aol.com...
> > All FAA ground stations use a combination of vertical and horizontal
> polarization

>
> I didn't know that. Now you've got my attention...and I'm curious to know
what
> techniques the FAA uses to implement it.
>
>
> Rick K1BQT

3943. Re: Relays for the Ladder-Line Length Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 00:46:37 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <a5elmi$52e@nntpb.cb.lucent.com>
Source record: 147779

Nice setup Cecil. I just hope one of the engineers from 'That" company
doesn't see your design and put it in a box for $299.
Hmmmm maybe I ....

Tony WA6LZH

3944. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 01:21:46 UTC
From: Jim Ek <jim-ek@worldnet.att.net>
Message-ID: <KqBe8.14687$Im1.988004@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147780

regarding previous post

SIR should be SIR

--
Have Trike, will Travel,

Jim Ek - KB9VEZ
Bloomington, IN

"Jim Ek" <jim-ek@worldnet.att.net> wrote in
message
news:pFze8.14481$Im1.972245@bgtnsc05-news.ops.worl
dnet.att.net...
> Will a short coax run of say 8 or 9 feet
> significantly change the SIR of an antenna.
That
> is making the assumption that the coax is good
> quality with no defect. I have a "Comet"
antenna
> on my HT that is good at getting the signal out.
> I'd like to mount the antenna separate from my
HT
> when riding on my recumbent trike.
>
> Have Trike, will Travel,
>
> Jim Ek - KB9VEZ
> Bloomington, IN
>
>

3945. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 01:23:34 UTC
From: Jim Ek <jim-ek@worldnet.att.net>
Message-ID: <qsBe8.14690$Im1.987811@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147781

apologize, not paying close attention to spell
checker

SIR should be SWR

--
Have Trike, will Travel,

Jim Ek
Bloomington, IN
"Jim Ek" <jim-ek@worldnet.att.net> wrote in
message
news:KqBe8.14687$Im1.988004@bgtnsc05-news.ops.worl
dnet.att.net...
> regarding previous post
>
> SIR should be SIR
>
> --
> Have Trike, will Travel,
>
> Jim Ek - KB9VEZ
> Bloomington, IN
>
>
> "Jim Ek" <jim-ek@worldnet.att.net> wrote in
> message
>
news:pFze8.14481$Im1.972245@bgtnsc05-news.ops.worl
> dnet.att.net...
> > Will a short coax run of say 8 or 9 feet
> > significantly change the SIR of an antenna.
> That
> > is making the assumption that the coax is good
> > quality with no defect. I have a "Comet"
> antenna
> > on my HT that is good at getting the signal
out.
> > I'd like to mount the antenna separate from my
> HT
> > when riding on my recumbent trike.
> >
> > Have Trike, will Travel,
> >
> > Jim Ek - KB9VEZ

> > Bloomington, IN
> >
> >
>
>

3946. Roof Mounted Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 01:36:45 UTC
From: Ace_On_Par3 <pwhelton@hal-pcNOSPAM.org>
Message-ID: <a5ep00$1u9a$1@news.hal-pc.org>
Source record: 147783

I'm in the planning stages of putting up a vertical and had planned on ground mounting it with radials and coax buried. I had abandoned the idea of roof mounting the vertical but it seems the more input I get there seems to be some strong opinion that better results might be obtained with roof mounting. So here are my questions:

1. The instructions for roof mounting call for a 45 degree droop angle below horizontal. How critical is this angle? I might be able to handle a shallower angle.

2. Equal length radials should be opposite each other. Can I cheat a little here? Run them any way I can fit them?

3. Given a choice of roof mounting with a maximum of 2 radials per band (10-80) "or" ground mounted with 4 or more 1/8 wave radials per band (10-80) which would you choose and why?

Thanks for your input.

Pat - KZ5J

3947. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 01:38:26 UTC
From: axolotl <kevin@shorecomp.com>
Message-ID: <3C7AE72E.5D47EBD9@shorecomp.com>
Source record: 147782

Rick Littlefield wrote:
I'm curious to know what
> techniques the FAA uses to implement it.

One style can be found here.

http://www.amsat.org/amsat/articles/w6shp/lindy.html

Kevin Gallimore

3948. Re: Roof Mounted Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 02:08:47 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7AEE2D.7DF9CE8C@icok.net>
Source record: 147784

Ace,
The 'angle of the dangle' isn't super critical, but the
closer you can get to the recomended angle the 'better' off
you are. It really depends on what you find the input impedance
of the antenna in ~that~ location to be. Just have to try
it and see.
To keep the radiation pattern symetrical, the radials should
also be symetrical. You can stand a fairly asymetrical radiation
pattern with very little 'hearable' change from the 'ideal', so
a little creative 'cheating' doesn't seem too out of order. It
isn't like you need to lay these things out to the exact degree.
Do what you need to do to make them 'fit'.
Given the choice between roof mounting or ground mounting,
I'd
take the one that puts the antenna as much in the 'clear' as
possible.
I also do NOT like heights, especially roofs with a slope like a
ski jump, so that would have a lot to do with it for ~me~. I've
used
verticl antennas in both places, and I couldn't tell any
difference,
same antenna too, so that wasn't a factor. As far as the number
and
length of radials, you can get an argument about the 1/4 vs.
shorter
radials. I tend to favor the 'shorter and more of them' school
of
though (mainly cuz' I don't have a lot of room for the longer
radials).
You know, nothing says you can't change things if you're not
satisfied with how things are working, in fact that's half the
fun of
playing with antennas. Pick a location and design and try it.
Then
change it to see what happens...
'Doc

3949. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 02:11:28 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7AEECF.B5CA6941@icok.net>
Source record: 147785

Jim,
If the antenna on you HT is removable, why not just
mount another antenna on the trike (not the HT's antenna).
It seems like it would be much simpler...
'Doc

3950. Re: antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 02:12:04 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7AEEF4.8B22DAB6@icok.net>
Source record: 147786

rsdalton1,
No.

3951. Re: Hairpin design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 02:51:03 UTC
From: n7ws@yahoo.com
Message-ID: <3c7af1cc.125250453@news.triconet.org>
Source record: 147787

On Mon, 25 Feb 2002 11:59:43 -0500, Scott McClements <yetbbwa@grove.iup.edu>
wrote:

|Hi,
|
|Does anybody know of a good source for coming up with the right
|dimensions for a hairpin match given the frequency and complex feedpoint
|impedance of the antenna? Books, software, website? Anything?

The hairpin match assumes that the real part of the feedpoint impedance is lower
than the line Zo. The element length is shortened to provide a capacitive
reactance in series with the real part.

An L network is then formed by adding a parallel inductance. So the usual
formulas for designing L networks apply for calculating the required reactances.

The inductive reactance can be provided by a lumped inductor or in the hairpin
case by a shorted stub. The reactance of a shorted stub shorter than 1/4
wavelength is given by:

Xl = Zo * j tan(L)

where L is the length in electrical degrees.

So for example assume a feedpoint resistance = 24 ohm and a line Zo = 50.

The matching Q = sqrt(50/24 - 1) = 1.041

Xc = 1.041 * 24 ~ -j25

Xp = 50 / 1.041 ~ +j48

So you need to shorten the driven element to provide a feedpoint

Z = 24 - j25

and select a stub Zs and length to provide + j48.

Use Zs = 150 ohm

Then: Len_stub ~ 41" for F = 14.175 MHz

These numbers happen to be for my HB 3 element 20 meter beam (made with material
salvaged from a TH-6DXX), viewable at:

http://users.triconet.org/wesandlinda

I don't have links to them but detailed photos of the stub are at:

http://users.triconet.org/wesandlinda/YagiFeed-1a.jpg

and

http://users.triconet.org/wesandlinda/YagiFeed-2a.jpg

In this case, the stub also performs the balun function without additional loss or windload.

There of course any number of combinations that will provide this so mechanical considerations will likely dictate your selection. Also when shortening the driven element the real part will be affected somewhat, so there might be some interation required.

This is all well covered in the ARRL Antenna Book.

Wes Stewart N7WS

3952. Re: Stainless steel tubing for elements & boom for UHF antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 03:06:59 UTC
From: richardharrison@webtv.net
Message-ID: <28174-3C7AFBD3-469@storefull-116.iap.bryant.webtv.net>
Source record: 147789

Joe wrote:
"I work in Varadaro, Cuba and wish to make an UHF yagi antenna to receive Fox ch 29 from Miami, 100 miles away."

Cuba is out of sight of Miami, but tropo bending, scattering, temperature inversions, etc. can permit occasional reception of Florida TV in Cuba.

Channel-29 occupies 560 MHZ to 566 MHz. Atmospheric noise is very low at frequencies this high, but the signal is very low too. The tiny signal must compete with internal noise of the 30-db booster from the Canadian Radio Shack, in this case. A balun may be helpful on the booster input. It might be located at some distance from the input if needed to avoid oscillation of the booster. Booster input and output are shielded coax cable connections to keep output of the booster from getting back into the input where it could cause trouble.

The ARRL Antenna Book, 19th edition, on page 11-2 says: "Yagi free-space gain ranges from about 5 dbi for a small 2-element design to about 20 dbi for a 31-element long boom UHF design.

A diamond shaped rhombic antenna comes within 3-db of the 31-element yagi and is non-critical as to spacing. It is not so likely to be recognized as a high-gain TV antenna.

A Channel-29 rhombic can be two #8 copper wires (more or less) which measure about 13 feet long, separated in their middles by about 6.5 feet, giving an overall length of 11 feet for the antenna.

Connect the wires at one end to a 680-ohm resistor, give or take 150 ohms or so. Point this end of the rhombic at Miami.

Connect 300-ohm twinlead to the other end of the rhombic. One twinlead wire to each rhombic wire. Run the twinlead to the TV-type 4/1-impedance balun used with the booster input.

Connect output from the booster to the TV with a shielded coax cable.

Erect the antenna as high as possible and watch for CH-29 and other UHF channels.

Best regards, Richard Harrison, KB5WZI

3953. 6 MTR ANTENNA?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 03:34:33 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <dnDe8.14956$lm1.1008775@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147790

are there 6 mtr antennas specifically made for use with an ht? it must have
a bnc connector.

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

3954. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 04:18:04 UTC
From: Jim Ek <jim-ek@worldnet.att.net>
Message-ID: <00Ee8.9064$FE4.555798@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147791

I don't have test equipment like SWR meter,
impedance checking meter whatever.

Currently I am overwhelmed with information
regarding antennas. Folks have offered what sound
like good suggestions, however, with terms and
technology I don't understand at this juncture. I
basically just want something that will enable me
to enjoy using my HT while pedaling my trike -
right now-. Then later develop a better antenna.
I live is a very hilly area. It seems that if I
construct something or modify (like a mobile whip
and add a ground plane) it would be a beneficial
to check it out with appropriate test equipment.

<Hmmm I wonder what folks did before the MFJ -
259B or whatever.>

It seems like at this point and without any test
equipment (except a $15.00 Radio Shack LCD
multi-meter), the best solution is just to take
the antenna that I have on the HT move it up in
location (approximately 5 feet above the surface
of the road and 2 feet above my head). I could
then keep the HT on my belt and safely use it.
That is unless, it would negatively impact the
radio. Then in the interim I could study the ARRL
Antenna book, figure out how sophisticated I want
to be with antennas. Then purchase the equipment
that will fit the parameters I name.

Have Trike, will Travel,

Jim Ek - KB9VEZ
Bloomington, IN

"'Doc" <w5lz@icok.net> wrote in message
news:3C7AEECF.B5CA6941@icok.net...
> Jim,
> If the antenna on you HT is removable, why
not just
> mount another antenna on the trike (not the HT's
antenna).
> It seems like it would be much simpler...
> 'Doc

3955. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 04:30:52 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7B0F7A.B97BC10C@icok.net>
Source record: 147792

Jim,
Even removing and mounting the HT's antenna on
the trike will mean you'll have to check to see
how well it's working (swr, or how well the radio
likes the antenna), just moving the antenna will
change things enough that you'll have to re-tune
it. Your best bet is to find someone locally, or
maybe one of the radio shops, that can loan you
a meter, or check the antenna for you. Even so,
you'd still be better off using a 'mobile' antenna
rather than the one off of the HT.
'Doc

3956. MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 04:55:35 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C7B1579.8987670C@bellatlantic.net>
Source record: 147793

In the 22nd edition of Bill Orr's Radio Handbook on page 27.24
Figure 38 is something called a MULTEE antenna. Made
completely from 300 ohm open wire TV line as a T with the top
looking like a folded dipole 70' long fed by the vertical part 52'
for 160/80 meters.

No matching device is shown. Instead, 50 ohm line is shown directly
connecting to the vertical feedline on one side, with ground radials
and the other conductor in the twinlead connected to the shield side.
But the text says "The antenna evolves from a vertical multiwire
radiator, fed on one leg only."

How the hell is this thing supposed to work? Where did they come up
with 6000 ohms and the linear loading "match", which doesn't work
out mathematically or at the antenna I built. See the quote from the
book below. I don't see how a quarter wave 300 ohm line matches
6000 ohms to 50 ohms. I came up with 547 ohms needed for the
matching section, assuming a 6000 ohm antenna load. (I measured
the damn thing. The VF was .76 with the TV wire I used and it
was a 1/4 wave long for 80 meters. It doesn't work worth beans on
receive, with or without a transmatch. I didn't bother trying to
transmit. Test equipment was an MFJ 259 and an ICOM 745.
An LDG MP AT-11 autotuner does tune it to a match on both
80 & 160. Maybe it works poorly because I used regular
foam dielectric TV line - but that doesn't answer the matching
question.)

Here's the text:
"On the low-frequency band, the top portion does little radiating so it
may be folded horizontally to form a radiator for the high-frequency
band. On the lower band, the antenna acts as a top-loaded vertical
antenna, while on the higher band, the flattop does the radiating,
rather
than the vertical portion. The vertical portion, instead, acts as a
quarter-wave linear transformer, matching the 6000-ohm nominal
antenna impedance of the 50 ohm impedance of the coaxial
transmission line". (I think "of the 50 ..." is a typo in the book
and should be "to the 50 ...")

3957. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 05:40:32 UTC
From: Jim Ek <jim-ek@worldnet.att.net>
Message-ID: <kdFe8.15073$lm1.1034777@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147794

Doc,

That is what I needed know, but didn't want to
hear. Thanks for taking the time to respond

Have Trike, will Travel,

Jim Ek - KB9VEZ
Bloomington, IN

"'Doc" <w5lz@icok.net> wrote in message
news:3C7B0F7A.B97BC10C@icok.net...
>
>
> Jim,
> Even removing and mounting the HT's antenna
on
> the trike will mean you'll have to check to see
> how well it's working (swr, or how well the
radio
> likes the antenna), just moving the antenna will
> change things enough that you'll have to re-tune
> it. Your best bet is to find someone locally,
or
> maybe one of the radio shops, that can loan you
> a meter, or check the antenna for you. Even so,
> you'd still be better off using a 'mobile'
antenna
> rather than the one off of the HT.
> 'Doc

3958. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 05:43:10 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a5f760pmv1@bob.news.rcn.net>
Source record: 147795

"Jim Ek" <jim-ek@worldnet.att.net> wrote:

> I don't have test equipment like SWR meter,
> impedance checking meter whatever.

Every ham should have an SWR meter.

> Currently I am overwhelmed with information
> regarding antennas. Folks have offered what sound
> like good suggestions, however, with terms and
> technology I don't understand at this juncture. I
> basically just want something that will enable me
> to enjoy using my HT while pedaling my trike -
> right now-.

Most HT antennas do not work well when they
are not connected directly to the radio because the
radio itself is part of the ground plane. Those of us
who enjoy "bicycle mobile" have better luck with
antennas that do not require a ground plane. Comet
now makes a mobile antenna that has a spring on it
yet is an end-fed (half-wave) antenna on two meters.

Of course, it is a different story on HF. The only HF
that I ever did from the bike was on ten meters, and
let's just say that it is a good thing that the HTX-100
is pretty tolerant of bad matches.

For more info on being "bicycle mobile," see:
http://www.lafetra.com/BMHA

> Then later develop a better antenna.
> I live is a very hilly area. It seems that if I
> construct something or modify (like a mobile whip
> and add a ground plane) it would be a beneficial
> to check it out with appropriate test equipment.

Of course, but there is little worry with the newer
"no ground plane" antennas.

> <Hmmm I wonder what folks did before the MFJ - 259B or whatever.>

We used our SWR meters and took lots of data points,
but I am glad to have my MFJ-259, especially for HF.
Note that the position of your body on the bike will
greatly affect your antenna's performance in many ways.

> It seems like at this point and without any test
> equipment (except a $15.00 Radio Shack LCD
> multi-meter), the best solution is just to take
> the antenna that I have on the HT move it up in
> location (approximately 5 feet above the surface
> of the road and 2 feet above my head).

That will work very poorly as described above.

> I could
> then keep the HT on my belt and safely use it.

It is not safe to be tethered to the bike by coax!
1/8" connectors are one thing, but your belt could
stay *very* connected to your bike in the event of
a mishap. If you insist on doing this, at least have
in-line some phono-type coax connectors. Yikes!

> That is unless, it would negatively impact the
> radio. Then in the interim I could study the ARRL
> Antenna book, figure out how sophisticated I want
> to be with antennas. Then purchase the equipment
> that will fit the parameters I name.

That's a great book. Just make sure that you get the
SWR meter soon.

3959. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 05:55:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C7B2350.E700144A@eznec.com>
Source record: 147796

I suggest that you begin with a simple and inexpensive SWR meter. This will tell you if the antenna you construct or buy presents a reasonable impedance to the HT. If it doesn't, the HT won't deliver full power to it. Beyond that, you're best off testing your experimental antennas under actual conditions, on the road. It'll be hard to beat something like a ground plane or J pole. Either of these might be improved by adding a couple of baluns, one at the feedpoint and another about a quarter wavelength below, but then again they might not -- it depends on the feedline length, ultimate path to ground, and how the feedline is oriented relative to the antenna. So experimentation is best. Listen to repeaters or simplex stations as you travel. In a lot of cases, you'll hear a chopping noise, often called "picket fencing", which is due to the same signal reaching you by various routes, some longer than the other, and all interfering with each other. You'll find that this will be worse on some antennas than others. Try talking to various repeaters, and see how the antennas compare. All else being equal, height will help, so put the antenna up as high as you practically can. RG-58 is perfectly adequate for a feedline.

For a commercial antenna, I like a half wave, like the AEA Hot Rod, for this kind of job. I know MFJ makes a similar antenna, and some other manufacturers do also. You could homebrew one, but the matching network is probably not for a beginner. The nice thing about a half wave antenna is that a ground plane isn't needed.

Roy Lewallen, W7EL

Jim Ek wrote:
>
> I don't have test equipment like SWR meter,
> impedance checking meter whatever.
>
> Currently I am overwhelmed with information
> regarding antennas. Folks have offered what sound
> like good suggestions, however, with terms and
> technology I don't understand at this juncture. I
> basically just want something that will enable me
> to enjoy using my HT while pedaling my trike -
> right now-. Then later develop a better antenna.
> I live is a very hilly area. It seems that if I
> construct something or modify (like a mobile whip
> and add a ground plane) it would be a beneficial
> to check it out with appropriate test equipment.
>
> <Hmmm I wonder what folks did before the MFJ -

> 259B or whatever.>
>
> It seems like at this point and without any test
> equipment (except a $15.00 Radio Shack LCD
> multi-meter), the best solution is just to take
> the antenna that I have on the HT move it up in
> location (approximately 5 feet above the surface
> of the road and 2 feet above my head). I could
> then keep the HT on my belt and safely use it.
> That is unless, it would negatively impact the
> radio. Then in the interim I could study the ARRL
> Antenna book, figure out how sophisticated I want
> to be with antennas. Then purchase the equipment
> that will fit the parameters I name.
>
> Have Trike, will Travel,
>
> Jim Ek - KB9VEZ
> Bloomington, IN
>
> "'Doc" <w5lz@icok.net> wrote in message
> news:3C7AEECF.B5CA6941@icok.net...
> > Jim,
> > If the antenna on you HT is removable, why
> not just
> > mount another antenna on the trike (not the HT's
> antenna).
> > It seems like it would be much simpler...
> > 'Doc

3960. Re: Stainless steel tubing for elements & boom for UHF antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 06:39:20 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a5faio$t99$3@quark.scn.rain.com>
Source record: 147797

Richard Harrison <richardharrison@webtv.net> wrote:

> Connect output from the booster to the TV with a shielded coax cable.

This is the only place where there is a problem. The booster is best
placed at the antenna, not near the receiver. But I don't know if there
are boosters with the proper impedance available.

--
Bill Nelson (billn@peak.org)

3961. Digital Communications : Modulation Recognition and Classification

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 08:01:59 UTC
From: john_james@email.com
Message-ID: <237340ff.0202260001.42dab682@posting.google.com>
Source record: 147798
Cross-posted to: comp.jobs,sci.research.postdoc,sci.electronics.design,rec.radio.amateur.antenna,misc.jobs.offered

Hi,
I am looking forward an expert in Modulation Recognition and
Classification of Digital Signals. A practical guide, cooperation or
any other information will be welcomed.
I hope to hear from you soon.
We can pay for any valuable practical help.
Bests,
John

3962. Re: Need 40/80M Antenna Advice

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 10:00:29 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202260200.786cf329@posting.google.com>
Source record: 147799

Richard Lubash <2k-plus@2k-plus.com> wrote in message news:<23022002154949426 5%My question, would either of these be an improvement
> (receive & transmit) over my existing antennas or if not any
> suggestions that don't involve stringing long lengths of wire through
> the dense foliage.
>
> Thanks,
>
>
> Richard / N1VXW

You don't mention the distances you want to work. For regional work on 40/80, a regular old coax fed dipole will outdo either of the antennas you have now. Probably the most difference on 80m. For DX, a vertical can be good, but you have to consider a good radial system if you really want it to work well. I'd probably go the HF2V of those two. It's fairly proven on 80/40. It's a full 1/4 wave on 40m at 32 ft tall, and it can work 160 and 30 with add on kits. But if you just want better reports within 1000 miles, I'd switch to dipoles instead of the slopers, etc. You could also shunt feed the tower as a vertical. That would be a fairly low cost route that should outdo the HF2V on 80m. MK

3963. Re: building a ground plane antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 10:40:07 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202260240.2fb03950@posting.google.com>
Source record: 147800

tucansam@whodis.org wrote in message news:<a59aafmvl1@reader2.panix.com>...
> Hi everyone.
>
> This is my first dive into antenna building, thus I am very green. Please
> forgive the simplistic nature of my questions.
>
> I am trying to build an antenna to grab 118.5Mhz, the tower frequency of
> an airport about 17 miles from me. I have a stick of PVC and some RG58
> and want to build a simple, vertical ground plane (based on a response I
> got to a previous post).
>
> I have one now cut to 26" and it performs reasonably well in grabbing
> stuff out of the air that my rubber duck never got. But I still can't get
> the tower.
>
> Rather than cutting the coax to the center of the band I want to get, can
> I cut it to 1.97 ft (243/118.5) and hope to get any better gain?
>
> If that doesn't work my next attempt will likely be a directional yagi, so
> I'll probably be back :)

I'm not sure, but it sounds like you are neglecting radials. You need
1/4 wave radials to act as the lower half of the ground plane. They
also act to decouple the feedline from the antenna. Without radials,
the coax can radiate and skew the pattern upwards off the horizon.
This effect will show on transmit and receiving. Adding radials, and
better decoupling could greatly improve the performance of the antenna
if you are not using them now. I'm not sure how you made that one, but
I often make small VHF ground planes from SO-239 connectors.
You can use stiff thick wire, or thin rod as the elements. With the 4
mounting holes, you have an easy way to connect four radials. I
usually slope them downwards at 45 degrees. It sounds like you may
well need a yagi for good reception. 3 elements mounted vertical would
likely do the trick. Very easy to make for the air band. As far as
gain and efficiency, I consider them two different animals. Gain is
the manipulation of an antenna pattern to increase effective power on
one direction over another. Any time you have gain in one direction
you must have a decrease of gain in another. Efficiency is the amount
of power that is radiated by an antenna vs losses. Loading,
matching,ground, or otherwise. You also have feedline and connection
losses. All these combine to calculate the ERP or effective radiated
power. You can have an antenna with 10 db gain, but if you lose 85% of
your power in the matching device, no bueno. Not to worry about the
simple ground plane for VHF. At any decent height above ground , one

with 4 radials will be very efficient. It has little gain, but what gain it does have is at a low angle if it's a few feet up. If a well decoupled ground plane doesn't cut it, make a 3 or 4 el yagi. Sounds like it may be kind of a weak tower. Not all are equal. MK

3964. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 11:55:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5ftm4$73r1p$1@ID-124126.news.dfncis.de>
Source record: 147801

Were there any 259's about when the book was written?

3965. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 12:18:57 UTC
From: k1bqt@aol.com
Message-ID: <20020226071857.16945.00000553@mb-co.aol.com>
Source record: 147802

Hi Kevin--

Bullseye! I know we've got more literature on the Lindenblad at work, so I'll take a look. Two meters is pretty close to the airband--the design in the article might scale with minimum of effort...

Thanks!

Rick K1BQT

3966. Re: 6 MTR ANTENNA?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 12:48:23 UTC
From: rsdalton1 <rsdalton1@earthlink.net>
Message-ID: <ruLe8.17262$0C1.1522997@newsread1.prod.itd.earthlink.net>
Source record: 147803

If you intend to use it mobile or base,you can always put a bnc connector on
it,I used to do this with my ht
"marvin rosen" <raghead@worldnet.att.net> wrote in message
news:dnDe8.14956$Im1.1008775@bgtnsc05-news.ops.worldnet.att.net...
> are there 6 mtr antennas specifically made for use with an ht? it must
have
> a bnc connector.
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02
>
>
>

3967. Re: Stainless steel tubing for elements & boom for UHF antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 13:22:49 UTC
From: richardharrison@webtv.net
Message-ID: <11787-3C7B8C29-234@storefull-114.iap.bryant.webtv.net>
Source record: 147804

Bill Nelson wrote:
"But I don`t know if there are boosters with the proper impedance
available."

Joe already has the booster. I am guessing it is like most consumer
boosters. It may be in a box like a tuna tin with two or more "F"
connectors and a power cord emerging. The "F" connectors are supposed to
be 75-ohms, in and out.

Best regards, Richard Harrison, KB5WZI

3968. Re: Stainless steel tubing for elements & boom for UHF antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 13:51:04 UTC
From: richardharrison@webtv.net
Message-ID: <29201-3C7B92C8-244@storefull-115.iap.bryant.webtv.net>
Source record: 147805

Oh! Before I`m chided for forgetting an important element: Supply 117 volts a-c, more or less, through its attached line-cord to the booster.

Best regards, Richard Harrison, KB5WZI

3969. Re: antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 14:36:06 UTC
From: KAZeringue <kazeringue@aol.com>
Message-ID: <3C7B9F34.3000204@aol.com>
Source record: 147806

Protect the joints/connections, and you should be okay. If they corrode
or oxidize, you'll notice the SWR change.

3970. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 14:44:57 UTC
From: richardharrison@webtv.net
Message-ID: <28174-3C7B9F69-534@storefull-116.iap.bryant.webtv.net>
Source record: 147807

EHS, Jr. wrote:
"How the hell is this thing supposed to work?"

I don`t have my copy of Orr`s handbook handy. But 6000-ohm loads are possible as are 50-ohm sources. To match these, a "Q-section", quarter-wave transformer, may be used. Impedance needed for the matching "Q-section" is the square root of the product of the end impedances.

50x6000 = 300 000, sq rt 300 000=547.7ohms, as EHS, Jr. calculated.

That may be close enough to 300 ohms for an appropriate impedance transformation in the case of this"T" antenna. I don`t have the required information , but decided that on this newsgroup, that`s customarily no inhibition.

Best regards, Richard Harrison, KB5WZI

3971. Re: older browers and loss of business

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 17:05:47 UTC
From: alex@localhost.localdomain
Message-ID: <slrna7ng8a.m2b.alex@homer.linux1.lan>
Source record: 147808

On <JM001.Harvey@sympatico.ca> wrote:
> "Wes Stewart"
>> | > Where I live the best I can get is a 28.8K dialup
>> | > connection. (No cable, no DSL, no Sprint)
>> | http://www.direcpc.com/index2.html
>> No uplink.
>
> No uplink ???? Click on "-How it works". You can use your dialup modem
> for the "uplink", or get the 2-way DirectPC.
>

Uplink is still via telephone, and where I live that means about 28k max.

Also, having used a satellite system, there is considerable lag time between requesting a page and actually showing it on the screen. For simple pages, the 28k phone system is sometimes much faster.

3972. Re: older browers and loss of business

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 19:19:53 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <tdRe8.354$lx4.256@nwrddc03.gnilink.net>
Source record: 147809

Thank you - seems some fellas like to offer complex and expensive soulutions to relatively simple
problems... Or else just be smart asses...

I too live in the country, hardly EVER connect at better tha 26.4 - I'd love something lots faster,
and would spend a LITTLE more to get it (I *do* have other priorities in my life other than
Internet!) - but so far, there's nothing that really provides a simple and inexpensive solution...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

"Alex Flinsch" <alex@localhost.localdomain> wrote in message
news:slrna7ng8a.m2b.alex@homer.linux1.lan...
> On <JM001.Harvey@sympatico.ca> wrote:
> > "Wes Stewart"
> >> | > Where I live the best I can get is a 28.8K dialup
> >> | > connection. (No cable, no DSL, no Sprint)
> >> | http://www.direcpc.com/index2.html
> >> No uplink.
> >
> > No uplink ???? Click on "-How it works". You can use your dialup modem
> > for the "uplink", or get the 2-way DirectPC.
> >
>
> Uplink is still via telephone, and where I live that means about 28k max.
>
> Also, having used a satellite system, there is considerable lag time between
> requesting a page and actually showing it on the screen. For simple pages,
> the 28k phone system is sometimes much faster.

3973. Re: antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 22:21:38 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <STTe8.14721$s03.428828@news2.east.cox.net>
Source record: 147811

You can always give a few coats of clear plastic spray -- that will give it
a few
years protection.

Peter

"rsdalton1" <rsdalton1@earthlink.net> wrote in message
news:eQye8.15925$0C1.1379066@newsread1.prod.itd.earthlink.net...
> Assuming I'm using copper tubing in beam construction,would you think
> the green corrosion,would degrade
> the electrical properties,and cause swr adjustment problems?
>
>

3974. Laugh for the day

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 22:24:42 UTC
From: yeroca@yahoo.com
Message-ID: <399c6e3a.0202261424.63e6eff3@posting.google.com>
Source record: 147810

These guys at Techno Scout, aka. Comtrad are the biggest slingers
of techno-bull I've ever seen.

Take a look at this web site for your daily load of techno babble.

http://www.technoscout.com/general/product/product.asp?product=125&Prod_Name=Xium_Antenna&
site=85515.

- Corey

3975. Re: Laugh for the day

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 22:36:29 UTC
From: Screaming Skull <KG4IVT@hot.mail.spicedmeat.sucks.leave.me.alone.com>
Message-ID: <N5Ue8.51695$nr.22898267@typhoon.southeast.rr.com>
Source record: 147812

It's a damned conspiracy! If they get everyone using small antennas and
cable TV there will be no need for outside antennas anymore.

Think about it..........

;-)

"Corey" <yeroca@yahoo.com> wrote in message
news:399c6e3a.0202261424.63e6eff3@posting.google.com...
> These guys at Techno Scout, aka. Comtrad are the biggest slingers
> of techno-bull I've ever seen.
>
> Take a look at this web site for your daily load of techno babble.
>
>
http://www.technoscout.com/general/product/product.asp?product=125&Prod_Name
=Xium_Antenna&site=85515.
>
> - Corey

3976. Re: Laugh for the day

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 22:37:31 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <L6Ue8.14732$s03.430502@news2.east.cox.net>
Source record: 147813

Good god, click on the URL and get fed a mouthful of cookies to boot!!

Sheesh!!

Peter

"Corey" <yeroca@yahoo.com> wrote in message
news:399c6e3a.0202261424.63e6eff3@posting.google.com...
> These guys at Techno Scout, aka. Comtrad are the biggest slingers
> of techno-bull I've ever seen.
>
> Take a look at this web site for your daily load of techno babble.
>
>
http://www.technoscout.com/general/product/product.asp?product=125&Prod_Name
=Xium_Antenna&site=85515.
>
> - Corey

3977. Re: older browers and loss of business

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 22:53:00 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a5h3kb0u3u@enews2.newsguy.com>
Source record: 147815

check out isdn access. that is all that is available out here in the sticks
in way western mass. distance from office are similar to dsl but many more
offices offer the service.

"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:tdRe8.354$lx4.256@nwrddc03.gnilink.net...
> Thank you - seems some fellas like to offer complex and expensive
soulutions to relatively simple
> problems... Or else just be smart asses...
>
> I too live in the country, hardly EVER connect at better tha 26.4 - I'd
love something lots faster,
> and would spend a LITTLE more to get it (I *do* have other priorities in
my life other than
> Internet!) - but so far, there's nothing that really provides a simple and
inexpensive solution...
>
> --
> Gary - KJ6Q
> **********
> Two things we'll never see:
> 1. Perpetual motion...
> 2. A liberal Democrat complaining
> about "Too much government"
>
> "Alex Flinsch" <alex@localhost.localdomain> wrote in message
> news:slrna7ng8a.m2b.alex@homer.linux1.lan...
> > On <JM001.Harvey@sympatico.ca> wrote:
> > > "Wes Stewart"
> > >> | > Where I live the best I can get is a 28.8K dialup
> > >> | > connection. (No cable, no DSL, no Sprint)
> > >> | http://www.direcpc.com/index2.html
> > >> No uplink.
> > >
> > > No uplink ???? Click on "-How it works". You can use your dialup
modem
> > > for the "uplink", or get the 2-way DirectPC.
> > >
> >
> > Uplink is still via telephone, and where I live that means about 28k
max.
> >
> > Also, having used a satellite system, there is considerable lag time
between

> > requesting a page and actually showing it on the screen. For simple
pages,
> > the 28k phone system is sometimes much faster.
>

3978. Re: Magnetic antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 23:34:14 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C7C1B6F.CF6A0409@shaw.ca>
Source record: 147816

Tomasz Cudny wrote:
>
> I am looking for information about magnetic loop antennas. Please email me
> cudtom@poczta.onet.pl
> best regarts
> Tomasz

Do a search on Yahoo or Google -- then look for the AA5TB
antenna site. You
will find everything you need to know including photos and
good links.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3979. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-26 23:58:34 UTC
From: paul <kelley.pf@verizon.net>
Message-ID: <KiVe8.1645$E11.333@nwrddc02.gnilink.net>
Source record: 147817

No the com VHF band is from 118.000 to 139.995 mhz AM generally 25khz steps but in 2006 it will be 8.33 khz steps also the Military freq is 225.000 to 399.995 Mhz. The middle of the band is 121.5 mhz (also the emergency frequency 121.5 , 243.000 mil). If the run from the antenna (a disk cone would be best for this purpose , and it's cheap) could be RG-58 or better RG-8 but if the run is a hundred or more feet TMR-400 (I think that's 9913 but don't quote me) would be better. If the Airodrome he is trying to lisen to is a larger airport the Altitude of the base transmitting station will usually be elevated , ie a tower , and have a 50Watt TX but if it's a small field it may be lower and have a power of only 3 to 10 Watts. You can see this is a bigger problem. Also Obstructions like mountains can make a big difference. The answer is not to simple .

"Jim Weir" <jim@rst-engr.com> wrote in message
news:u7b3acl1du70b0@corp.supernews.com...
> Why would you cut it for the middle of the NAV band when he is trying to
> receive COM signals? The center of the COM band is 127.5 MHz..
>
> Jim
>
>
>
> "SAM" <xxscottm@xxnetcommander.comxx> wrote in message
> news:v1fd8.143929$Aw2.10158626@bin7.nnrp.aus1.giganews.com...
> > Sure,
> >
> > I would just build a J pole cut for about 115 MHz. and feed it with
some
> > RG58. Should work great.
>
>
>
>
>

3980. DRAKE MN2000 TUNER SWAP.....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 00:47:13 UTC
From: NI4L <ni4l@charter.net>
Message-ID: <3C7C2C91.ED25FDED@charter.net>
Source record: 147818

Would like to swap MN2000 for Dentron tuner. have dentron amp and would
like dentron tuner. I have manual also pic.
thanks ni4l

--

NI4L CUSTOM RESONANT DIPOLE
LEGAL LIMIT ++ CUSTOM MADE CENTER FED DIPOLE
Made with the same components used by our military forces today
Custom made to YOUR FREQUENCY of operation
Let me take the hassle out of making a RESONANT DIPOLE for you.
Click here for more info... <http://www.angelfire.com/nb/ni4l/>

3981. Re: Call Sign as your Dot.com name $11.95

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 00:58:52 UTC
From: "J. Duffy Beischel" <duffyb01@fuse.net>
Message-ID: <1103_1014771532@news.fuse.net>
Source record: 147819
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.morse,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Well in a sense, when you use EZ-DomainNameRegistration.com you are using GoDaddy. EZ is just a reseller of
GoDaddy. He just marks everything up by $3.00 or so. Go to www.godaddy.com and you can get the EXACT same
thing for a few bucks less.

On Mon, 25 Feb 2002 01:31:04 -0800, "Wayne" <wayneleake@wayneleake.net> wrote:
> I register many domains of my own, all at a cheaper cost of $8.95 or less
> per year.
> And I use www.godaddy.com for mine, which is less than what you charge.
> BTW, why is this crossposted to so many groups anyway?
> I don't do business with spammers, and I class you there.
>
> "News Editor" <news@ez-domainnameregistration.com> wrote in message
> news:u7j4vj5c9p2b9e@corp.supernews.com...
> > You're correct Charles... if you need domain forwarding, our fee is more
> than
> > you might pay at others... but then you don't get our outstanding,
> personalized
> > support. And, you forgot to mention that our registration fee of $11.95
> is
> > $4.05 cheaper than the other company... if you don't need forwarding, why
> pay
> > more?
> > www.Ez-DomainNameRegistration.com
> >
> > > Hello News Editor,
> > > I have used domain forwarding for years and it is very useful. However
> > > I pay only $16 / year for the domain registration, the email forwarding,
> > > URL forwarding, full-frame forwarding, toll-free tech support, domain
> > > parking, and full-featured DNS....all found at.....
> > > http://www.buydomains.com/
> > >
> > > Your price (from your site) is $23. IMHO if smart people shop around
> > > for these kinds of services they won't be contacting you.....your
> > > competition has already got you whipped but good.....
> > >
> > > --
> > >
> > > 73 / DX
> > >
> > > Charles T Johnston
> > > Prescott, Arizona - U.S.A.

> > > charles@ab7sl.com
> > >
> > > AB7SL - Ham Radio Pages
> > > Official W9INN Antennas Page
> > > www.ab7sl.com
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>
>

J. Duffy Beischel - Amateur Radio WB8NUT - www.wb8nut.com

Member of: ARRL, NRA, Kiwanis, Republican Party, Masons, and Shriners
and the vast Right Wing conspiracy to get the Clintons

"If the government owned all the guns, would we still be a free people?"

3982. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 01:35:47 UTC
From: ricknj10@hotmail.com
Message-ID: <3c7c36f7.302887083@news.eclipse.net>
Source record: 147820
Cross-posted to: rec.radio.amateur.antenna,rec.ham-radio,alt.ham-radio

>But I like having enough land around my
>>house so I can hoot, holler, shoot spuds in the air and keep animals
>>without annoying my neighbors...

And the best part - while you are out in your field working on your
antennas, and you have to take a leak, you don't have to go all the
way back to the house.
At this QTH - 7 acres, fields, woods, tower, no CC&Rs, no neighbors,
no XYL, no problems.

Rick K2XT

3983. Re: Laugh for the day

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 01:42:30 UTC
From: babel@fish.org
Message-ID: <q3eo7ug9eqel4p0sg7fgpdvehl7bcuddsb@4ax.com>
Source record: 147821

On 26 Feb 2002 14:24:42 -0800, yeroca@yahoo.com (Corey) wrote:

>These guys at Techno Scout, aka. Comtrad are the biggest slingers
>of techno-bull I've ever seen.
>
>Take a look at this web site for your daily load of techno babble.
>
>http://www.technoscout.com/general/product/product.asp?product=125&Prod_Name=Xium_Antenna
&site=85515.
>
>- Corey

I remember that my parents had a similar device attached to their RCA shortwave set. It was a black cylinder, _thoroughly_ potted with some hard, black substance with #16 stranded leads and a thumbscrew on the case labeled 'Ground'. The thing disappeared years ago, probably disassembled by one of my brood. I do remember the marked improvement in reception when it was attached to the radio, so it apparently worked.

3984. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 01:47:24 UTC
From: VE3TMT <ve3tmt@rac.ca>
Message-ID: <OUWe8.4787$it5.1704168@news20.bellglobal.com>
Source record: 147822
Cross-posted to: rec.radio.amateur.antenna,rec.ham-radio,alt.ham-radio

> At this QTH - 7 acres, fields, woods, tower, no CC&Rs, no neighbors,
> no XYL, no problems.
>
> Rick K2XT

I we could all be so lucky..

At this QTH - 1 backyard, two kids, 1 XYL. a cat and one hidden HF antenna!!

3985. Re: Laugh for the day

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 01:54:43 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <C%We8.10748$tA.1718538@news20.bellglobal.com>
Source record: 147823

<babel@fish.org> reported:
> It was a black cylinder, _thoroughly_ potted with some
> hard, black substance with #16 stranded leads and a
> thumbscrew on the case labeled 'Ground'.

Ah, the world-famous ACME 'Portable Ground'. And some people thought that I
was just kidding...

3986. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 02:13:43 UTC
From: k1bqt@aol.com
Message-ID: <20020226211343.11000.00000816@mb-fj.aol.com>
Source record: 147824

> TMR-400 (I think that's 9913 but don't quote me)<

Dielectric is different. 9913 uses air-spaced poly (that spiral stuff) and LMR-400 is foam poly. LMR is supposedly less lossy at higher frequencies (and, from my experience, acts less like water hose).

>The middle of the band is 121.5 mhz<

Check your math--Jim is right.

BTW, looked at the roof of MHT and the FAA center in Nashua, NH today and didn't see any VHF Lindys or spiral-wound biconals. Just good old verticals. Got to ask a friend who's an FAA tech if they're usning them around here.

Rick K1BQT

3987. Re: Laugh for the day

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 02:19:14 UTC
From: VE3TMT <ve3tmt@rac.ca>
Message-ID: <FmXe8.74268$JZ.9054512@news20.bellglobal.com>
Source record: 147825

"Corey" <yeroca@yahoo.com> wrote in message
news:399c6e3a.0202261424.63e6eff3@posting.google.com...
> These guys at Techno Scout, aka. Comtrad are the biggest slingers
> of techno-bull I've ever seen.
>
> Take a look at this web site for your daily load of techno babble.
>
>
http://www.technoscout.com/general/product/product.asp?product=125&Prod_Name
=Xium_Antenna&site=85515.
>
> - Corey

Multiple Spilateral....sounds like some kind of emergency surgery. Rank it
right up there with those little round dishes you used to sit on top of the
tv set. Wonder if it mounts with a 3/8-24 thread??

3988. WANTED: your suggestions on 2m/70cm directional antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 02:21:45 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0202261821.11b473bd@posting.google.com>
Source record: 147826

I am debating which 2m/70cm directional antenna to buy.

The URLs for the products are:
http://www.arrowantennas.com/146-437.html
http://www.cushcraft.com/amateur/details.asp?catid=183
http://www.mfjenterprises.com/products.php?prodid=MFJ-1768

I'm not familiar with directional antennas or satellite communications, so I need your help. I'm looking for a compact directional antenna with plenty of gain, and while I haven't tried satellite communications, I would like to try at some point in my ham career. (I already have good omnidirectional antennas.)

What are the pros and cons of these three compact 2m/70cm antennas? I am leaning towards the Arrow II Satellite Antenna, as it has excellent reviews on eham.net, has a handle for portable operation, and promises satellite capability. (I assume the latter is made possible by the optional duplexer.) In other words, it seems to perform at least as well (I may be wrong) as the other two with much more versatility. Is there any reason one would prefer the MFJ or Cushcraft? Are there other options I should consider?

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

3989. Re: Laugh for the day

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 04:10:06 UTC
From: Fred Hambrecht <w4jle@charter.net>
Message-ID: <u7on13id0vl592@corp.supernews.com>
Source record: 147827

Sounds like it may violate one or more of Chips patents, the description is very close to the claims made for fractal antennas. The working theory is everybit as obtuse as the claims from New England.

> These guys at Techno Scout, aka. Comtrad are the biggest slingers
> of techno-bull I've ever seen.
>
> Take a look at this web site for your daily load of techno babble.
>
>
http://www.technoscout.com/general/product/product.asp?product=125&Prod_Name=Xium_Antenna&site=85515.
>
> - Corey

3990. what is the 'best way' to do this? cl.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 04:59:51 UTC
From: kc5cqa@yahoo.com
Message-ID: <3c7d6786.2861461@news.devtex.net>
Source record: 147828

First let me tell you I am trying to do this as cheap as possible. I bought a little dig camera the other day, and I have really enjoyed taking pics with it,,, but , (there is always a but), I have to buy a battery for it about every 85 pictures. It is a 123 3 volt lithium battery ,pilelithium. And they cost about two for 11$. What I would like to do is 'rig' up a power source, maybe 12 or 6 volts and then 'divide' it down to the needs of the camera. A while back I 'had' something , kind of like a wall wart except it had varibale voltages , and you could 'swap' the positive and negtive poles. I have a couple of 'mixed' ideas, but hope you can clarify what I need. I hope you can 'see' what I am trying to say. hihi. thanks in advance. cl. 73

3991. Re: what is the 'best way' to do this? cl.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 06:47:03 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7C80E1.6EFACDC5@icok.net>
Source record: 147829

CL,
The hard part would be to find/make an adaptor to fit
in the battery compartment. From there, just run a line
to a 'bat-pack' of whatever kind of batteries you have,
wired so that you have 3 volts output. Ten 'D' cells in
parallel, connected in series with ten more 'D' cells in
parallel, should last awhile. And Eveready will love you!
'Doc

3992. Re: Laugh for the day

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 08:05:01 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <2F008052F3ABD5A5.D2164E02A93EFC0F.3735667C56370D54@lp.airnews.net>
Source record: 147830

On Tue, 26 Feb 2002 21:19:14 -0500, "VE3TMT" <ve3tmt@rac.ca> wrote:

>Multiple Spilateral....sounds like some kind of emergency surgery.

I think it sounds more like what the cat does if we forget to clean
the litterbox for a week or so...if it can get that sort of coverage,
it may be useful.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

3993. Re: what is the 'best way' to do this? cl.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 08:09:47 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <097D377BB46FBDD8.4FFD64B30445EC8E.B60BB3D0E2257123@lp.airnews.net>
Source record: 147831

On Wed, 27 Feb 2002 06:47:03 GMT, 'Doc <w5lz@icok.net> wrote:

> The hard part would be to find/make an adaptor to fit
>in the battery compartment. From there, just run a line
>to a 'bat-pack' of whatever kind of batteries you have,
>wired so that you have 3 volts output. Ten 'D' cells in
>parallel, connected in series with ten more 'D' cells in
>parallel, should last awhile. And Eveready will love you!

Do it with, say, 4 pairs of NiMH AAs, and you should be able to get
good life and rechargeability.

Buy a bunch of the 2AA holders at Rat Shack, wire them in parallel,
load them up with Rayovac or Energizer NiMHs, and make yourself a
carrier from a cheap fanny pack. The $20 Rayovac charger will charge
four pairs overnight.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

3994. EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 08:14:49 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a5i4jfqfi1@newsserver.cilea.it>
Source record: 147832

February has gone, and despite the January's claims that "some interesting results are going to be published soon" Re the Medium Wave tests, the EH Antenna Web Site is still silent... does anyone know what Ted Hart has been doing on that antenna recently ?

Michele IZ2EAS

3995. Re: MIRACLE ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 08:21:26 UTC
From: Bob G4VGO <rmread@attglobal.net>
Message-ID: <3c7c9981_3@news2.prserv.net>
Source record: 147834

It's an all band, portable, small, easy to use DUMMY LOAD!

Bob G4VGO

3996. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 08:22:03 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7p5om69ecl62c@corp.supernews.com>
Source record: 147833

I detect that your native language is not English, so I'll try and lighten up the responses.

"paul" <kelley.pf@verizon.net> wrote in message news:KiVe8.1645$E11.333@nwrddc02.gnilink.net...

> No the com VHF band is from 118.000 to 139.995 mhz AM generally 25khz steps

No sir, the com VHF is from 118.0 to 136.975. Not generally 25 kHz. steps, but REALLY 25 kHz. steps.

> but in 2006 it will be 8.33 khz steps

Only if Europe has enough clout to pull it off. How those idiots got us off the digital divide-by program is beyond me. I do not for one second believe that we will be going to this bastard system.

>The middle of the band is 121.5 mhz (also the emergency
> frequency 121.5

No, sir, the middle of the band is (sqrt ((118^2 + 137^2)/2), or about 127.5 MHz.

>> The answer is not to simple .

The answer is trivially simple. Toss up a vertical dipole and see if you can hear ANYTHING. If you can hear a signal embedded in the noise, a good gain antenna may do something for you. If you hear noise only, nothing I know will help.

Jim

3997. Re: Stainless steel tubing for elements & boom for UHF antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 08:57:40 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a5i724$3oa$5@quark.scn.rain.com>
Source record: 147835

Richard Harrison <richardharrison@webtv.net> wrote:
> Bill Nelson wrote:
> "But I don`t know if there are boosters with the proper impedance
> available."

> Joe already has the booster. I am guessing it is like most consumer
> boosters. It may be in a box like a tuna tin with two or more "F"
> connectors and a power cord emerging. The "F" connectors are supposed to
> be 75-ohms, in and out.

True, but the impedance of the antenna (if I read right) is about 300
ohms, not 75 ohms.

But then I would probably connect an impedance matcher to the antenna
input, the booster to the matcher and the coax to the booster.

The closer the well shielded booster is to the antenna, the better.

--
Bill Nelson (billn@peak.org)

3998. What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 09:04:50 UTC
From: DJ <kb5ylg@attglobal.net>
Message-ID: <3c7ca499_4@news1.prserv.net>
Source record: 147836

When discussing RF safety, many of the calculations refer to a "near field." The only explanation I have found for what this is seems rather vague from the ARRL Antenna Book 17th edition (c) 1996, which describes the "near field on page 1-19 as "an area roughly bounded by several wavelengths of the antenna."

Is there anything more specific...like how many wavelengths?

David KB5YLG

3999. Re: Call Sign as your Dot.com name $11.95

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 09:29:43 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u7p9o9stc089c1@corp.supernews.com>
Source record: 147837
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.morse,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.policy

Hmm, if he resells Godaddy.com, then what shows up when you go to
administer your domains?
I deal with Godaddy directly, and I can change where my domains point at
any time.
There are some registrars that do a bit more for you, but they charge extra
for that service. They just don't tell you about that.

"J. Duffy Beischel" <duffyb01@fuse.net> wrote in message
news:1103_1014771532@news.fuse.net...
> Well in a sense, when you use EZ-DomainNameRegistration.com you are using
GoDaddy. EZ is just a reseller of
> GoDaddy. He just marks everything up by $3.00 or so. Go to
www.godaddy.com and you can get the EXACT same
> thing for a few bucks less.
>
> On Mon, 25 Feb 2002 01:31:04 -0800, "Wayne" <wayneleake@wayneleake.net>
wrote:
> > I register many domains of my own, all at a cheaper cost of $8.95 or
less
> > per year.
> > And I use www.godaddy.com for mine, which is less than what you charge.
> > BTW, why is this crossposted to so many groups anyway?
> > I don't do business with spammers, and I class you there.
> >
> > "News Editor" <news@ez-domainnameregistration.com> wrote in message
> > news:u7j4vj5c9p2b9e@corp.supernews.com...
> > > You're correct Charles... if you need domain forwarding, our fee is
more
> > than
> > > you might pay at others... but then you don't get our outstanding,
> > personalized
> > > support. And, you forgot to mention that our registration fee of
$11.95
> > is
> > > $4.05 cheaper than the other company... if you don't need forwarding,
why
> > pay
> > > more?
> > > www.Ez-DomainNameRegistration.com
> > >
> > > > Hello News Editor,
> > > > I have used domain forwarding for years and it is very useful.
However

> > > > I pay only $16 / year for the domain registration, the email
forwarding,
> > > > URL forwarding, full-frame forwarding, toll-free tech support,
domain
> > > > parking, and full-featured DNS....all found at.....
> > > > http://www.buydomains.com/
> > > >
> > > > Your price (from your site) is $23. IMHO if smart people shop
around
> > > > for these kinds of services they won't be contacting you.....your
> > > > competition has already got you whipped but good.....
> > > >
> > > > --
> > > >
> > > > 73 / DX
> > > >
> > > > Charles T Johnston
> > > > Prescott, Arizona - U.S.A.
> > > > charles@ab7sl.com
> > > >
> > > > AB7SL - Ham Radio Pages
> > > > Official W9INN Antennas Page
> > > > www.ab7sl.com
> > > >
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> >
> >
>
>
>
> --
> J. Duffy Beischel - Amateur Radio WB8NUT - www.wb8nut.com
>
> Member of: ARRL, NRA, Kiwanis, Republican Party, Masons, and Shriners
> and the vast Right Wing conspiracy to get the Clintons
>
> "If the government owned all the guns, would we still be a free people?"
> --
>
>

4000. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 12:59:01 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <pK4f8.6638$mG.33685@rwcrnsc54>
Source record: 147838

>
> Is there anything more specific...like how many wavelengths?

Depends on how much gain the antenna has.

W4ZCB

4001. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 13:49:56 UTC
From: fractenna@aol.com
Message-ID: <20020227084956.17471.00000735@mb-cr.aol.com>
Source record: 147839

>
>When discussing RF safety, many of the calculations refer to a "near field."
>The only explanation I have found for what this is seems rather vague from
>the ARRL Antenna Book 17th edition (c) 1996, which describes the "near field
>on page 1-19 as "an area roughly bounded by several wavelengths of the
>antenna."
>
>Is there anything more specific...like how many wavelengths?
>
>David KB5YLG
>
>

You can look at the near field as the volume (not area) within which the intensity falls as 1/r (where r is distance from radiator) and the far field as the volume--extending out to infinity-- for which the intensity falls as 1/r^2. All in free space, of course.

When we talk about 'communication', there are few examples where the antenna is in the near field. When we talk about 'exposure', it is usually when we are within the near field.Of course, there are always practical exceptions to both, but these are useful rules of thumb.

The transition region is roughly 1/8 wave from the radiation source, for a point source. But gain antennas have non- trivial apertures, or at least 'effective' apertures, so they extend the transition zone often beyond a wavelength or more; much more for a high gain antenna.

A low gain antenna, such as a 1/2 wave dipole, is certainly within the far field when the separation is several wavelengths, say, 3. Of course, the 'pickup' antenna has its own transition region and commonly this antenna is a high gain antenna itself.

Kraus's 'Antennas' has a nice discussion, but I'm afraid I have no ham pub pointers.

73,
Chip N1IR

4002. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 14:03:36 UTC
From: richardharrison@webtv.net
Message-ID: <2146-3C7CE738-16@storefull-113.iap.bryant.webtv.net>
Source record: 147841

Jim Weir wrote:
"Why would you cut it for the middle of the NAV band when he is trying to receive COM signals? The center of the COM band is 127.5 MHz."

Why would you try to make a receive antenna exactly 1/4-wave?

A ground plane or similar vertical antenna which is "too long" gains signal from vertical angle directivity as it grows from 1/4-wave to 5/8-wavelength. That`s a frequency ratio of 2.5 to 1.

A vertical antenna cut for 1/4-wavelength at 100 MHz will increase in gain along the horizontal all the way up to 250 MHz.

In 1949, I worked at a radio station on 1320 KHz. That station operated on a tower built for a 740 KHz station. The 1320 KHz station didn`t suffer from the extra height. In fact, the height was a big benefit to the station. It concentrated the radiation along the horizontal plane which increased the station`s service area.

Today that station is still operating on 1320 KHz on the same tower.

The same directional gain, lowering the vertical radiation angle, would be true for a vertical antenna 1/100th the length and operating at 132 MHz.

A non-resonant antenna is reactive but matching networks fix that and adjust the resistance too.

In a receiving antenna, mismatch reduces signal, but it also reduces noise. At VHF and UHF, there is less noise to reduce. It does help to maximize signal to overpower internal noise at these frequencies in the receiver.

Best regards, Richard Harrison, KB5WZI

4003. FS: Hard to find Bristol Wrench sets

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 14:07:54 UTC
From: jonweiner@aol.com
Message-ID: <20020227090754.09696.00001096@mb-md.aol.com>
Source record: 147840

10 PIECE BRISTOL SPLINE WRENCH SETS FOR COLLINS & HALLICRAFTERS. I have for sale the original hard to find 10 piece Bristol spline wrench sets. These are "L" shaped, made in the USA, and come in a fitted vinyl pouch. Includes all necessary sizes for Collins (even the tiny size for the 75A-4 main tuning knob), Hallicrafters, Johnson and others. Price is $20. per set postpaid USA, $22. postpaid
World-Wide.

4004. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 15:20:27 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <%O6f8.7251$mG.36109@rwcrnsc54>
Source record: 147842

> Kraus's 'Antennas' has a nice discussion, but I'm afraid I have no ham pub
> pointers.

Well I have. The best and most lucid I've ever read, although possibly a little difficult to locate. You might contact the author directly, he's with SETI.

The article is called "The Far-Field Fallacy" and was authored by Dr. H. Paul Shuch, N6TX. It was published in QEX, December 1987.

W4ZCB
If coerced, I could send you a personal copy in .PDF format.

4005. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 15:27:51 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <XV6f8.12483$9o.245076@sccrnsc02>
Source record: 147843

There was an additional input from Gary Coffman KE4ZV 4 years ago tomorrow on this newsgroup. Explicit with radial equations. You might find it in Deja Vu. Gary adds an interesting observation re transverse fields.

W4ZCB

4006. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 15:45:04 UTC
From: SAM <xxscottm@xxnetcommander.comxx>
Message-ID: <4a7f8.224537$d34.16477182@bin8.nnrp.aus1.giganews.com>
Source record: 147844

Harold,

Would it be possible for you to post the PDF version of this article on
alt.binaries.pictures.radio for others to read?
Scott M.

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:%O6f8.7251$mG.36109@rwcrnsc54...
>
>
> > Kraus's 'Antennas' has a nice discussion, but I'm afraid I have no ham
pub
> > pointers.
>
> Well I have. The best and most lucid I've ever read, although possibly a
> little difficult to locate. You might contact the author directly, he's
with
> SETI.
>
> The article is called "The Far-Field Fallacy" and was authored by Dr. H.
> Paul Shuch, N6TX. It was published in QEX, December 1987.
>
> W4ZCB
> If coerced, I could send you a personal copy in .PDF format.
>
>
>

4007. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 15:50:55 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C7D00BB.C43D57B7@bellatlantic.net>
Source record: 147845

Richard Harrison wrote:

> EHS, Jr. wrote:
> "How the hell is this thing supposed to work?"
>
> I don`t have my copy of Orr`s handbook handy. But 6000-ohm loads are
> possible as are 50-ohm sources. To match these, a "Q-section",
> quarter-wave transformer, may be used. Impedance needed for the matching
> "Q-section" is the square root of the product of the end impedances.
>
> 50x6000 = 300 000, sq rt 300 000=547.7ohms, as EHS, Jr. calculated.
>
> That may be close enough to 300 ohms for an appropriate impedance
> transformation in the case of this"T" antenna. I don`t have the required
> information , but decided that on this newsgroup, that`s customarily no
> inhibition.
>
> Best regards, Richard Harrison, KB5WZI

Richard,

Thanks. Apparently, the text just omits the idea that the
transformation afforded by the 1/4 wave section is only
intended to get things "close enough". I received some
E mail, suggesting as much, just as your post does. That
seems reasonable to me - and the impedance at the
feedpoint is within the range of the autotuner.

I still am trying to understand where the figure 6000 ohms
nominal for this antenna comes from. I neither challenge
it nor agree with it - I just don't know. But learning more
is fun! (Frustrating, too.)

4008. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 16:17:48 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <ME7f8.13326$Dv1.49046@rwcrnsc53>
Source record: 147846

> Would it be possible for you to post the PDF version of this article on
> alt.binaries.pictures.radio for others to read?
> Scott M.

Dunno, never have done that. However, if you'd express the interest to Dr. Shuch, I betcha he'd do it if he could. The League may have copyright on it and they get a little touchy about that from time to time.

W4ZCB
Actually, a whole lot touchy and lots more often than I think they should.

4009. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 16:33:40 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <vQh9PEVlWVvm8kPXXNWBrqAsdrip@4ax.com>
Source record: 147847

"SAM" <xxscottm@xxnetcommander.comxx> wrote:

>Harold,
>
>Would it be possible for you to post the PDF version of this article on
>alt.binaries.pictures.radio for others to read?
>Scott M.

If you're an ARRL member, the article is available at
http://www.arrl.org/tis/info/antheory.html

Bob
k5qwg

>
>"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
>news:%O6f8.7251$mG.36109@rwcrnsc54...
>>
>>
>> > Kraus's 'Antennas' has a nice discussion, but I'm afraid I have no ham
>pub
>> > pointers.
>>
>> Well I have. The best and most lucid I've ever read, although possibly a
>> little difficult to locate. You might contact the author directly, he's
>with
>> SETI.
>>
>> The article is called "The Far-Field Fallacy" and was authored by Dr. H.
>> Paul Shuch, N6TX. It was published in QEX, December 1987.
>>
>> W4ZCB
>> If coerced, I could send you a personal copy in .PDF format.
>>
>>
>>
>

4010. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 16:34:27 UTC
From: wright2113cropp@aol.com
Message-ID: <20020227113427.16967.00000820@mb-dd.aol.com>
Source record: 147848

make sure the coax is the same feet or u will have problem with the swr i had the problem in my car with the coax being to short

4011. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 16:37:08 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <UW7f8.7746$mG.35172@rwcrnsc54>
Source record: 147849

> If you're an ARRL member, the article is available at
> http://www.arrl.org/tis/info/antheory.html

Mni Tnx Bob, that's the one, I had not gone to the site to check on availability.

W4ZCB

4012. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 16:52:15 UTC
From: DJ <kb5ylg@attglobal.net>
Message-ID: <3c7d1228_4@news1.prserv.net>
Source record: 147850

Or alt.ham-radio.binaries
??/

"SAM" <xxscottm@xxnetcommander.comxx> wrote in message
news:4a7f8.224537$d34.16477182@bin8.nnrp.aus1.giganews.com...
> Harold,
>
> Would it be possible for you to post the PDF version of this article on
> alt.binaries.pictures.radio for others to read?
> Scott M.
>
> "Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
> news:%O6f8.7251$mG.36109@rwcrnsc54...
> >
> >
> > > Kraus's 'Antennas' has a nice discussion, but I'm afraid I have no ham
> pub
> > > pointers.
> >
> > Well I have. The best and most lucid I've ever read, although possibly a
> > little difficult to locate. You might contact the author directly, he's
> with
> > SETI.
> >
> > The article is called "The Far-Field Fallacy" and was authored by Dr. H.
> > Paul Shuch, N6TX. It was published in QEX, December 1987.
> >
> > W4ZCB
> > If coerced, I could send you a personal copy in .PDF format.
> >
> >
> >
>
>

4013. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 17:29:16 UTC
From: SAM <xxscottm@xxnetcommander.comxx>
Message-ID: <MH8f8.224694$d34.16523393@bin8.nnrp.aus1.giganews.com>
Source record: 147851

Thanks Bob. I am and I found it.
Scott M.
KA1MRO

"Bob Miller" <bamiller@texas.net> wrote in message
news:vQh9PEVlWVvm8kPXXNWBrqAsdrip@4ax.com...
> "SAM" <xxscottm@xxnetcommander.comxx> wrote:
>
> >Harold,
> >
> >Would it be possible for you to post the PDF version of this article on
> >alt.binaries.pictures.radio for others to read?
> >Scott M.
>
> If you're an ARRL member, the article is available at
> http://www.arrl.org/tis/info/antheory.html
>
> Bob
> k5qwg
>
>
>
> >
> >"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
> >news:%O6f8.7251$mG.36109@rwcrnsc54...
> >>
> >>
> >> > Kraus's 'Antennas' has a nice discussion, but I'm afraid I have no
ham
> >pub
> >> > pointers.
> >>
> >> Well I have. The best and most lucid I've ever read, although possibly
a
> >> little difficult to locate. You might contact the author directly, he's
> >with
> >> SETI.
> >>
> >> The article is called "The Far-Field Fallacy" and was authored by Dr.
H.
> >> Paul Shuch, N6TX. It was published in QEX, December 1987.
> >>
> >> W4ZCB
> >> If coerced, I could send you a personal copy in .PDF format.

> >>
> >>
> >>
> >
>
>

4014. Re: Stainless steel tubing for elements & boom for UHF antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 17:48:06 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7q6u3dbtrnleb@corp.supernews.com>
Source record: 147852

That's an interesting question, and one that I hadn't pondered before. Stainless has a bulk resistivity somewhere around 50 to 75 times that of copper (alloy-variable), while aluminum is about 1.6 times that of copper. Now given that skin effect will keep this wave in the top few mils of the surface, might we not expect to see a measurable and perhaps significant loss when using stainless over aluminum?

I don't know; I haven't run the tests.

Jim

"joe" <casavant@nucleus.com> wrote in message news:3c7a7cd2@news.nucleus.com...

> 1) Can I use Stainless steel for the Elements?
> 2) Can the boom be made of conductive material like stainless?
> 3) Any designs to get the best signal strength?
>
> I'm not a hobbiest so less technical information is appreciated. Also, this
> antenna is illegal in Cuba so it should not be more than 10' long.
> Thankyou
> Andre
>
>

4015. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 17:48:18 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <CZ8f8.4881$E11.3315@nwrddc02.gnilink.net>
Source record: 147853

"WRIGHT2113CROPP" <wright2113cropp@aol.com> wrote in message
news:20020227113427.16967.00000820@mb-dd.aol.com...
> make sure the coax is the same feet or u will have problem with the swr i
had
> the problem in my car with the coax being to short

Why, didn't it reach to the radio...? :>)

4016. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 17:56:02 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7D1DAA.A933F26E@icok.net>
Source record: 147854

David,
The 'near field' is where you keep cattle in the fall
and winter of the year. The 'far field' is where you keep
them in the spring and summer, the smell you know...
'Doc

4017. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 18:00:18 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7q7kntlr42t39@corp.supernews.com>
Source record: 147855

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:2146-3C7CE738-16@storefull-113.iap.bryant.webtv.net...

> Jim Weir wrote:

> "Why would you cut it for the middle of the NAV band when he is trying
> to receive COM signals? The center of the COM band is 127.5 MHz."
>
> Why would you try to make a receive antenna exactly 1/4-wave?

Because all things considered, it is the best compromise between efficiency
and antenna pattern over the full bandwidth.

>
> A ground plane or similar vertical antenna which is "too long" gains
> signal from vertical angle directivity as it grows from 1/4-wave to
> 5/8-wavelength. That`s a frequency ratio of 2.5 to 1.

You are correct that the E-field pattern changes towards the horizon as the
antenna gets longer relative to a quarter-wave. You are incorrect in that
to match and get the advantage of this horizontal gain you tighten up the
bandwidth significantly. The original poster was wanting to hear the ENTIRE
com band, which is a 15% bandwidth. This is a nontrivial match at BEST, and
when you put in a matching network, the bandwidth shrinks concomitantly.

>
> A vertical antenna cut for 1/4-wavelength at 100 MHz will increase in
> gain along the horizontal all the way up to 250 MHz.

And unless you use a matching network (sort of beyond the capability of the
original poster, don't you think) that "gain" goes to loss in one hell of a
hurry.

>
> In 1949, I worked at a radio station on 1320 KHz.

Yes, and your transmitter had a pi-network on the output that would match a
knitting needle to a barbwire fence over a fraction of a percent of
bandwidth. What did the station care what the bandwidth was? They weren't
going anywhere.

>
> A non-resonant antenna is reactive but matching networks fix that and
> adjust the resistance too.

And reduce the bandwidth simultaneously. There ain't no free lunch.

>
> In a receiving antenna, mismatch reduces signal, but it also reduces
> noise.

So does a resistive pad. I don't recommend it, however.

At VHF and UHF, there is less noise to reduce.

You wanna try that again? Last time I looked, there WAS an "f" factor in the equation.

Jim

4018. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 18:53:39 UTC
From: Kevin Gunther <beeltee@optonline.net>
Message-ID: <TW9f8.2899$lu2.1269830@news02.optonline.net>
Source record: 147856

"W6DKN" <w6dkn@qsl.net> wrote in message
news:CZ8f8.4881$E11.3315@nwrddc02.gnilink.net...
> "WRIGHT2113CROPP" <wright2113cropp@aol.com> wrote in message
> news:20020227113427.16967.00000820@mb-dd.aol.com...
> > make sure the coax is the same feet or u will have problem with the swr
i
> had
> > the problem in my car with the coax being to short
>
> Why, didn't it reach to the radio...? :>)

NO NO, it must have been the OTHER end that was short!!!!
>
>
>
>
>

4019. Load Resistors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 19:01:15 UTC
From: avatar <avatar@frii.com>
Message-ID: <3c7d2d5a$0$178$7586b60c@news.frii.com>
Source record: 147857

I recall there were several postings awhile back about sources for non-inductive power resistors. I tried a few search engines, but none list this news group.

If anyone kept a file of this info, please email a copy to me or post it here.

Thanks,

Dave
W&#65533;MAY

4020. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 19:05:38 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C7D2E02.12ACB1EA@umich.edu>
Source record: 147858

Dick Hughes wrote:
>
> I have been buying and using MFJ equipment for many years. I guess I
> have been one of the lucky ones as I have not had problems with any of
> them (yet.) I have looked inside some of them, and the soldering
> scared me so bad I just closed it back up quick! :-) Of course 30
> years in aerospace manufacturing and quality assurance tends to make
> one rather critical of workmanship anyway. The problem is, "where are
> you going to buy this stuff if not MFJ?" It's the only game in town
> for much of what they make. I just grin and bear it.

Having added to the ranting about MFJ quality (or the lack thereof),
I should include my opinions on the other side as well. I complained
about the switches on my '259B analyzer, but boy, I do use that thing
often, and it sure makes my life easier. Bad switches and all.

When I'm working HF, I can tune the antenna without QRMing the world.
The 259 puts out only about 20 mW while I adjust the antenna tuner to
the band. I may change bands several times in a few hours, so this
saves all of you from a lot of QRM. [hrrmm - I wonder if even that
little signal bothers someone somewhere?]

When I'm up on the rooftop adjusting a new VHF antenna, it sure is a
lot easier to get it tuned when I can quickly scan for the frequency
with the lowest SWR. The tweak-and-check cycle time is a LOT faster
than with a traditional SWR meter.

Bob, KI8AB

P.S. - When my beam is pointed the right way, the 20 mW from an MFJ is
in fact enough to key up a repeater about 5 miles away!

4021. Re: Stainless steel tubing for elements & boom for UHF antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 19:39:19 UTC
From: richardharrison@webtv.net
Message-ID: <22810-3C7D35E7-21@storefull-112.iap.bryant.webtv.net>
Source record: 147859

Bill nelson wrote:
"But then I would probably connect an impedance matcher to the antenna input, the booster to the antenna input, the booster to the matcher and the coax to the booster."

That is a superior arrangement in an ideal situation. Loss in the coax between antenna and booster hurts the signal to noise ratio. Twinlead isn`t so bad. It has only about a third of the coax loss.

Joe can`t readily get another booster made for antenna mounting, or for mounting indoors for that matter. He probably has to work with the booster made for indoors, that he already has. Providing a-c power to an ordinary booster mounted at the antenna might also be a problem.

The little "matchbox" coil balun that he might use is probably available from some TV repairman. This will also probably be an indoors device.

My concern was that if something could go wrong it might be the balun`s susceptibility to signal leaking from the output of the booster. A little distance provides a lot of isolation. The radiated signal loses 22 db in its first wavelength of radiation and 6 db every time the distance doubles after that. So, just a few feet of coax at 560 MHz is a lot of distance away between the balun and the booster to get some isolation and avoid oscillation. The wavelength is about 54 cm (21 inches).

The total transmission line system, with its twinlead, balun, and short length of coax will only have a few db loss if all the components are good. Care in affixing the "F" connectors is probably the most taxing part of the exercise.

Best regards, Richard Harrison, KB5WZI

4022. Tesla coil transmitter/ antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 20:21:10 UTC
From: AB Brown <abbrown@nospammail.com>
Message-ID: <a5jfan$j9i$1@slb4.atl.mindspring.net>
Source record: 147860

I believe most Tesla coils resonate around 500 Khz or less, but I have heard of some operating in the low hf range, around 2 Mhz. Has anyone tried using Tesla coils to send CW or AM? Most Tesla coils use an LC network for tuning, but it may be too broad to be useful as a transmitter. Perhaps a long wire can be attached to the LC network to act as an antenna.

Interested in any thoughts, opinions, or actual experience in this area.

AB

4023. Re: what is the 'best way' to do this? cl.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 20:46:00 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <cAbf8.15557$s03.511568@news2.east.cox.net>
Source record: 147861

My Fujifilm also eats AA alkalines like lunch crackers,
with the LCD on I was getting about 20 shots per set of four batteries.
The solution was to buy a NiMH charger and 8 1700 mA AA batteries.
The entire package ran about 33 bucks on eBay. The NiMH cells sell for
under two bucks, pretty reasonable.

Pete

4024. What kind of paint to paint PVC antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 21:02:11 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C7D4953.9CD6BDB0@yahoo.com>
Source record: 147864

Building for the Halibut a 300ohm twin lead dual band j and Im putting it inside a 1/2" PVC with cap to keep it dry. Anyone know which paints are RF Friendly?

Rick KF7QZ

4025. Re: Digital Communications : Modulation Recognition and Classification

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 21:38:41 UTC
From: "M.C. Maguire" <mncomsapgaumire@hotmail.com>
Message-ID: <3C7D51D8.5DFDA81A@hotmail.com>
Source record: 147862
Cross-posted to: comp.jobs,sci.research.postdoc,sci.electronics.design,rec.radio.amateur.antenna,misc.jobs.offered

Not sure what budget range you are looking at.

For basics of digital modulation, try Agilent Test & Measurement application and tech notes searching for keywords "digital communications" or product "89441" and "E3238":
http://www.tm.agilent.com/classes/MasterServlet?view=library&language=eng&locale=US

Agilent (HP), Lake Stevens Division (Measurement Systems), gave a seminar in 1998-99 timeframe called "Surveillance Forum" which showed capabilities of their vector signal analyzers in digital comms analysis. Contact an HP rep and see if you can get a copy of the notes.

An adequate text on digital comms measurements is:
"Telecommunications Measurements, Analysis, and Instrumentation", Dr. Kamilio Feher, ISBN 1-884932-03-7.

For hardware, look for electronic warfare and vector signal analyzers equipment:
http://www.condorsys.com/
http://ewhdbks.mugu.navy.mil/contents.htm

For your consideration.

mm

John wrote:
>
> Hi,
> I am looking forward an expert in Modulation Recognition and
> Classification of Digital Signals. A practical guide, cooperation or
> any other information will be welcomed.
> I hope to hear from you soon.
> We can pay for any valuable practical help.
> Bests,
> John

4026. Re: Load Resistors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 21:49:44 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C7D5478.61DCBABF@coqui.net>
Source record: 147863

avatar wrote:
>
> I recall there were several postings awhile back about sources for
> non-inductive power resistors. I tried a few search engines, but none list
> this news group.
>
> If anyone kept a file of this info, please email a copy to me or post it
> here.
>
> Thanks,
>
> Dave
> Wï¿½MAY

Try searching here:
http://groups.google.com/groups?hl=en&group=rec.radio.amateur.antenna

4027. Re: Tesla coil transmitter/ antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 22:06:33 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <92mq7u8jic83r9k79akodtho4loqqe3c3m@4ax.com>
Source record: 147865

On Wed, 27 Feb 2002 15:21:10 -0500, "AB Brown" <abbrown@nospammail.com>
wrote:

>I believe most Tesla coils resonate around 500 Khz or less, but I have heard
>of some operating in the low hf range, around 2 Mhz. Has anyone tried using
>Tesla coils to send CW or AM? Most Tesla coils use an LC network for
>tuning, but it may be too broad to be useful as a transmitter. Perhaps a
>long wire can be attached to the LC network to act as an antenna.
>
>Interested in any thoughts, opinions, or actual experience in this area.

Lord, give me strength......

Bill, W7TI

4028. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 22:18:21 UTC
From: Pie`` IK2VTJ <picarusoNONVOGLIOSPAM@writeme.com>
Message-ID: <a5jlv1$83fbl$1@ID-83989.news.dfncis.de>
Source record: 147866

"Michele IZ2EAS" <iz2eas@libero.it> ha scritto nel messaggio
news:a5i4jfqfi1@newsserver.cilea.it...
> February has gone, and despite the January's claims that "some interesting
> results are going to be published soon" Re the Medium Wave tests, the EH
> Antenna Web Site is still silent... does anyone know what Ted Hart has
been
> doing on that antenna recently ?
>
> Michele IZ2EAS
>
He's carrying on a very hard job: trying to find out how does it work!
--
73 de IK2VTJ, Piero.

http://www.qsl.net/ik2vtj
http://www.ardf.it

Togli / Remove
NONVOGLIOSPAM
dall'indirizzo / from address

4029. Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 22:36:52 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <8cdf8.5415$G7.3650@nwrddc01.gnilink.net>
Source record: 147867

It's my understanding that monoband antennas using coils for matching purposes are more efficient -
all things being equal - than larger multi-band coils using taps for various bands - but have not
seen actual data as to what percentage losses might be involved...

I have arrived at a 20/40 mobile designe that seems to provide excellent efficiency on both bands,
and I'm wondering how much loss I might be experiencing due to the dualband tapped coil as opposed
to 2 separate antennas/coils...

Comments?

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

4030. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 23:27:01 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7D6B45.F4B0991D@IEEE.org>
Source record: 147868

Robert Lyons wrote:
> Dick Hughes wrote:
> Having added to the ranting about MFJ quality (or the lack thereof),
> I should include my opinions on the other side as well. I complained
> about the switches on my '259B analyzer, but boy, I do use that thing
> often, and it sure makes my life easier. Bad switches and all.

I've got a question about the readings from my MFJ-259B. On 40m,
I use a 75m dipole fed with 3/4WL of ladder-line. The MFJ gives
the following readings.

6.79MHz SWR=3:1, R=16 ohms, X=0 ohms
6.94MHz SWR=2.4:1, R=25 ohms, X=3 ohms
7.00MHz SWR=2.2:1, R=40 ohms, X=15 ohms
7.04MHz SWR=2.3:1, R=49 ohms, X=19 ohms

Seems to me the resistive part of the impedance is changing much
faster than it should which causes the minimum 50 ohm SWR to be
somewhere other than the resonance point of 16 ohms. Has anybody
else seen the feedpoint resistance change eight times faster than
the reactance? Is this a characteristic of full-wave dipoles?
--
cheers, CAM http://www.qsl.net/w5dxp

4031. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-27 23:52:19 UTC
From: k1bqt@aol.com
Message-ID: <20020227185219.03089.00001110@mb-fe.aol.com>
Source record: 147719

Conducting a site survey to determine the feasibility of receiving signals from a specific terrestrial source is always a good idea, and I don't mean to dis Jim's suggestion for doing that. However, in my view, simply sticking a dipole into the air and making a snap go/no-go assessment is like doing the foreplay and then leaving town when it's time for sex. I say this because, for OTH VHF signals, a sample taken in one spot may yield nothing while another taken 10-20 feet away might yield a readable level. Haven't we all rolled the car ahead at a red light to pull the FM radio out of a null--or seen a TV antenna stuck on a 5-foot pole in the middle of the lawn because that's the only place where the signal comes in? At most spots on my roof, I couldn't hear the tower using a hand-held groundplane on a 6 foot pole. Yet, with an 11-dBi gain antenna 25 feet above the same roof, I hear the tower (and a lot of other stuff) just fine. Bottom line, if you're going to go to the trouble to make a survey antenna, put it on a real long stick and move it around to as many locations as you possibly can. You may get lucky and find a great spot where you won't even need a gain antenna.

As a postscript, the aviation standard for clear reception appears to have a built-in margin of safety that would probably accommodate a Narco Omnigator with soft tubes and a blown ballast cap on the vibrator. If you want to monitor a tower from a fixed spot, you can literally do about 50 dB better than that with a good antenna and a hot receiver.

Rick K1BQT

4032. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 00:33:30 UTC
From: mcduffie@xactcom.net
Message-ID: <p6uq7ugsad15oqfkcscil99q1msapp6ook@4ax.com>
Source record: 147720

On Wed, 27 Feb 2002 14:05:38 -0500, Robert Lyons <boblyons@umich.edu>
wrote:

> When I'm working HF, I can tune the antenna without QRMing the world.
> The 259 puts out only about 20 mW while I adjust the antenna tuner to
> the band. I may change bands several times in a few hours, so this
> saves all of you from a lot of QRM. [hrrmm - I wonder if even that
> little signal bothers someone somewhere?]

Along these lines, please be aware that the 259 IS a low power
transmitter (not you specifically, but everyone in general). It is very
easy to leave it on and cause QRM to some local VHF users. I've keyed
my repeater with mine hooked to a gain-type omni directional antenna at
40'. My repeater is 30 miles away.

Best to turn it off when you aren't making measurements.

Gary
--
There is no x in my ISPs domain name.

4033. Re: Tesla coil transmitter/ antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 01:35:59 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C7D885F.BDFBDBB0@bellatlantic.net>
Source record: 147721

As a science project in 8th grade I made a spark transmitter (a Model T spark coil with an LC network), and a "Coherer" receiver (A matching LC network, a glass tube with iron filings detector, and a buzzer to shake the filings loose when they stick). I managed to transmit a total of 20 feet between 5' long parallel antennas! Sort of similar to the Tesla Idea. I don't think the FCC would approve.

'73 KI4Z

AB Brown wrote:

> I believe most Tesla coils resonate around 500 Khz or less, but I have heard
> of some operating in the low hf range, around 2 Mhz. Has anyone tried using
> Tesla coils to send CW or AM? Most Tesla coils use an LC network for
> tuning, but it may be too broad to be useful as a transmitter. Perhaps a
> long wire can be attached to the LC network to act as an antenna.
>
> Interested in any thoughts, opinions, or actual experience in this area.
>
> AB

4034. Re: What kind of paint to paint PVC antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 01:39:00 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C7D8915.619FE5@bellatlantic.net>
Source record: 147722

I wouldn't paint it.. whatever paint you get to stick to PVC will
eventually peel off.

'73 KI4Z

"R. Scott" wrote:

> Building for the Halibut a 300ohm twin lead dual band j and Im putting
> it inside a 1/2" PVC with cap to keep it dry. Anyone know which paints
> are RF Friendly?
>
> Rick KF7QZ

4035. Financial Emergency Sale - NØKO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 01:41:58 UTC
From: NØKO <n0sah@prodigy.net>
Message-ID: <GVff8.14603$OR6.1902733482@newssvr17.news.prodigy.com>
Source record: 147723

Please take a look at my Webpage that contains items I am having to
liquidate due to unfortunate times.
Thanks for your time.
de Nï¿½KO
Randy
Rolla, Missouri 65401

http://n0sah.8m.com/sale.html

4036. Re: Tesla coil transmitter/ antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 02:28:52 UTC
From: AB Brown <abbrown@nospammail.com>
Message-ID: <a5k4khfph1@nntp9.atl.mindspring.net>
Source record: 147724

Thanks Mark. I did manage to do some further research into my question earlier today. I agree that the FCC probably wouldn't approve because the transmitted frequency would be way too broadbanded and many harmonics would be generated, especially with a length of wire as an antenna extension. Bad idea I guess.

AB

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message news:3C7D885F.BDFBDBB0@bellatlantic.net...
> As a science project in 8th grade I made a spark transmitter (a Model T spark
> coil with an LC network), and a "Coherer" receiver (A matching LC network, a
> glass tube with iron filings detector, and a buzzer to shake the filings loose
> when they stick). I managed to transmit a total of 20 feet between 5' long
> parallel antennas! Sort of similar to the Tesla Idea. I don't think the FCC
> would approve.
>
> '73 KI4Z
>
> AB Brown wrote:
>
> > I believe most Tesla coils resonate around 500 Khz or less, but I have heard
> > of some operating in the low hf range, around 2 Mhz. Has anyone tried using
> > Tesla coils to send CW or AM? Most Tesla coils use an LC network for
> > tuning, but it may be too broad to be useful as a transmitter. Perhaps a
> > long wire can be attached to the LC network to act as an antenna.
> >
> > Interested in any thoughts, opinions, or actual experience in this area.
> >
> > AB
>

4037. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 02:38:59 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C7D9843.3080001@sympatico.ca>
Source record: 147725

(snip)
> Are manufacturers waiting until they have extracted the maximum possible
> profit from present designs before introducing bringing something "new" ?

of course! it's called capitalism! look at the price of CD's!

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

4038. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 02:49:10 UTC
From: richardharrison@webtv.net
Message-ID: <26102-3C7D9AA6-83@storefull-116.iap.bryant.webtv.net>
Source record: 147728

Chip, N1IR wrote:
"You can look at the near field as the volume (not area) within which the intensity falls as 1/r (where r is the distance from the radiator) and the far field as the volume--extending out to infinity--for which the intensity falls as 1/r^2. All in free space, of course."

That predicts a faster decline of the summation of the fields beyond the point where the near field has significance, just as it should.

In the far field, power can be determined and expressed in watts per square meter perpendicular to the propagation of the wave, or in volts per meter in the wave or a wire best positioned for induction of voltage in the wire.

The far field decays due to spreading of the radiation. The volts per meter decay linearly with Chip`s "r' (distance from the radiator) in the far field. The watts per square meter decline as the square of the distance from the radiator. At twice the distance there is 1/4 the power, hence the "inverse square law".

Arnold B. Bailey in "TV and Other Receiving Anntennas" discusses "Near Field and Far Field" in detail in chapters 5 and 6. Bailey says the near field is the complex summation of three fields. The electric vector (voltage) decays as the cube of the distance. The induction field decays as the square of the distance. The radiation field decays inversely (linearly) as the distance grows. So, the radiation field predominates in short order.

That reactive electric field declining as the cube of the distance fades first and fastest. It soon counts for nothing. The reactive induction field is next to go and it fades as the square of the distance. Then the radiated field is left traveling alone for practical purposes in the far field. It fades linearly with distance. We are dealing with volts per meter, not watts per square meter, and the like values of the reactive components of the field were considered.

From a point source, Bailey says the radiation field predominates over the other two fields beyond about 10 wavelengths. Bailey says a lot more about the topic, but you need to read the book.

John E. Cunningham in "The Complete Broadcast Handbook" extends the definition of "Near and Far Zones" to a dividing line as:
D^2/2lambda
Where D is the largest dimension of the antenna, and lambda is the wavelength.
D and lambda are expressed in the same units.

At this dividing line, the induction field and radiation fields are equal, but at greater distances, the induction field fades rapidly.

Best regards, Richard Harrison, KB5WZI

4039. Re: What kind of paint to paint PVC antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 03:06:19 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C7D9DB1.4A90667A@gte.net>
Source record: 147726

Mark Hall wrote:

> I wouldn't paint it.. whatever paint you get to stick to PVC will
> eventually peel off.
>

This is not correct- Home Depot and Lowes both sell vinyl paints that attack the surface of vinyl derivatives and adhere extremely well- so well it can even be used on vinyl seat covers.

Dale W4OP

4040. Re: Laugh for the day

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 03:11:11 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C7D9FCF.5070302@sympatico.ca>
Source record: 147727

ACME? how did their catalog compare to the MFJ one with strange things
in it? Hell they even made it into the road runner cartoons

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

J. Harvey wrote:

> <babel@fish.org> reported:
>
>>It was a black cylinder, _thoroughly_ potted with some
>>hard, black substance with #16 stranded leads and a
>>thumbscrew on the case labeled 'Ground'.
>>
>
> Ah, the world-famous ACME 'Portable Ground'. And some people thought that I
> was just kidding...
>
>
>
>
>

4041. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 03:14:22 UTC
From: richardharrison@webtv.net
Message-ID: <26102-3C7DA08E-87@storefull-116.iap.bryant.webtv.net>
Source record: 147730

EHS, Jr. wrote:
"I am still trying to understand where the figure 6000 ohms nominal for this antenna comes from."

I have not found my prized copy of the Orr Handbook, so this is a guess. High impedance such as this, likely comes from something like an end-fed 1/2-wave, some multiple thereof, or something close, any of these having an open-circuit at the far end.

As Reg recently pointed out, the half-wavelength does not repeat the open-circuit through the distance of a half-wavelength because there is radiation taking place in a radiation resistance. The antenna is accepting power, proof of a feedpoint resistance considerably lower than infinity.

Best regards, Richard Harrison, KB5WZI

4042. Re: Tesla coil transmitter/ antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 03:35:51 UTC
From: whagen6@cs.com
Message-ID: <20020227223551.07514.00000598@mb-ce.news.cs.com>
Source record: 147729

and the wheel (spark gap transmitter) gets re-invented. Those wo dont know history are doomed to repeat it. It would be fun though.

4043. Re: Financial Emergency Sale - NØKO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 03:58:15 UTC
From: NI4L <ni4l@charter.net>
Message-ID: <3C7DAAD7.4CC8773C@charter.net>
Source record: 147731

Hey Randy
Yaesu SP980P speaker/phone patch, excellent condition with manual.
$50 shipped in CONUS.
Is ther anyway i could get a copy of that manual i have been looking for
a while for it and no one seemed to have it.
chris NI4L

Nï¿½KO wrote:

> Please take a look at my Webpage that contains items I am having to
> liquidate due to unfortunate times.
> Thanks for your time.
> de Nï¿½KO
> Randy
> Rolla, Missouri 65401
>
> http://n0sah.8m.com/sale.html

--

NI4L CUSTOM RESONANT DIPOLE
LEGAL LIMIT ++ CUSTOM MADE CENTER FED DIPOLE
Made with the same components used by our military forces today
Custom made to YOUR FREQUENCY of operation
Let me take the hassle out of making a RESONANT DIPOLE for you.
Click here for more info... <http://www.angelfire.com/nb/ni4l/>

4044. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 04:19:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7DAFDD.75C9B8C5@IEEE.org>
Source record: 147732

Richard Harrison wrote:
>
> EHS, Jr. wrote:
> "I am still trying to understand where the figure 6000 ohms nominal for
> this antenna comes from."
>
> I have not found my prized copy of the Orr Handbook, so this is a guess.
> High impedance such as this, likely comes from something like an end-fed
> 1/2-wave, some multiple thereof, or something close, any of these having
> an open-circuit at the far end.

I found my Orr Handbook and it appears to me that this antenna is bogus.
The horizontal folded dipole section is 35 ft for 75m/40m. I modeled it
using EZNEC and the impedance is NOT 6000 ohms. It is around 3+j600 ohms.
The SWR on the 26 ft vertical section is very close to infinity on 75m.
This looks like a really terrible 75m antenna.
--
cheers, CAM http://www.qsl.net/w5dxp

4045. Re: Financial Emergency Sale - N&#65533;KO

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 09:44:03 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <80F19165DA0D8353.D84E1DF1C1B49837.B98794B72D79D0C0@lp.airnews.net>
Source record: 147733

On Thu, 28 Feb 2002 01:41:58 GMT, Nï¿½KO <n0sah@prodigy.net> wrote:

>Please take a look at my Webpage that contains items I am having to
>liquidate due to unfortunate times.

Well, you know, with all these extra radios laying around, you could start a real decent business. What you do, is you send a radio to each of the people on the following list, then take the name from the top of the list, move all the others up one space, and add your name at the bottom. You then send this list to all the hams you know, and they do the same. In a month, you'll have five thousand radios, and can get your own store going.

1. KD5NRH
2. KD5NRH
3. KD5NRH
4. KD5NRH
5. KD5NRH

(Don't laugh; I actually got one of those chain letters from some guy who had used five variations of his own name, each with a different PO Box address in about a 20mi radius of his actual address)

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

4046. Re: what is the 'best way' to do this? cl.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 09:49:55 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <46FA52A2FCD84866.0CE7047583FB38AB.7AE12C271D000720@lp.airnews.net>
Source record: 147734
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

[Note Followups; I'm moving this thread to r.r.a.e, where it's more
on-topic]
On Wed, 27 Feb 2002 20:46:00 GMT, " Uncle Peter"
<radioconnectionNO@cox.netSPAM> wrote:

>My Fujifilm also eats AA alkalines like lunch crackers,
>with the LCD on I was getting about 20 shots per set of four batteries.
>The solution was to buy a NiMH charger and 8 1700 mA AA batteries.
>The entire package ran about 33 bucks on eBay. The NiMH cells sell for
>under two bucks, pretty reasonable.

That's pretty close to retail around here; just a hair over $20 for
the charger, and 1600mAh AA or AAAs are $10/4-pack. C & Ds are a bit
pricier, but still well worth it for the radios that use them.

IIRC, the charger comes with coupons good for about $5-10 off
subsequent battery purchases.

I'm a real big fan of not dumping several pounds of extra trash into
the landfills, so I only use alkalines where they actually do some
good. (i.e. flashlights and emergency kits, where self-discharge is a
potentially serious problem)

It also allows me to experiment with toys like this one:
http://www.kd5nrh.net/EmPower/windturbine.html

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

4047. About Vector Network Analyser

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 10:50:03 UTC
From: savitesh@yahoo.com
Message-ID: <da32bb5a.0202280250.7b196ca6@posting.google.com>
Source record: 147735

Describe Vector Network Analyser with block diagram?
And also describe methods of measuring Resonant
frequency,Q-factor,degree of coupling etc of Magnetron using VNA.

4048. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 12:24:03 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7E2158.47EB5CFB@icok.net>
Source record: 147736

Gary,
I'm not sure I can agree with your 'understanding' about monoband antennas, or that there would be any appreciable difference in efficiency between antennas using descrete coils per band, or a tapped coil for multi-bands.
Given that the only difference between those two 'type' of antennas is the loading coil, I would think that any difference in efficiency would be in the coil structure and not in if/how the coil is tapped. (I'm assuming your refering to the 'extra' coil turns not being used, or that are shorted, and the shorting lead.) If the only difference in the two antennas is the loading coil, and if we're talking about using a 'shorting lead' or just clipping the 'extra' coil turns off, I don't see where there would be any ~practical~ difference in efficiency on HF. There would be a difference in convenience in not having to stop and change taps, though.
'Doc

4049. Re: What kind of paint to paint PVC antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 12:28:12 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7E2251.81C5D49D@icok.net>
Source record: 147738

Rick,
Any paint that doesn't contain conducting materials. I
think 'Hot Pink' latex (or vinyl) would be nice...
'Doc

4050. Re: About Vector Network Analyser

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 12:28:14 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <1npf8.20500$Dv1.71550@rwcrnsc53>
Source record: 147737

"savitesh" <savitesh@yahoo.com> wrote in message
news:da32bb5a.0202280250.7b196ca6@posting.google.com...
> Describe Vector Network Analyser with block diagram?
> And also describe methods of measuring Resonant
> frequency,Q-factor,degree of coupling etc of Magnetron using VNA.

Not even a "please"?

W4ZCB

4051. Re: About Vector Network Analyser

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 12:28:45 UTC
From: fractenna@aol.com
Message-ID: <20020228072845.16923.00001243@mb-dd.aol.com>
Source record: 147739

>Describe Vector Network Analyser with block diagram?
>And also describe methods of measuring Resonant
>frequency,Q-factor,degree of coupling etc of Magnetron using VNA.
>

Hmmmm...sounds like a homework question.

What have you found out by yourself already?

73,
Chip N1IR

4052. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 12:37:34 UTC
From: fractenna@aol.com
Message-ID: <20020228073734.16923.00001245@mb-dd.aol.com>
Source record: 147740

>
>Chip, N1IR wrote:
>"You can look at the near field as the volume (not area) within which
>the intensity falls as 1/r (where r is the distance from the radiator)
>and the far field as the volume--extending out to infinity--for which
>the intensity falls as 1/r^2. All in free space, of course."
>
>That predicts a faster decline of the summation of the fields beyond the
>point where the near field has significance, just as it should.
>
>In the far field, power can be determined and expressed in watts per
>square meter perpendicular to the propagation of the wave, or in volts
>per meter in the wave or a wire best positioned for induction of voltage
>in the wire.
>
>The far field decays due to spreading of the radiation. The volts per
>meter decay linearly with Chip`s "r' (distance from the radiator) in the
>far field. The watts per square meter decline as the square of the
>distance from the radiator. At twice the distance there is 1/4 the
>power, hence the "inverse square law".
>
>Arnold B. Bailey in "TV and Other Receiving Anntennas" discusses "Near
>Field and Far Field" in detail in chapters 5 and 6. Bailey says the near
>field is the complex summation of three fields. The electric vector
>(voltage) decays as the cube of the distance. The induction field decays
>as the square of the distance. The radiation field decays inversely
>(linearly) as the distance grows. So, the radiation field predominates
>in short order.
>
>That reactive electric field declining as the cube of the distance fades
>first and fastest. It soon counts for nothing. The reactive induction
>field is next to go and it fades as the square of the distance. Then the
>radiated field is left traveling alone for practical purposes in the far
>field. It fades linearly with distance. We are dealing with volts per
>meter, not watts per square meter, and the like values of the reactive
>components of the field were considered.
>
>From a point source, Bailey says the radiation field predominates over
>the other two fields beyond about 10 wavelengths. Bailey says a lot more
>about the topic, but you need to read the book.
>
>John E. Cunningham in "The Complete Broadcast Handbook" extends the
>definition of "Near and Far Zones" to a dividing line as:
>D^2/2lambda

>Where D is the largest dimension of the antenna, and lambda is the
>wavelength.
>D and lambda are expressed in the same units.
>
>At this dividing line, the induction field and radiation fields are
>equal, but at greater distances, the induction field fades rapidly.
>
>Best regards, Richard Harrison, KB5WZI
>

Hi Richard,

On this forum its often difficult to judge the level of the answer some folks request, hence my pithy version.

Of course, if I had asked the question, I would have preferred your answer:-)

Frankly it always amazes me that some people who actually do antenna measurements don't know or care about the difference between the two, and also how often many people assume that a compact range must (in all cases) be far field.

..or that one can do a single, very near field measurement of an extended aperture and claim it tells you about the far field ;-)

73,
Chip N1IR

4053. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 13:18:15 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <q6qf8.78193$JZ.9830523@news20.bellglobal.com>
Source record: 147741

>> the intensity falls as 1/r
>> the intensity falls as 1/r^2
>> (where r is the distance from the radiator)

Does this mean that when r=0, the intensity is 'infinite' ?

Is the boundary between the near and far fields a perfect sphere centred on the antenna ?

Does the field 'switch gears' from 1/r to 1/r^2 instantly ?

Does it matter that more accurate theories don't even include the concept of 'field' ?

All above are rhetorical.

J. Harvey, Ottawa

PS: Please, no Snow White virus...

4054. Re: What kind of paint to paint PVC antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 14:25:39 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C7E3DE3.917B5A01@yahoo.com>
Source record: 147743

'Doc wrote:
>
> Rick,
> Any paint that doesn't contain conducting materials. I
> think 'Hot Pink' latex (or vinyl) would be nice...
> 'Doc

Dunno about hot pink, but Candy Apple Red would be nice :)

Thanks :)

4055. Re: What kind of paint to paint PVC antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 14:26:09 UTC
From: "R. Scott" <kf7qz@yahoo.com>
Message-ID: <3C7E3E01.571E67A3@yahoo.com>
Source record: 147742

> This is not correct- Home Depot and Lowes both sell vinyl paints that attack
> the surface of vinyl derivatives and adhere extremely well- so well it can
> even be used on vinyl seat covers.
>
> Dale W4OP

Thanks Dale, Ill go look this weekend.

Rick KF7QZ

4056. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 15:53:13 UTC
From: aa1ll@email.com
Message-ID: <e85be400.0202280753.4641dded@posting.google.com>
Source record: 147744

"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<8cdf8.5415$G7.3650@nwrddc01.gnilink.net>...
> It's my understanding that monoband antennas using coils for matching purposes are more efficient -
> all things being equal - than larger multi-band coils using taps for various bands - but have not
> seen actual data as to what percentage losses might be involved...
>
> I have arrived at a 20/40 mobile designe that seems to provide excellent efficiency on both bands,
> and I'm wondering how much loss I might be experiencing due to the dualband tapped coil as opposed
> to 2 separate antennas/coils...
>
> Comments?
Hi Gary, We need more information on your mobile installation:
1. What is the antenna size and material? Length, diameter?
2. What are the dimensions and material of the loading coil?
3. Where is the tapped coil placed on the antenna? (bottom or middle?)
4. What kind of additional matching circuitry + feedline is being used?
5. Where is the antenna mounted on the vehicle?
6. What type of vehicle is it?
7. What type of soil is it being driven over?
8. What color is the vehicle? (Only kidding...)

All of the above (minus #8) will effect relative efficiency.

Offhand I'd say it's not too difficult to get decent efficiency (>50%) on 20 meters with an 8' base loaded whip and it's very difficult to get usable efficiency (>30%) on 40 meters due to the low radiation resistance. So there's not much you can do to mess things up on 20, and not much you can do to make things good on 40.

73, Paul, AA1LL
Mason, NH
http://www.qsl.net/aa1ll

4057. Re: What kind of paint to paint PVC antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 16:10:38 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <vdls7u48jk8b77i3p58fin9n0g8ucpf19i@4ax.com>
Source record: 147745

I painted my BB3 screwdriver PVC cover with Krylon brand spray paint.
It has held up very well in the sun, and shows no sign of peeling or
other form of deterioration. I used white. Have to watch for any
metal ingredients if you use a color.

Dick - W6CCD

On Wed, 27 Feb 2002 21:02:11 GMT, "R. Scott" <kf7qz@yahoo.com> wrote:

>Building for the Halibut a 300ohm twin lead dual band j and Im putting
>it inside a 1/2" PVC with cap to keep it dry. Anyone know which paints
>are RF Friendly?
>
>
>Rick KF7QZ

4058. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 16:25:38 UTC
From: richardharrison@webtv.net
Message-ID: <22810-3C7E5A02-92@storefull-112.iap.bryant.webtv.net>
Source record: 147746

J. Harvey wrote:
"Does it matter that more accurate theories don`t even include the concept of "field"?

It may be instructive to review what a field is supposed to be.

A force field surrounds an electric field. This is demonstrated by bits of paper attracted to a hair comb when conditions are right.

Another force field surrounds a moving charge as is demonstrated in an electromagnet, or the compass needle and the wire between battery terminals.

The intensites of these forces is measured by the force exerted on an electric charge within a field as is demonstrated by electrostatic or magnetic deflection in a CRT (cathode ray tube)

B. Whitfield Griffith, Jr. in "Radio-Electronic Transmission Fundamentals" lists 9 of the ways positive and negative charges can be separated:
friction, chemical action, thermoelectric action, electromagnetic induction, electric induction, thermionic action, piezoelectric effect, photoelectric action, and radio activity.

Once charges are separated into concentrations of positive and negative charges, an electric force field exists in the space between the positive and negative charges.

Griffith says charges don`t move a motor rotor, the force of the magnetic field causes rotation. He also says, voltage doesn`t produce plate current in a vacuum tube, it`s the electric field between plate and cathode.

Griffith says the preceding is prologue to the fact:
"When the transmission line terminates in an antenna, we must understand that the fields are simply changed in shape, that they keep on going into space, complete with power, but without benefit of voltage or current."

Best regards, Richard Harrison, KB5WZI

4059. I need an opinion

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 16:53:44 UTC
From: IronHead <slipkid@kwiknet.net>
Message-ID: <sgtf8.439$7272.33554595@news2.randori.com>
Source record: 147747

I am in the process of replacing my 80-10m whip antenna and replacing it with a better product. Can anyone give a good recommedation for a HF verticle. I will be mounting it on a roof top. I am trying to decide between a trapped design, non-trapped design, counterpoise, radial...etc... any help is appreciated.

KC2FYP

4060. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 16:57:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5lnsq$8fsjd$1@ID-124126.news.dfncis.de>
Source record: 147748

Who's Griffith ? - never heard of him.

4061. Re: About Vector Network Analyser

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 17:20:35 UTC
From: n7ws@yahoo.com
Message-ID: <3c7e66a3.172968597@news.triconet.org>
Source record: 147750

On 28 Feb 2002 02:50:03 -0800, savitesh@yahoo.com (savitesh) wrote:

|Describe Vector Network Analyser with block diagram?
|And also describe methods of measuring Resonant
|frequency,Q-factor,degree of coupling etc of Magnetron using VNA.

http://www.tm.agilent.com/classes/MasterServlet?view=technote&tcn-ItemID=1000001258&language=eng&locale=US

4062. Re: Short coax runs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 17:22:48 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3C7E6768.94ABCC77@umich.edu>
Source record: 147749

Kevin Gunther wrote:
>
> "W6DKN" <w6dkn@qsl.net> wrote in message
> news:CZ8f8.4881$E11.3315@nwrddc02.gnilink.net...
> > "WRIGHT2113CROPP" <wright2113cropp@aol.com> wrote in message
> > news:20020227113427.16967.00000820@mb-dd.aol.com...
> > > make sure the coax is the same feet or u will have problem with the swr
> i
> > had
> > > the problem in my car with the coax being to short
> >
> > Why, didn't it reach to the radio...? :>)
>
> NO NO, it must have been the OTHER end that was short!!!!

Well, Turn it around, then! Or, better yet, I've seen something called
a 'common mode choke' that seems to lengthen the the cable slightly -
might be just long enough for you then!

Bob, KI8AB

4063. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 17:32:20 UTC
From: richardharrison@webtv.net
Message-ID: <8137-3C7E69A4-259@storefull-114.iap.bryant.webtv.net>
Source record: 147751

J. Harvey wrote:
"Does this mean when r = 0, the intensity is "infinite"?"

Infinite voltage produces an infinite electric field, and infinite current produces an infinite magnetic field. These aren`t found in a radiator.

The fields already exist in a transmission line, feeding an antenna, and are merely reshaped, by the antenna, as they are launched into space. The intensities of the fields surrounding a conductor are consistent with the voltage and current of the conductor.

In texts, depictions of fields are seldom perfect circles around all conductors in all cases. I have no quarrel with most representations.

There is no gear shift at the demarcation point between near field and far field. The fade of individual constituents of the electric and magnetic fields around a conductor is continuous but they don`t all fade at the same rate. It is a fact that the farther the fields are from an antenna, the less energy in the fields returns to the antenna. The demarcation point is an arbitrary human choice. One definition is: the point at which energy in the induction field equals energy in the radiation field. You are free to make your owen definition.

Best regards, Richard Harrison, KB5WZI

4064. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 18:02:12 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0202281002.44edac99@posting.google.com>
Source record: 147752

"Michele IZ2EAS" <iz2eas@libero.it> wrote in message
news:<a5i4jfqfi1@newsserver.cilea.it>...
> February has gone, and despite the January's claims that "some interesting
> results are going to be published soon" Re the Medium Wave tests, the EH
> Antenna Web Site is still silent... does anyone know what Ted Hart has been
> doing on that antenna recently ?
>
If the EH antenna really had merit, it would have been out some time
ago. I'll believe in the EH antenna when it makes the Texas
Bugcatcher, Screwdriver, Isotron, magnetic loop, and other small HF
antennas obsolete.

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

4065. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 18:18:01 UTC
From: richardharrison@webtv.net
Message-ID: <22809-3C7E7459-217@storefull-112.iap.bryant.webtv.net>
Source record: 147754

Reg Edwards wrote:
"Who`s Griffith?"

The cover of "Radio-Eletronic Transmission Funamentals" says this about the author:
B. Whitfield Griffith, Jr. is Manager of the Electronic Equipment Division of the General Electrodynamics Corporation in Garland, Texas. Mr. Griffith is a graduate of MIT, has a Radio Amateur license, and is a senior member of the IRE. He is a member of the Texas Society of Professional Engineers, National Society of Professional Engineers, and the American Radio Relay League.

I don`t find Griffith listed in the ARRL`s Antenna Book bibliography on page 2-19, but he surely belongs there.

Best regards, Richard Harrison, KB5WZI

4066. Re: I need an opinion

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 18:29:15 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a5lsq6ceq1@bob.news.rcn.net>
Source record: 147753

"IronHead" <slipkid@kwiknet.net> wrote:

> I am in the process of replacing my 80-10m whip antenna and replacing it
> with a better product. Can anyone give a good recommedation for a HF
> verticle. I will be mounting it on a roof top. I am trying to decide between
> a trapped design, non-trapped design, counterpoise, radial...etc...
> any help is appreciated.

That's a pretty broad task, and you will get a zillion
varying opinions. Try: http://www.eham.net/reviews

4067. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 19:08:10 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <UX5+PF4YBVOLRk2DM8mE8piW6MC0@4ax.com>
Source record: 147755

"Don Johnston" <duck@mindspring.com> wrote:

>I have a handheld aviation radio that I can only pick up the aircraft side
>of a transmission. It has a short (about 8 inch "rubber ducky") antenna that
>mounts with a BNC connector. Would I be able to pick up the ground side of
>the transmisson (source is appx. 18 miles away) with an outside antenna?
>Would it be possible to build one?
>
>Thanks in advance,
>Don
>

Depends on whether the ground radio is transmitting on the same frequency as the
aircraft radios.

Bob
k5qwg

4068. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 19:12:25 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7t083l1ckm34@corp.supernews.com>
Source record: 147756

Except in the very rare case when the aircraft is transmitting in the com band and listening to a VOR in the nav band, all aircraft communications are simplex.

Jim

>
> Depends on whether the ground radio is transmitting on the same frequency as the
> aircraft radios.
>
> Bob
> k5qwg
>

4069. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 19:25:07 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202281125.3cf30e45@posting.google.com>
Source record: 147757

"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<8cdf8.5415$G7.3650@nwrddc01.gnilink.net>...
> It's my understanding that monoband antennas using coils for matching purposes are more efficient -
> all things being equal - than larger multi-band coils using taps for various bands - but have not
> seen actual data as to what percentage losses might be involved...
>
> I have arrived at a 20/40 mobile designe that seems to provide excellent efficiency on both bands,
> and I'm wondering how much loss I might be experiencing due to the dualband tapped coil as opposed
> to 2 separate antennas/coils...
>
> Comments?

I'm not sure if you mean the loading coils, or the matching coils, but
if you mean the loading coils, the difference won't be huge on 40/20.
I've got two 40m antennas. One a multiband coil and a tap for 40m, and
the other is single band 40m. I can tell very little difference
between them in everyday use. But I haven't done a direct comparison.
It's best to use a single band coil, I know that, but I've never
actually done an A/B test to see how much difference there is. If you
mean the matching coil, Dunno about that as I use a small tuner for
impedance matching. It works all bands. Never tried a single coil
matcher such as a "dollar special". It may be a slight improvment over
my tuner. I should try that sometime. MK

4070. Re: antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 19:36:17 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0202281136.1fab1430@posting.google.com>
Source record: 147758

"rsdalton1" <rsdalton1@earthlink.net> wrote in message
news:<eQye8.15925$0C1.1379066@newsread1.prod.itd.earthlink.net>...
> Assuming I'm using copper tubing in beam construction,would you think
> the green corrosion,would degrade
> the electrical properties,and cause swr adjustment problems?

No problems. I built a 6m 3 el yagi totally from copper tubing. I used a torch and brazed the elements straight to the copper boom. Even the gamma match is copper tubing. Works great, but is a little heavier and easier to bend than an aluminium antenna. But I've had no problems so far. I used hard copper. Mine is starting to turn green/brown a bit, but has no effect. MK

4071. UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 19:45:52 UTC
From: Jim Walker <walkerjd1@worldnet.att.net.net>
Message-ID: <QNvf8.4579$gK2.364568@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147759

I am using a UHF/VHF antenna on the roof for digital TV and I am having some trouble getting the signal strength needed. I find the signal fluctuates and I have to rotate the antenna to from time to time to pick up the same channel. It does look like multipath. I can move the antenna to a different spot on the roof, but before I do that a couple of questions. First the antenna is on one side of the roof and is pointed toward the other side. The roof has asphalt shingles. I wonder if the multipath comes from the roof. In the line of sight of the antenna about 100' from its location are a row of pine trees. Could they be a factor? Any help or suggestions would be welcome.
--
Jim Walker
Northern Virginia

4072. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 20:55:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5m644$89usd$2@ID-124126.news.dfncis.de>
Source record: 147760

Sorry Richard, I'm none the wiser.

What is the Electronic Equipment Division of the General Electrodynamics Corporation? Never heard of the Texas Society of Professional Engineers, or the National Society of Professional Engineers.

I have heard of the ARRL and Radio Amateur licenses. ;o)

Reg
==========

Richard Harrison <richardharrison@webtv.net> wrote in message news:22809-3C7E7459-217@storefull-112.iap.bryant.webtv.net...
> Reg Edwards wrote:
> "Who`s Griffith?"
>
> The cover of "Radio-Eletronic Transmission Funamentals" says this about
> the author:
> B. Whitfield Griffith, Jr. is Manager of the Electronic Equipment
> Division of the General Electrodynamics Corporation in Garland, Texas.
> Mr. Griffith is a graduate of MIT, has a Radio Amateur license, and is a
> senior member of the IRE. He is a member of the Texas Society of
> Professional Engineers, National Society of Professional Engineers, and
> the American Radio Relay League.
>
> I don`t find Griffith listed in the ARRL`s Antenna Book bibliography on
> page 2-19, but he surely belongs there.
>
> Best regards, Richard Harrison, KB5WZI
>

4073. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 21:30:46 UTC
From: Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna7t8dm.ope.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 147676

On Thu, 28 Feb 2002 19:45:52 GMT, Jim Walker <walkerjd1@worldnet.att.net.net> wrote:
> I am using a UHF/VHF antenna on the roof for digital TV and I am having

I assume by "digital TV" that you mean broadcast HDTV, correct?

Was the antenna designed specifically for broadcast HDTV?

Was it installed recently?

What kind of lead-in (300ohm twinlead, rg-59 or rg-6 coax)?

Broadcast HDTV is UHF. Many older TV antenna slighted their UHF
sections. Only solution is a better antenna system.

> some trouble getting the signal strength needed. I find the signal
> fluctuates and I have to rotate the antenna to from time to time to pick up
> the same channel. It does look like multipath. I can move the antenna to a

What happens if you aim directly at the transmitting antenna?

Can you raise the antenna higher to get a better LoS?

sdb
--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

4074. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 22:19:21 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <J1yf8.9522$G7.6587@nwrddc01.gnilink.net>
Source record: 147761

I shoulda been more precise - I'm referring to the LOADING coil - in my case, in the upper half of
the antenna...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0202281125.3cf30e45@posting.google.com...
> "Gary - KJ6Q" <davison7@gte.net> wrote in message
news:<8cdf8.5415$G7.3650@nwrddc01.gnilink.net>...
> > It's my understanding that monoband antennas using coils for matching purposes are more efficient -
> > all things being equal - than larger multi-band coils using taps for various bands - but have
not
> > seen actual data as to what percentage losses might be involved...
> >
> > I have arrived at a 20/40 mobile designe that seems to provide excellent efficiency on both
bands,
> > and I'm wondering how much loss I might be experiencing due to the dualband tapped coil as
opposed
> > to 2 separate antennas/coils...
> >
> > Comments?
>
> I'm not sure if you mean the loading coils, or the matching coils, but
> if you mean the loading coils, the difference won't be huge on 40/20.
> I've got two 40m antennas. One a multiband coil and a tap for 40m, and
> the other is single band 40m. I can tell very little difference
> between them in everyday use. But I haven't done a direct comparison.
> It's best to use a single band coil, I know that, but I've never
> actually done an A/B test to see how much difference there is. If you
> mean the matching coil, Dunno about that as I use a small tuner for
> impedance matching. It works all bands. Never tried a single coil
> matcher such as a "dollar special". It may be a slight improvment over
> my tuner. I should try that sometime. MK

4075. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 22:43:30 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <koyf8.23383$q47.2861459@news20.bellglobal.com>
Source record: 147762

"Richard Harrison" wrote:
> J. Harvey wrote:
> > "Does it matter that more accurate theories don`t
> > even include the concept of "field"?
>
> It may be instructive to review what a field is supposed to be.
<snip>

Extract of Richard Feynman's speech as he accepted his Nobel Prize in Physics, 11 December 1965.

"Well, it seemed to me quite evident that the idea that a particle acts on itself, that the electrical force acts on the same particle that generates it, is not a necessary one-it is a sort of a silly one, as a matter of fact. And, so I suggested to myself, that electrons cannot act on themselves, they can only act on other electrons. That means there is no field at all. You see, if all charges contribute to making a single common field, and if that common field acts back on all the charges, then each charge must act back on itself. Well, that was where the mistake was, there was no field."

http://www.nobel.se/physics/laureates/1965/feynman-lecture.pdf

"...there is no field..."

:-)

4076. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 22:52:31 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Nwyf8.23468$q47.2865640@news20.bellglobal.com>
Source record: 147763

"Richard Harrison"
> J. Harvey wrote:
> > "Does this mean when r = 0, the intensity is "infinite"?"
>
> Infinite voltage produces an infinite electric field, and infinite
> current produces an infinite magnetic field. These aren`t
> found in a radiator.

So the field strength around an antenna only follows the '1/r' or '1/r^2'
laws when it happens to feel like it ? When it gets too close to the
radiator, then these "laws of radio physics" break down ?

These are rhetorical questions.

:-)

> There is no gear shift at the demarcation point between near field
> and far field. .... The demarcation point is an arbitrary human choice.

Or several human choices... We are in complete agreement.

4077. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 22:52:57 UTC
From: richardharrison@webtv.net
Message-ID: <26104-3C7EB4C9-27@storefull-116.iap.bryant.webtv.net>
Source record: 147764

Reg wrote:
"I`m none the wiser."

Griffith`s credential which really counts is the MIT degree. Nothing guarantees a winner, but some firms only recruit engineers at MIT when they want to beat the competition.

Another credential is his book because he explains things well.

I`ve never done business with Consolidated Dynamics, but they thought enough of Griffith to pick him as a division manager.

The professional engineer organizations require a state license of their members. Some ordinances require a registered engineer`s signature on documents. State registration requires passing an exam or graduation from a listed college.

Best regards, Richard Harrison, KB5WZI

4078. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-02-28 23:45:51 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Oizf8.23953$q47.2898292@news20.bellglobal.com>
Source record: 147765

> >> the intensity falls as 1/r
> >> the intensity falls as 1/r^2
> >> (where r is the distance from the radiator)
<snip>
> [I wrote] PS: Please, no Snow White virus... [!!!]

Quote 'the gnat' and receive a free 'Snow White' (W95.hybris.worm) virus.
Works every single time ! Strange but true. Norton nukes it of course -
takes five seconds.

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

Helpful info:
Dell Dimension 8100 P4
Win XP (all security settings correct, always up-to-date)
Norton AntiVirus 2002 (always up-to-date)
DSL (fire-walled, IP changing ~hourly)

4079. Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 00:01:12 UTC
From: Ravi R <krravi@yahoo.com>
Message-ID: <cxzf8.233320$d34.17348230@bin8.nnrp.aus1.giganews.com>
Source record: 147766

This might sound silly.. but i was just curious to know if my existing Satellite Dish (You know the huge one that rotates..).. can in any way modified to be used as a Shortwave Antenna ?

4080. Re: Load Resistors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 00:08:50 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <u7tktqkj982fd5@corp.supernews.com>
Source record: 147669

You can try Mouser or Digikey.

"avatar" <avatar@frii.com> wrote in message news:3c7d2d5a$0$178$7586b60c@news.frii.com...
> I recall there were several postings awhile back about sources for
> non-inductive power resistors. I tried a few search engines, but none list
> this news group.
>
> If anyone kept a file of this info, please email a copy to me or post it
> here.
>
> Thanks,
>
> Dave
> W&#65533;MAY
>
>
>

4081. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 00:22:17 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7EC9A8.C1933F4F@icok.net>
Source record: 147767

Ravi,
Except for maybe UHF and SHF, I doubt it. At least
not simply, or cheaply...
'Doc

4082. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 00:23:43 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <hSzf8.21870$it5.2976981@news20.bellglobal.com>
Source record: 147768

"Ravi R" asked:
> This might sound silly.. but i was just curious to know
> if my existing Satellite Dish (You know the huge one
> that rotates..).. can in any way modified to be used
> as a Shortwave Antenna ?

Depends how short the shortwaves are !

Ask a silly question - get a silly answer... :-)

Or two:
Since many people have used a short piece of wire (or even a bedspring) as a shortwave antenna, then 'YES' you could connect your portable shortwave radio to it, but then you would have to perch yourself beside it (probably uncomfortable). Might as well use a random wire just by itself.

More seriously, many shortwave broadcast stations also make their broadcasts available on various satellite subcarriers. If you have an old C-band satellite system, you might try disconnecting it from your TV and try some browsing for audio signals. If you're interested in shortwave, then you would probably enjoy browsing the satellites.

4083. Re: Relays for the Ladder-Line Length Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 00:32:30 UTC
From: dbagley@mindspring.com
Message-ID: <a5mlnlncb1@slb6.atl.mindspring.net>
Source record: 147671

Why not try latching relays?
they only need power to switch then back and forth , other than thay they stay in the position you switched them too .(IE)you power the latch coil and the contacts shift, release the power they stay shifted

power the reset coil and they shift back to the original position and stay there

Dwayne
"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C77FD1B.79D13D4@IEEE.org...
> I've got a few inquiries about using relays for the ladder-line length
> selector. Relays will work but they have the disadvantage of consuming
> power in order to perform their function. (I'm working on the concept of
> using small model airplane servo motors for this function that won't
require
> continuous current but I'm not a mechanical engineer.) The relays that I
have
> successfully used are:
>
> Omron, LY4-12d - these relays are four pole double throw and ideally
> suited for 100 watt RF stuff. Four are needed for a 0-15ft LLLS and
> five are needed for a 0-31ft LLLS.
>
> I was lucky enough to find a bunch of P&B MR11's at a surplus store in
> Phoenix. They aren't made anymore but worked very well in a 500 watt
> system inside a dust-proof enclosure.
>
> I also used P&B KUP-11D15-24's that I obtained for $2 each at a surplus
> store in Silicon Valley. They handled 500w nicely after tuneup at 100w.
> I modified the common contact wire such that it exited the relay through
> the plastic dust cover top rather than at the base of the relay.
>
> Since I don't like the current drain associated with the above relays,
> I presently use ten DPDT knife switches obtained from a surplus store in
> Tucson for $2 each. They are mounted on a piece of plexiglas that is
> mounted in my hamshack window just above my transceiver, amp, and power
> supply. I can switch the knife switches quicker than I can tune an antenna
> tuner as I have a chart on the wall with the previous tuning information
> - no tuner required.
> --
> cheers, CAM http://www.qsl.net/w5dxp

4084. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 01:27:24 UTC
From: John Edwards <johnedw@powerup.com.au>
Message-ID: <5NAf8.91$RH.7776@ozemail.com.au>
Source record: 147670

Self-mending problem. If you leave it on, the batteries will go flat in
about an hour or so in my experience!

<mcduffie@xactcom.net> wrote in message
news:p6uq7ugsad15oqfkcscil99q1msapp6ook@4ax.com...
> On Wed, 27 Feb 2002 14:05:38 -0500, Robert Lyons <boblyons@umich.edu>
> wrote:
>
> > When I'm working HF, I can tune the antenna without QRMing the world.
> > The 259 puts out only about 20 mW while I adjust the antenna tuner to
> > the band. I may change bands several times in a few hours, so this
> > saves all of you from a lot of QRM. [hrrmm - I wonder if even that
> > little signal bothers someone somewhere?]
>
> Along these lines, please be aware that the 259 IS a low power
> transmitter (not you specifically, but everyone in general). It is very
> easy to leave it on and cause QRM to some local VHF users. I've keyed
> my repeater with mine hooked to a gain-type omni directional antenna at
> 40'. My repeater is 30 miles away.
>
> Best to turn it off when you aren't making measurements.
>
> Gary
> --
> There is no x in my ISPs domain name.

4085. Scanners 4 Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 03:00:02 UTC
From: klarrg@aol.com
Message-ID: <20020228220002.07481.00000871@mb-ce.aol.com>
Source record: 147672

I have the following scanners for sale...

1.) Regency Z-10 professionally converted from 10 to 30 channels with beep-delete and audio enhancement mod.Radio is a SOLID 9 out of 10 both cosmetically and functionally, and includes back-of-set antenna and power cord (no box or booklet).Scanner is in AMAZING shape for its age and is housed in an attractive, wood-look cabinet with LARGE bright green LCD display . Covers 30-50/144-174/406-512 Mhz. $40 SHIPPED

2.) Bearcat BC-12 CRYSTAL 10-channel base unit. These are quite rare to find, and this one is in BEAUTIFUL, virtual MINT condition (SOLID 9 of 10 !).Has scan speed adjustment control and delay on/off switch. Includes antenna and power cord (no box or book).Works and looks great..a must for collectors or, as a reliable backup radio ! $40 SHIPPED

Radios shipped by USPS parcel post. Insurance optional if requested as is different shipping method for additional cost as per USPS rates. If interested or have any questions, feel free to Email me @ any time. All replies answered. Payment via M.O. or personal check (w/ 14-day waiting period for clearance).

Thank You and Happy Monitoring !!

4086. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 03:03:35 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C7EEF86.82F20105@tampabay.rr.com>
Source record: 147674

hey ravi
get your ham license and that dish can be modified to work as a high gain
antenna for 432mhz and above for sat or EME

Ravi R wrote:

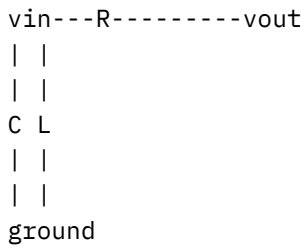
> This might sound silly.. but i was just curious to know if my existing
> Satellite Dish (You know the huge one that rotates..).. can in any way
> modified to be used as a Shortwave Antenna ?

4087. HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 03:22:33 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0202281922.2bf73b9d@posting.google.com>
Source record: 147673
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

NOTE: This is NOT a homework assignment. (I graduated from college nearly 6 years ago, so there is no grade at stake.) Yes, I am truly interested in understanding how filters work.

Can anyone help me with the Bode Plot for the following bandpass filter circuit? Have I stumbled across limitations of Bode Plots?



As usual, the input voltage is on the left and the output voltage is on the right.

The transfer function is H(s)=vout/vin=sL/(s^2*CLR+sL+R).

If R=100 ohms, C=100 microF, and L=100 mH, then the transfer function is:
H(s)=.1s/(.001s^2 + .1s + 100) = 100/(s^2+100s+100,000)

The dB of the transfer function is:
HdB(w)= 10 log [(.01 w^2)/(.01 w^2 + 10^4 (10^-5 w^2 -1)^2)]

The phase of the transfer function is:
Hangle(w) = -arctan[100 (10^-5 w^2 -1)/(.1 w)]

The poles of the transfer function are s=-50+-j312.2498999

This means that the cutoff frequency is 321.2498999 radians (around 49.7 Hz). But why isn't this cutoff frequency 316.227766 radians? I realize there isn't a very big difference between these two frequencies, but the second one is the resonant one.

And why is the dB slope per decade irregular? The cutoff frequency is 49.7 Hz, and the gain is near 0 dB here. At 497 Hz, the gain is -29.8 Hz. At 4970 Hz, the gain is -49.9 dB. The gain is -30.0 dB at 4.97 Hz and -50.1 dB at .497 Hz.

Can someone tell me how you would draw the Bode Plot for this circuit?

Jason Hsu, AG4DG
jason_hsu_802701@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio.html

4088. Re: Laugh for the day

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 03:35:09 UTC
From: Charles Fregeau <n5hsr@sprynet.com>
Message-ID: <3C7EF6ED.6561F66C@sprynet.com>
Source record: 147675

Corey wrote:
>
> These guys at Techno Scout, aka. Comtrad are the biggest slingers
> of techno-bull I've ever seen.
>
> Take a look at this web site for your daily load of techno babble.
>
> http://www.technoscout.com/general/product/product.asp?product=125&Prod_Name=Xium_Antenn
a&site=85515.
>
> - Corey

Somebody ought to forward this to Kurt N Sterba at World Radio. <g>

4089. Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 03:46:31 UTC
From: Ken Johnson <kckmjohn@comcast.net>
Message-ID: <MPG.16e8c34da231c477989680@news.mi.comcast.giganews.com>
Source record: 147677

I have read good things about full wave loop antennas that has me ready to put one up. One thing that I cannot seem to find out is what if instead of putting up one wavelength on 3.9 mhz, I put up 1000'- 1200' of wire? Will that be better than one wavelength's worth? Does "Bigger is Better" apply here? Thanks... Ken WB8VTW

4090. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 03:47:57 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C7EF9E3.9BE922C6@shaw.ca>
Source record: 147678

Jim Walker wrote:
>
> I am using a UHF/VHF antenna on the roof for digital TV and I am having
> some trouble getting the signal strength needed. I find the signal
> fluctuates and I have to rotate the antenna to from time to time to pick up
> the same channel. It does look like multipath. I can move the antenna to a
> different spot on the roof, but before I do that a couple of questions.
> First the antenna is on one side of the roof and is pointed toward the other
> side. The roof has asphalt shingles. I wonder if the multipath comes from
> the roof. In the line of sight of the antenna about 100' from its location
> are a row of pine trees. Could they be a factor? Any help or suggestions
> would be welcome.
> --
> Jim Walker
> Northern Virginia

Are you using a Digital Ready antenna such as the Xium?
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4091. Re: Relays for the Ladder-Line Length Selector

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 04:03:26 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7EFD8E.3049E426@IEEE.org>
Source record: 147681

dbagley@mindspring.com wrote:
>
> Why not try latching relays?
> they only need power to switch then back and forth , other than thay they
> stay in the position you switched them too .(IE)you power the latch coil
> and the contacts shift, release the power they stay shifted
>
> power the reset coil and they shift back to the original position and stay
> there

So far, I haven't paid more than $3 for any of my relays. I haven't found
any suitable latching relays for $3.
--
cheers, CAM http://www.qsl.net/w5dxp

4092. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 04:04:23 UTC
From: Jim Walker <walkerjd1@worldnet.att.net.net>
Message-ID: <b5Df8.6739$106.432929@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147680

The answers to the question below are that I am talking about HDTV. The antenna was not specifically designed for HDTV, in fact to be honest it is a rather inexpensive Radio Shack VHF/UHF antenna, medium gain. It has been installed for one year and I am using coax to connect to the TV. I believe that it is RG 59. It is definitely not RG 6. The antenna is about eight feet above the top of my chimney and I hate to raise it further, or at least at last resort.
--
Jim Walker
Northern Virginia
Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid> wrote in message
news:slrna7t8dm.ope.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid...
> On Thu, 28 Feb 2002 19:45:52 GMT, Jim Walker
<walkerjd1@worldnet.att.net.net> wrote:
> > I am using a UHF/VHF antenna on the roof for digital TV and I am having
>
> I assume by "digital TV" that you mean broadcast HDTV, correct?
>
> Was the antenna designed specifically for broadcast HDTV?
>
> Was it installed recently?
>
> What kind of lead-in (300ohm twinlead, rg-59 or rg-6 coax)?
>
> Broadcast HDTV is UHF. Many older TV antenna slighted their UHF
> sections. Only solution is a better antenna system.
>
> > some trouble getting the signal strength needed. I find the signal
> > fluctuates and I have to rotate the antenna to from time to time to pick up
> > the same channel. It does look like multipath. I can move the antenna to a
>
> What happens if you aim directly at the transmitting antenna?
>
> Can you raise the antenna higher to get a better LoS?
>
> sdb
> --
> | Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
> | Watch out for my e-mail address. Thank UCE. #### change ^ to @ #### |
> They that can give up essential liberty to obtain a little temporary

> safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
> Fight terrorism, arm the population!

4093. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 04:04:27 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <3C7EFDCB.C83C0AD9@rica.net>
Source record: 147679
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Jason Hsu wrote:
>
> NOTE: This is NOT a homework assignment. (I graduated from college
> nearly 6 years ago, so there is no grade at stake.) Yes, I am truly
> interested in understanding how filters work.
>
> Can anyone help me with the Bode Plot for the following bandpass
> filter circuit? Have I stumbled across limitations of Bode Plots?
>
> vin---R---------vout
> | |
> | |
> C L
> | |
> | |
> ground
>
> As usual, the input voltage is on the left and the output voltage is
> on the right.
>
> The transfer function is H(s)=vout/vin=sL/(s^2*CLR+sL+R).
>
> If R=100 ohms, C=100 microF, and L=100 mH, then the transfer function
> is:
> H(s)=.1s/(.001s^2 + .1s + 100) = 100/(s^2+100s+100,000)
>
> The dB of the transfer function is:
> HdB(w)= 10 log [(.01 w^2)/(.01 w^2 + 10^4 (10^-5 w^2 -1)^2)]
>
> The phase of the transfer function is:
> Hangle(w) = -arctan[100 (10^-5 w^2 -1)/(.1 w)]
>
> The poles of the transfer function are s=-50+-j312.2498999
>
> This means that the cutoff frequency is 321.2498999 radians (around
> 49.7 Hz). But why isn't this cutoff frequency 316.227766 radians? I
> realize there isn't a very big difference between these two
> frequencies, but the second one is the resonant one.
>
> And why is the dB slope per decade irregular? The cutoff frequency is
> 49.7 Hz, and the gain is near 0 dB here. At 497 Hz, the gain is -29.8
> Hz. At 4970 Hz, the gain is -49.9 dB. The gain is -30.0 dB at 4.97
> Hz and -50.1 dB at .497 Hz.

>
> Can someone tell me how you would draw the Bode Plot for this circuit?
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio.html

Actually, the cutoff frequency is not exactly at the resonance,
because cutoff is defined as the 3 db down points on each side of the
response peak.

But he way I think of the frequency shift of the peak is like this:
If the resonance of the LC were lossless, each cycle would last a bit
longer than if energy is draining out of the resonance while it is
ringing down from some starting energy. This raises the exponentially
damped frequency just a bit compared to the undamped resonance.

--
John Popelish

4094. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 04:11:22 UTC
From: Jim Walker <walkerjd1@worldnet.att.net.net>
Message-ID: <KbDf8.6765$106.435616@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147682

As you probably see in my post above I don't have a specific digital
ready antenna. Channel Master has been recommended to me also. I will
gladly get rid of the Radio Shack antenna for one that will work.
--
Jim Walker
Northern Virginia
Irv Finkleman <finkirv@shaw.ca> wrote in message
news:3C7EF9E3.9BE922C6@shaw.ca...
> Jim Walker wrote:
> >
> > I am using a UHF/VHF antenna on the roof for digital TV and I am
having
> > some trouble getting the signal strength needed. I find the signal
> > fluctuates and I have to rotate the antenna to from time to time to pick
up
> > the same channel. It does look like multipath. I can move the antenna
to a
> > different spot on the roof, but before I do that a couple of questions.
> > First the antenna is on one side of the roof and is pointed toward the
other
> > side. The roof has asphalt shingles. I wonder if the multipath comes
from
> > the roof. In the line of sight of the antenna about 100' from its
location
> > are a row of pine trees. Could they be a factor? Any help or
suggestions
> > would be welcome.
> > --
> > Jim Walker
> > Northern Virginia
>
> Are you using a Digital Ready antenna such as the Xium?
> --
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> --------------------
> Visit my website at http://members.home.net/finkirv/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

4095. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 04:25:38 UTC
From: "dave y." <sagdave@cris.com>
Message-ID: <rrvt7ucl6l8l282bn6h88a0no80fhhiusk@4ax.com>
Source record: 147683
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Given the transfer function 100/(s^2+100s+100,000), 316.23 is the undamped natural frequency of the circuit. If the resistance was very low, the circuit would have resonance at that frequency. However, the resistance lowers the resonant frequency of the circuit to the 'damped' natural frequency. If you plot your transfer function in fine detail, you will see it peaks a little below the 312.25 value you might expect.

As far as creating a bode plot, in this day of computers and such, you should use software such as Matlab, or even Excel for that matter to do the plotting. If you must do it by hand, the simple rules for asmyptotes apply far from the resonance. Near the resonant peak you must apply a correction factor based upon the Q of the circuit. I don't know, do they still teach this stuff in school? Not much point with the software available today.

Cheers,

dave y.

4096. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 04:27:43 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <0rDf8.22332$it5.3170121@news20.bellglobal.com>
Source record: 147684

Aren't most Digital TV signals not actually broadcast in HDTV, but only in SDTV (Standard Definition) ? For example, the famous Super Bowl was broadcast in SDTV, not HDTV (to many complaints). The reason that I'm asking is that many people seem to think that digital TV is always HDTV when I read that most isn't. Just curious if I missed a memo...

Given that the Digital TV signal fits into the same channel bandwidth as the old analog TV signal, what does it mean for the TV antenna to be "Digital Ready" or "designed specifically for broadcast HDTV" ? It may be that Digital TV happens to need more gain than analog TV, but "higher gain" is a more well defined meaning than "digital ready" given that people might live close or far.

4097. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 04:41:14 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u7u1jakg07km76@corp.supernews.com>
Source record: 147685
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <f7d9a152.0202281922.2bf73b9d@posting.google.com>,
jason_hsu@my-deja.com says...
>
>NOTE: This is NOT a homework assignment. (I graduated from college
>nearly 6 years ago, so there is no grade at stake.) Yes, I am truly
>interested in understanding how filters work.
>
>Can anyone help me with the Bode Plot for the following bandpass
>filter circuit? Have I stumbled across limitations of Bode Plots?
>
>vin---R---------vout
> | |
> | |
> C L
> | |
> | |
> ground

[snip]

You might want to download the very simple (yet quite effective) program
called "PC-Ecap" from:
http://ourworld.compuserve.com/homepages/circuitsys/PCECAP.HTM

This is a circuit analysis program, rather like a poor man's SPICE. Yes, it
runs in a DOS shell, and you have to manually create a text-based input, but
for simple networks like you are asking about, it is amazingly effective. It
creates a Bode plot as an output, for defined input conditions.

It won't help you with the theory, but at least you can see the results of
different trials, which may help you gain an understanding of the network.

For the above circuit, you only need to type 4 or 5 short lines of text,
then start the simulation.

Bob.

4098. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 04:54:36 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7F096C.BB080A0E@icok.net>
Source record: 147686

Ken,
This is one of those times when bigger is better, to
a point. Personally, I'd try for about 1 1/2 wave on the
lowest band I was going to use. The second harmonic of an
antenna doesn't usually 'work' too well. The 'extra'
half wave on the lowest band in use should get you away
from the second harmonic on all bands. But, if you've got
the room for larger, why not??
'Doc

4099. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 05:05:23 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2802022105230001@a3b05603.sympatico.bconnected.net>
Source record: 147687

In article <3C7F096C.BB080A0E@icok.net>, 'Doc <w5lz@icok.net> wrote:

> Ken,
> This is one of those times when bigger is better, to
> a point. Personally, I'd try for about 1 1/2 wave on the
> lowest band I was going to use.

Wouldn't that have a very high input impedance on that lowest band? Of course if you use the right length of open wire feedline, as Cecil W5DXP would surely recommend, that won't matter.

> The second harmonic of an antenna doesn't usually 'work' too well.

I'm not sure what you mean by this. If you mean that antennas don't work well on twice the frequency for which they were originally designed, I suspect most people who use loops that are a full wavelength in circumference on the lowest frequency band would strongly disagree with you.

David, ex-W8EZE

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

4100. Re: Antenna 468 MHz ???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 05:15:35 UTC
From: "Stan Labinsky Jr." <stanbarb@warwick.net>
Message-ID: <3c7f0f22@news1.warwick.net>
Source record: 147690
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

If you don't find anything in your country, you might want to check out
www.antenex.com. They're a commercial antenna manufacturer near
Chicago, Il. USA and sell several well made antennas just for that
application. They might even have a European outlet.
Another possibility is www.tessco.com, a general commercial radio
wholesaler who does business worldwide, you might be able to
work with them as well.
Good hunting!
Stan, WA2PUQ

"Peter Hunt" <news@peterhunt.zoetermeernet.nl> wrote in message
news:a4dhjd$m7q$1@news1.xs4all.nl...
> Hi!
>
> For better reception of a trunking-system on 468 MHz I'm looking for
> a beam/yagi which is especially tuned for this frequency.
>
> WIMO in Germany has lots of beams and in their catalogue you can
> see some machines which are computer-controlled and can make
> antennas for any possible frequency, but now they don't seem to be
> able (or don't want) to make such an antenna for 468 MHz.
>
> Does anybody know other firms that are able to make this???
>
> 73, Peter Hunt PE1RFR.
>
>
>

4101. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 05:16:59 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c7f12ae_1@news1.prserv.net>
Source record: 147691

Back in the black and white TV days, one of the best all channel VHF antennas was built by Channel Master. They all quickly disappeared with the advent of color TV. Reason? Phase roll across the passband, which didn't affect B&W, but shifted the color phase differently on different channels - unacceptable to the audience. HDTV occupies the 6 MHz channel fully with a rectangular chunk of signal. Phase and amplitude need to be very nearly the same across that 6 MHz, a requirement met by few off-the-shelf antennas.

--
Crazy George
Remove NO and SPAM from return address
J. Harvey <JM001.Harvey@sympatico.ca> wrote in message
news:0rDf8.22332$it5.3170121@news20.bellglobal.com...
> Aren't most Digital TV signals not actually broadcast in HDTV, but only in
> SDTV (Standard Definition) ? For example, the famous Super Bowl was
> broadcast in SDTV, not HDTV (to many complaints). The reason that I'm
> asking is that many people seem to think that digital TV is always HDTV
when
> I read that most isn't. Just curious if I missed a memo...
>
> Given that the Digital TV signal fits into the same channel bandwidth as
the
> old analog TV signal, what does it mean for the TV antenna to be "Digital
> Ready" or "designed specifically for broadcast HDTV" ? It may be that
> Digital TV happens to need more gain than analog TV, but "higher gain" is
a
> more well defined meaning than "digital ready" given that people might
live
> close or far.
>
>
>
>

4102. Re: Magnetic antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 05:17:56 UTC
From: cooperjim@aol.com
Message-ID: <20020301001756.10963.00001332@mb-fj.aol.com>
Source record: 147689

Try

www.antennex.com

They have a bunch of stuff on mag-loops

4103. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 05:18:33 UTC
From: JD <dyson@jdyson.com>
Message-ID: <s1Ef8.1240$K%4.297029@news1.iquest.net>
Source record: 147688

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:0rDf8.22332$it5.3170121@news20.bellglobal.com...
> Aren't most Digital TV signals not actually broadcast in HDTV, but only in
> SDTV (Standard Definition) ? For example, the famous Super Bowl was
> broadcast in SDTV, not HDTV (to many complaints). The reason that I'm
> asking is that many people seem to think that digital TV is always HDTV when
> I read that most isn't. Just curious if I missed a memo...
>
> Given that the Digital TV signal fits into the same channel bandwidth as the
> old analog TV signal, what does it mean for the TV antenna to be "Digital
> Ready" or "designed specifically for broadcast HDTV" ? It may be that
> Digital TV happens to need more gain than analog TV, but "higher gain" is a
> more well defined meaning than "digital ready" given that people might live
> close or far.
>
DTV can carry SDTV or HDTV. The biggest need for American
HDTV reception is a directional antenna. I have found that matching
the antenna properly with proper signal levels can make a difference
between intermittent reception and perfection. Gain is much
less important than a reasonable directional antenna.

I get excellent indoor reception with a bow-tie and a low noise (but
low gain) preamp that feeds two HDTV recievers. My indoor UHF
antenna provides for reception of my UHF HDTV channels, but one
of my DTV signals is on VHF, and I have combined in the output
of a fixed position rabbit ear antenna also.

John

4104. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 05:20:40 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C7F0F9B.F0899DC3@shaw.ca>
Source record: 147693

Jim Walker wrote:
>
> As you probably see in my post above I don't have a specific digital
> ready antenna. Channel Master has been recommended to me also. I will
> gladly get rid of the Radio Shack antenna for one that will work.
> --
> Jim Walker
> Northern Virginia
> Irv Finkleman <finkirv@shaw.ca> wrote in message
> news:3C7EF9E3.9BE922C6@shaw.ca...
> > Jim Walker wrote:
> > >
> > > I am using a UHF/VHF antenna on the roof for digital TV and I am
> having
> > > some trouble getting the signal strength needed. I find the signal
> > > fluctuates and I have to rotate the antenna to from time to time to pick
> up
> > > the same channel. It does look like multipath. I can move the antenna
> to a
> > > different spot on the roof, but before I do that a couple of questions.
> > > First the antenna is on one side of the roof and is pointed toward the
> other
> > > side. The roof has asphalt shingles. I wonder if the multipath comes
> from
> > > the roof. In the line of sight of the antenna about 100' from its
> location
> > > are a row of pine trees. Could they be a factor? Any help or
> suggestions
> > > would be welcome.
> > > --
> > > Jim Walker
> > > Northern Virginia
> >
> > Are you using a Digital Ready antenna such as the Xium?
> > --
> > Diagnosed Type II Diabetes March 5 2001
> > Beating it with diet and exercise!
> > 297/215/210 (to be revised lower)
> > 58"/43"(!)/44" (already lower too!)
> > --------------------
> > Visit my website at http://members.home.net/finkirv/
> > --------------------
> > Irv Finkleman,
> > Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP

> > Calgary, Alberta, Canada

Sorry Jim! I was just being facetious! The Xium antenna is
at the link
below and is just a scam. The term "Digital Ready" I
intended as further
ironic humor. I didn't mean to mislead you -- the stuff on
the Xium antenna
was brought to my attention on an earlier post by someone in
this group.

http://www.technoscout.com/general/product/product.asp?product=125&Prod_Name=Xium_Antenna&
site=85515
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4105. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 05:27:59 UTC
From: JD <dyson@jdyson.com>
Message-ID: <iaEf8.1241$K%4.297064@news1.iquest.net>
Source record: 147692

"Jim Walker" <walkerjd1@worldnet.att.net.net> wrote in message
news:b5Df8.6739$106.432929@bgtnsc05-news.ops.worldnet.att.net...
> The answers to the question below are that I am talking about HDTV. The
> antenna was not specifically designed for HDTV, in fact to be honest it is a
> rather inexpensive Radio Shack VHF/UHF antenna, medium gain. It has been
> installed for one year and I am using coax to connect to the TV. I believe
> that it is RG 59. It is definitely not RG 6. The antenna is about eight
> feet above the top of my chimney and I hate to raise it further, or at least
> at last resort.
>
If you are in a difficult reception area, the impairments can accumulate to
provide you an unreceiveable signal. If you have a reasonably directional
antenna, and are marginally getting the signal, you might want to be prepared
to deal with the antenna/feed-line/TV-front-end matching issues. In my
own circumstances, by adding a preamp (I mean a high signal level capable
one), the reception seems to improve markedly. Gain isn't always the problem,
and in fact, too much gain can be a worse problem than too little. TV
front-ends aren't always a very good match for the feedline, and antennas
are also not always a good match. If you can put a preamp close between
the antenna and feedline, you can mitigate rather heinous response curves
because of matching issues.

Frankly, it is sometimes easy to overload a preamp in strong signal areas,
but in such areas, the signal can be strong enough to overcome other
impairments. In medium strength signal areas, solving the problems
can be a bit of an artistic endeavor, because of the various mismatches
involved.

I had mitigated my indoor reception problems by using a low gain/low noise
preamp next to the indoor antenna (it isn't immediately next to the TV), then
I pad the output of the preamp, but it provides a nice 75ohm match to the
coax. I haven't done anything with the match on the TV side, but if I
had continued ot have intermittent reception, I would have done something
about the match on the TV side also. The extra few dB of signal quality (since
my desired channels are all across the TV spectrum) affords consistant
reception on all channels. I have been 'hit' by severe rainy/windy weather
than has caused some intermittent reception, but the environment for my
antenna is horrid. Above the roof, my reception would be totally trivial.

John

John

4106. Re: Tesla coil transmitter/ antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 05:37:18 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C7F139F.E0BCE67F@worldnet.att.net>
Source record: 147694

Bill Turner wrote:

> On Wed, 27 Feb 2002 15:21:10 -0500, "AB Brown" <abbrown@nospammail.com>
> wrote:
>
> >I believe most Tesla coils resonate around 500 Khz or less, but I have heard
> >of some operating in the low hf range, around 2 Mhz. Has anyone tried using
> >Tesla coils to send CW or AM? Most Tesla coils use an LC network for
> >tuning, but it may be too broad to be useful as a transmitter. Perhaps a
> >long wire can be attached to the LC network to act as an antenna.
> >
> >Interested in any thoughts, opinions, or actual experience in this area.
>
> ____
>
> Lord, give me strength......

Just tune on, Bill, like the rest of us.

4107. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 06:10:56 UTC
From: Don Kelly <dhky@peeshaw.ca>
Message-ID: <QXEf8.173219$A44.10272071@news2.calgary.shaw.ca>
Source record: 147695
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0202281922.2bf73b9d@posting.google.com...
> NOTE: This is NOT a homework assignment. (I graduated from college
> nearly 6 years ago, so there is no grade at stake.) Yes, I am truly
> interested in understanding how filters work.
>
> Can anyone help me with the Bode Plot for the following bandpass
> filter circuit? Have I stumbled across limitations of Bode Plots?
>
> vin---R---------vout
> | |
> | |
> C L
> | |
> | |
> ground
>
> As usual, the input voltage is on the left and the output voltage is
> on the right.
>
> The transfer function is H(s)=vout/vin=sL/(s^2*CLR+sL+R).
>
> If R=100 ohms, C=100 microF, and L=100 mH, then the transfer function
> is:
> H(s)=.1s/(.001s^2 + .1s + 100) = 100/(s^2+100s+100,000)

OOPS: you lost an s upstairs but you seem to have got it back below
----
>
> The dB of the transfer function is:
> HdB(w)= 10 log [(.01 w^2)/(.01 w^2 + 10^4 (10^-5 w^2 -1)^2)]

Check this- it appears you are complicating things
try Hdb(w) =20log(100)+20log(w) -10log((w+312)^2 +2500) +10log((w-312)^2
+2500)

>
> The phase of the transfer function is:
> Hangle(w) = -arctan[100 (10^-5 w^2 -1)/(.1 w)]

You forgot the effect of the zero which adds 90 degrees
Try 90 -arctan((w+312)/50) -arctan((w-312)/50)

>
> The poles of the transfer function are s=-50+-j312.2498999

OK

>
> This means that the cutoff frequency is 321.2498999 radians (around
> 49.7 Hz). But why isn't this cutoff frequency 316.227766 radians? I
> realize there isn't a very big difference between these two
> frequencies, but the second one is the resonant one.

How did you get 321 rad/sec? (ignoring the meaningless decimals)

>
> And why is the dB slope per decade irregular? The cutoff frequency is
> 49.7 Hz, and the gain is near 0 dB here. At 497 Hz, the gain is -29.8
> Hz. At 4970 Hz, the gain is -49.9 dB. The gain is -30.0 dB at 4.97
> Hz and -50.1 dB at .497 Hz.
> Can someone tell me how you would draw the Bode Plot for this circuit?

The asymptotic slopes are each about 20db/decade - no problem here. It
appears that you are looking for the asymptotic Bode plot made up, in this
case of a line rising at 20db/decade up to the corner frequency (due to the
zero) then falling at 20db/decade(adding in the effect of the poles. Try
superimposing this on your plot. Remember, the straight line asymptotic plot
is an approximation.
If I am wrong I hope that I will be corrected- it is considerably more than
6 years since I did a Bode plot
--
Don Kelly
dhky@peeshaw.ca
remove the urine to answer

4108. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 06:51:53 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <dyFf8.243$0H.9@nwrddc01.gnilink.net>
Source record: 147696

"John Edwards" <johnedw@powerup.com.au> wrote in message
news:5NAf8.91$RH.7776@ozemail.com.au...
> Self-mending problem. If you leave it on, the batteries will go flat in
> about an hour or so in my experience!
>

I run mine on 1700 mah Nmh rechargables. It runs for days at a time before
needing a recharge...

73 de W6DKN

> <mcduffie@xactcom.net> wrote in message
> news:p6uq7ugsad15oqfkcscil99q1msapp6ook@4ax.com...
> > On Wed, 27 Feb 2002 14:05:38 -0500, Robert Lyons <boblyons@umich.edu>
> > wrote:
> >
> > > When I'm working HF, I can tune the antenna without QRMing the world.
> > > The 259 puts out only about 20 mW while I adjust the antenna tuner to
> > > the band. I may change bands several times in a few hours, so this
> > > saves all of you from a lot of QRM. [hrrmm - I wonder if even that
> > > little signal bothers someone somewhere?]
> >
> > Along these lines, please be aware that the 259 IS a low power
> > transmitter (not you specifically, but everyone in general). It is
very
> > easy to leave it on and cause QRM to some local VHF users. I've keyed
> > my repeater with mine hooked to a gain-type omni directional antenna at
> > 40'. My repeater is 30 miles away.
> >
> > Best to turn it off when you aren't making measurements.
> >
> > Gary
> > --
> > There is no x in my ISPs domain name.
>
>

4109. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 07:14:09 UTC
From: richardharrison@webtv.net
Message-ID: <26102-3C7F2A41-217@storefull-116.iap.bryant.webtv.net>
Source record: 147697

Jim Weir wrote:
"Because all things considered, it is the best compromise between efficiency and antenna pattern over the full bandwidth." (To cut the 1/4-wave vertical antenna for the center of a band with a width of 15% of the center frequency.)

TV antennas need wideband response. Arnold B. Bailey in "TV and Other Receiving Antennas" has a catalog of antenna characteristics. It includes the antenna`s bandwidth as a percentage of center frequency.

Bailey gives the bandwidth of a 1/4-wave vertical antenna with a radiation resistance of 28 ohms and a 52-ohm coax feed as 18% for 1db down and 40% for 3db down in response.

When frequency rises above the quarter-wave frequency, radiation is concentrated toward the horizon, producing gain. Also, radiation resistance rises. A 10% increase over the resonant frequency will give about 50-ohms resistance plus an inductive reactance

When frequency falls below the quarter-wave frequency, the radiation resistance falls below 28 ohms and a capacitive reactance is added. So, not only does operating the antenna below resonance reduce its gain, operating the antenna below resonance also worsens its mismatch to a 50-ohm coax.

As this antenna has a 40% bandwidth, and as the antenna gets worse below resonance, and as the antenna gets better above resonance, it makes sense to resonate it at the low end of a 15% of center-frequency bandwidth, instead of the center of the band.

Best regards, Richard Harrison, KB5WZI

4110. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 08:09:42 UTC
From: Kevin Aylward <kevin@anasoft.co.uk>
Message-ID: <eHGf8.19098$R16.2951758@news11-gui.server.ntli.net>
Source record: 147698
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0202281922.2bf73b9d@posting.google.com...

> This means that the cutoff frequency is 321.2498999 radians (around
> 49.7 Hz). But why isn't this cutoff frequency 316.227766 radians? I
> realize there isn't a very big difference between these two
> frequencies, but the second one is the resonant one.
>
> And why is the dB slope per decade irregular? The cutoff frequency is
> 49.7 Hz, and the gain is near 0 dB here. At 497 Hz, the gain is -29.8
> Hz. At 4970 Hz, the gain is -49.9 dB. The gain is -30.0 dB at 4.97
> Hz and -50.1 dB at .497 Hz.
>
> Can someone tell me how you would draw the Bode Plot for this circuit?
>

From looking at the other posts, I think that there is some confusion here. A bode plot is not simply a plot of gain against frequency. It is the _straight_ line approximation to the frequency response obtained by examining the poles and zeros of the gain function. This can _only_ be done if the poles and zeros are sufficiently apart from each other.

As a technical statement, the bode plot fails for resonance's, i.e. there are no n*20.db/decade straight line approximations to the real curve. i.e. you can _not_ draw a "bode" plot for such resonance transfer functions. It should be noted that a normal frequency response graph is not a bode plot, although the term bode plot is often used indiscriminately to apply to such general smooth curve frequency response plots.

Kevin Aylward , Warden of the Kings Ale
kevin@anasoft.co.uk
http://www.anasoft.co.uk
SuperSpice, a very affordable Mixed-Mode
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Waveform Display, FFT's and Filter Design.

4111. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 08:13:17 UTC
From: richardharrison@webtv.net
Message-ID: <9742-3C7F381D-270@storefull-118.iap.bryant.webtv.net>
Source record: 147700

I wrote:
"At VHF and UHF, there is less noise to reduce."

Jim Weir responded:
""You wanna try that again?"

Yes. At VHF and UHF, there is little sky wave or ground wave propagation. So, except for noise generated nearby or far out in space, there is less noise as compared with lower frequencies. Of course, receivers have internal noise to compete with weak signals.

Best regards, Richard Harrison, KB5WZI

4112. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 08:17:37 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u7ue85greqbje1@corp.supernews.com>
Source record: 147699

Richard....

Having spent the better part of half a century in my specialty of designing and testing aircraft VHF antennas, you aren't going to convince me to use an antenna longer than necessary, nor am I going to sway you out of your convictions. So be it. We both have our reasons for doing what we do, and that is fine. I'm happy with mine and you are happy with yours. Let it be. I'll be glad to start throwing my experts against your experts, but all we will achieve is to confuse the group.

To the person who started this thread, I have a question. Have you tried an outside antenna and did it do any good?

Jim

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:26102-3C7F2A41-217@storefull-116.iap.bryant.webtv.net...

> As this antenna has a 40% bandwidth, and as the antenna gets worse below
> resonance, and as the antenna gets better above resonance, it makes
> sense to resonate it at the low end of a 15% of center-frequency
> bandwidth, instead of the center of the band.
>
> Best regards, Richard Harrison, KB5WZI
>

4113. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 08:45:20 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <7hCLePAg+zf8EwFP@jmwa.demon.co.uk>
Source record: 147703
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Jason Hsu <jason_hsu@my-deja.com>
wrote (in <f7d9a152.0202281922.2bf73b9d@posting.google.com>) about 'HELP
needed in understanding Bode Plots', on Thu, 28 Feb 2002:

>This means that the cutoff frequency is 321.2498999 radians (around
>49.7 Hz). But why isn't this cutoff frequency 316.227766 radians? I
>realize there isn't a very big difference between these two
>frequencies, but the second one is the resonant one.

You presumably define 'resonance' as the frequency at which the
reactances are equal and opposite or at which the circulating current is
a maximum. But the 'cut-off' frequency, by which I suppose you mean the
frequency at which the output voltage is a maximum, is NOT at the same
frequency.
>
>And why is the dB slope per decade irregular? The cutoff frequency is
>49.7 Hz, and the gain is near 0 dB here. At 497 Hz, the gain is -29.8
>Hz. At 4970 Hz, the gain is -49.9 dB. The gain is -30.0 dB at 4.97
>Hz and -50.1 dB at .497 Hz.

The response curve is only *approximately* symmetrical with a
logarithmic frequency scale.

Note that your LC circuit contains *no resistance*. This leads to many
anomalous results of calculation for the LC circuit alone: for example,
the Q is infinite and the bandwidth is zero. It is just the presence of
the source resistance R that makes the overall characteristics finite.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
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http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4114. Re: MFJ259 ANALYZER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 11:30:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5npbt$8s6r6$1@ID-124126.news.dfncis.de>
Source record: 147701

I run mine on a little 12VDC supply which plugs into an AC power supply socket. There is an RF choke in a long DC supply lead wound on a ferrite rod. Can still be used in the hand-held mode.

It lasts for ever.

Reg, G4FGQ

4115. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 12:16:57 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c7f6eb0_4@corp.newsgroups.com>
Source record: 147702

"Ken Johnson" <kckmjohn@comcast.net> wrote in message
news:MPG.16e8c34da231c477989680@news.mi.comcast.giganews.com...
> I have read good things about full wave loop antennas that has me ready
> to put one up. One thing that I cannot seem to find out is what if
> instead of putting up one wavelength on 3.9 mhz, I put up 1000'- 1200' of
> wire? Will that be better than one wavelength's worth? Does
> "Bigger is Better" apply here? Thanks... Ken WB8VTW
Well Yes and Know , but I would put up the big loop first feed it with open wire line and it should do a good Job for you.. will act some what like a rhombic on the higher frequencies.. and you may want a vertical or dipole up as well because the higher you go in Frequency the deeper the nulls become.. but also the greater the gain in the lobes of the antenna pattern. Anyway had a 600 footer up for several years here was a great antenna unfortunately the ice strom of 1998 took down two of my supporting trees so it will be long time for them to grow back.

Also you may wish to take a look a L.B.'s fine work on Horizontal loops at
http://www.cebik.com/atl1.html

http://www.cebik.com/hl.html

73 , Dave KC1DI// always qrp..

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Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

4116. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 13:30:41 UTC
From: N2EY@AOL.COM
Message-ID: <c2356669.0203010530.79b2461b@posting.google.com>
Source record: 147704

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C7DAFDD.75C9B8C5@IEEE.org>...
> Richard Harrison wrote:
> >
> > EHS, Jr. wrote:
> > "I am still trying to understand where the figure 6000 ohms nominal for
> > this antenna comes from."
> >
> > I have not found my prized copy of the Orr Handbook, so this is a guess.
> > High impedance such as this, likely comes from something like an end-fed
> > 1/2-wave, some multiple thereof, or something close, any of these having
> > an open-circuit at the far end.
>
> I found my Orr Handbook and it appears to me that this antenna is bogus.
> The horizontal folded dipole section is 35 ft for 75m/40m. I modeled it
> using EZNEC and the impedance is NOT 6000 ohms. It is around 3+j600 ohms.
> The SWR on the 26 ft vertical section is very close to infinity on 75m.
> This looks like a really terrible 75m antenna.

This antenna appears in my old ARRL Antenna Book and the RSGB Handbook
I have
(4th edition, I think). The dimensions vary slightly in various
publications,
some shing open-line and others Twin Lead. The RSGB book credits the
antenna's origin to W6BCX. Looks like the design has been around for
40 years
or so, but I've never heard of anybody actually using one.

All of the descriptions show a set of ground radials at the base, too.
Did your model include radial system, Cecil?

The descriptions say that on on 80/75 meters the antenna is basically
a
loaded vertical, which looks reasonable. Works out to about ~1/10 wave
vertical section with a BIG capacity hat. Operation on 40 is a bit
more fuzzy, but it looks to me like the idea is that the folded dipole
section doesn't do much loading on 40 because the vertical section is
pretty close to a quarter wave. Or perhaps the FD section causes 3/4
wave resonance on 40.

In any event the antenna is highly dependent on a good ground/radial
system.
The thing can't be looked at as a bunch of transmission lines because
the
parts all radiate somewhat.

Who was/is W6BCX? Maybe he knows.

73 de Jim, N2EY

4117. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 13:42:31 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <3C7F8547.EEAC08CB@rica.net>
Source record: 147705
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Kevin Aylward wrote:

> From looking at the other posts, I think that there is some confusion here. A
> bode plot is not simply a plot of gain against frequency. It is the _straight_
> line approximation to the frequency response obtained by examining the poles and
> zeros of the gain function. This can _only_ be done if the poles and zeros are
> sufficiently apart from each other.
(snip)

As I learned it, a Bode plot is the actual phase and amplitude plot versus frequency with the amplitude and frequency scales plotted as logarithms but the phase plot to a linear scale. There are no inherent assumptions of any approximations on the plot, though, if the poles are real and well separated, one can approximate the actual Bode plot with straight lines and rounded corners and get pretty close to the actual Bode plot. Now that I have Mathcad, I can make accurate Bode plots of any circuit I can describe by a LaPlace transform with no approximations or pole zero placement restrictions. I don't think making an accurate plot makes it any less of a Bode plot.

--
John Popelish

4118. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 14:01:02 UTC
From: Kevin Aylward <kevin@anasoft.co.uk>
Message-ID: <DQLf8.21014$R16.3125470@news11-gui.server.ntli.net>
Source record: 147706
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"John Popelish" <jpopelish@rica.net> wrote in message
news:3C7F8547.EEAC08CB@rica.net...
> Kevin Aylward wrote:
>
> > From looking at the other posts, I think that there is some confusion here.
A
> > bode plot is not simply a plot of gain against frequency. It is the
straight
> > line approximation to the frequency response obtained by examining the poles
and
> > zeros of the gain function. This can _only_ be done if the poles and zeros
are
> > sufficiently apart from each other.
> (snip)
>
> As I learned it, a Bode plot is the actual phase and amplitude plot
> versus frequency with the amplitude and frequency scales plotted as
> logarithms but the phase plot to a linear scale. There are no
> inherent assumptions of any approximations on the plot, though, if the
> poles are real and well separated, one can approximate the actual Bode
> plot with straight lines and rounded corners and get pretty close to
> the actual Bode plot.

Well John, I would have to say that you learnt this incorrectly. There is no doubt, that a "Bode Plot" refers to the straight line asymptotic approximation to the real frequency plots. This was certainly the way I first learnt to some 24 years ago, probably 2nd year of my degree.

The fundamental point of a "Bode Plot" is that you find out all the poles and zeros of a response and draw straight lines between them. That _is_ indeed why it was invented.

>Now that I have Mathcad, I can make accurate
> Bode plots of any circuit I can describe by a LaPlace transform with
> no approximations or pole zero placement restrictions.

That is not a Bode Plot. It is a normal frequency response plot.

> I don't think
> making an accurate plot makes it any less of a Bode plot.

It does. A frequency response curve is just that, a frequency response curve. It is not what is defined as a "Bode Plot". I agree that this is a very common misconception, but I am sure if you have a look on the web, you could find the original paper by Bode where he introduced this method.

Think about it this way. What would you call this specific method of using straight line approximations?

Kevin Aylward , Warden of the Kings Ale
kevin@anasoft.co.uk
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Waveform Display, FFT's and Filter Design.

4119. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 14:33:21 UTC
From: Jim Walker <walkerjd1@worldnet.att.net.net>
Message-ID: <RiMf8.6229$gK2.482661@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147707

Irv Finkleman <finkirv@shaw.ca> wrote in message
news:3C7F0F9B.F0899DC3@shaw.ca...
I looked at the Xium site a couple of days ago and of course it was a
scam. I didn't associate it with your post until you mentioned it. I let
those wothless names go very quickly. I have too much trouble remembering
the important ones. I am off to tinker with the antenna and cables. I will
call a service person before long if it doesn't clear up. What a defeat if
that happens, but they have the instruments to nail what I am sure is a
simple problem if I only knew what to do. Otherwise, I might be swapping
antennas and cables forever. I haven't thrown in the towel yet.
--
Jim Walker
Northern Virginia

> Sorry Jim! I was just being facetious! The Xium antenna is
> at the link
> below and is just a scam. The term "Digital Ready" I
> intended as further
> ironic humor. I didn't mean to mislead you -- the stuff on
> the Xium antenna
> was brought to my attention on an earlier post by someone in
> this group.
>
>
http://www.technoscout.com/general/product/product.asp?product=125&Prod_Name
=Xium_Antenna&site=85515
> --
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> --------------------
> Visit my website at http://members.home.net/finkirv/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

4120. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 14:39:05 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C7F9289.7BF1D3F@IEEE.org>
Source record: 147708

N2EY wrote:
> The descriptions say that on on 80/75 meters the antenna is basically
> a loaded vertical, which looks reasonable.

I misread the Orr text. Sorry.
--
cheers, CAM http://www.qsl.net/w5dxp

4121. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 15:24:58 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <gL4t0NBK15f8EwFY@jmwa.demon.co.uk>
Source record: 147715
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Kevin Aylward
<kevin@anasoft.co.uk> wrote (in <DQLf8.21014$R16.3125470@news11-gui.serv
er.ntli.net>) about 'HELP needed in understanding Bode Plots', on Fri, 1
Mar 2002:
>There is no
>doubt, that a "Bode Plot" refers to the straight line asymptotic approximation
>to the real frequency plots. This was certainly the way I first learnt to some
>24 years ago, probably 2nd year of my degree.

I agree, except that '24' should be '45' (;-). The areas between the
real response and the straight line approximations are called 'Bode
fillets'.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4122. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 15:32:38 UTC
From: Ravi R <krravi@yahoo.com>
Message-ID: <qaNf8.47$yL2.26831@bin6.nnrp.aus1.giganews.com>
Source record: 147709

LOL Harvey !

Well see, i dont have a professional equipment, just got a new SONY
ICF-SW7600GR and i love it. It seems to pull out signals from afar,
especially Marine and Amateur Radio, using SSB. But i am using the supplied
Reel Antenna to hang outside the window to do it.
After browising through many Antenna models and manufacturers.. i dont know
as to which will suit my Radio, since i am scared that such high power
antennas might damage my radio. The one from SONY especially AN-1 and AN-LP1
are expensive. Anyone has any idea about these antennas ?

So i thought if i can use that thing in anyway. Looks like i need to perch
under the dish and use it eh harvey ? lol

So harvey, how do i connect that coaxial cable that comes into the house
from my dish into the radio ?
Because my radio has a mini plug called.."Ext Ant" looks like a RCA jack.
And how do i prevent Lighting and other factors from affecting my set.

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:hSzf8.21870$it5.2976981@news20.bellglobal.com...
> "Ravi R" asked:
> > This might sound silly.. but i was just curious to know
> > if my existing Satellite Dish (You know the huge one
> > that rotates..).. can in any way modified to be used
> > as a Shortwave Antenna ?
>
> Depends how short the shortwaves are !
>
> Ask a silly question - get a silly answer... :-)
>
> Or two:
> Since many people have used a short piece of wire (or even a bedspring) as
a
> shortwave antenna, then 'YES' you could connect your portable shortwave
> radio to it, but then you would have to perch yourself beside it (probably
> uncomfortable). Might as well use a random wire just by itself.
>
> More seriously, many shortwave broadcast stations also make their
broadcasts
> available on various satellite subcarriers. If you have an old C-band
> satellite system, you might try disconnecting it from your TV and try some
> browsing for audio signals. If you're interested in shortwave, then you
> would probably enjoy browsing the satellites.
>

>
>
>
>

4123. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 15:36:07 UTC
From: Ravi R <krravi@yahoo.com>
Message-ID: <HdNf8.58$yL2.29247@bin6.nnrp.aus1.giganews.com>
Source record: 147710

Hi Dennis,
I am just getting the hang of this whole radio thing, though i remember in my younger days, my dad used to build them using Valve Tubes (yes they were all SYLVANIA and made in USA). I think the magic lamp is something yet to be replicated in todays electronics.

I plan to get my HAM license and probably buy a JRC -NRD 545... Oh well.. dont have that much money now though.

So i would appreciate of any information on how to convert that C-Band Satellite Dish to be of use in radio communications.

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message news:3C7EEF86.82F20105@tampabay.rr.com...
> hey ravi
> get your ham license and that dish can be modified to work as a high gain
> antenna for 432mhz and above for sat or EME
>
> Ravi R wrote:
>
> > This might sound silly.. but i was just curious to know if my existing
> > Satellite Dish (You know the huge one that rotates..).. can in any way
> > modified to be used as a Shortwave Antenna ?
>
>

4124. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 16:06:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5o9ct$8t2hb$1@ID-124126.news.dfncis.de>
Source record: 147711

> If the EH antenna really had merit, it would have been out some time
> ago. I'll believe in the EH antenna when it makes the Texas
> Bugcatcher, Screwdriver, Isotron, magnetic loop, and other small HF
> antennas obsolete.
==========

Hi Jason, there's no reason yet why it should be much worse than other antennas of the same size. Some of the criticism on this newsgroup is unfairly biassed. People are jealous of the publicity it has accumulated.

But it's a pity the inventor didn't give it a better name. What about "Screwcatcher" or " Bugsdriver" ?

Teg.

4125. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 16:14:49 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <QGNf8.102212$2v1.2744615@e3500-atl1.usenetserver.com>
Source record: 147713

Far be it from me to promote myself as an antenna guru, and I defer to Doc, at al, on this.
However, I believe there would be *some* difference in discrete coils and a tapped, multi-
band single coil. It's because, inspite of being "tapped", those jumpered turns "try" to load as well. Since these turns aren't truly "shorted", but rather "bypassed", they still factor into the
equation. That is not to say that such an arrangement doesn't work--it does---, but suffice it
to say that, IMHO, there is *some* effect from it. I have heard of coils catching fire due to this, but never experienced it myself. I used a Texas Bugcatcher for a number of years this way.

I do, however, believe that this is one of the reasons screwdriver antennas work so well---be-
cause any unused coil turns are down inside the mast and, in effect, are part of the mast itself.

Jerry
K4KWH
Gary - KJ6Q <davison7@gte.net> wrote in message
news:J1yf8.9522$G7.6587@nwrddc01.gnilink.net...
> I shoulda been more precise - I'm referring to the LOADING coil - in my case, in the upper half of
> the antenna...
>
> --
> Gary - KJ6Q
> **********
> Two things we'll never see:
> 1. Perpetual motion...
> 2. A liberal Democrat complaining
> about "Too much government"
> "Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0202281125.3cf30e45@posting.google.com...
> > "Gary - KJ6Q" <davison7@gte.net> wrote in message
> news:<8cdf8.5415$G7.3650@nwrddc01.gnilink.net>...
> > > It's my understanding that monoband antennas using coils for matching purposes are more
> efficient -
> > > all things being equal - than larger multi-band coils using taps for various bands - but have
> not
> > > seen actual data as to what percentage losses might be involved...
> > >

> > > I have arrived at a 20/40 mobile designe that seems to provide
excellent efficiency on both
> bands,
> > > and I'm wondering how much loss I might be experiencing due to the
dualband tapped coil as
> opposed
> > > to 2 separate antennas/coils...
> > >
> > > Comments?
> >
> > I'm not sure if you mean the loading coils, or the matching coils, but
> > if you mean the loading coils, the difference won't be huge on 40/20.
> > I've got two 40m antennas. One a multiband coil and a tap for 40m, and
> > the other is single band 40m. I can tell very little difference
> > between them in everyday use. But I haven't done a direct comparison.
> > It's best to use a single band coil, I know that, but I've never
> > actually done an A/B test to see how much difference there is. If you
> > mean the matching coil, Dunno about that as I use a small tuner for
> > impedance matching. It works all bands. Never tried a single coil
> > matcher such as a "dollar special". It may be a slight improvment over
> > my tuner. I should try that sometime. MK
>

4126. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 16:15:27 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C7FA90E.61451B3A@icok.net>
Source record: 147712

David or Jo Anne,
I wouldn't even guess at what the impedance would be
on any band, and it really doesn't make a lot of difference
when using ladder-line and a tuner. Personally, I prefer
using a tuner rather than Cecil's method. I have the tuner
and don't have the switches or relays.

Usually the second harmonic of an antenna doesn't work
out too well. An 80 meter doesn't 'work' very well on 40,
a 40 on 20, etc. I can't help it if someone doesn't like
it, or disagrees, it's just what I've found to be true in
most cases. (I'm one of those people who use a full wave
length loop on the lowest band I can 'do'.) I think that
has more to do with radiation patterns than anything else.
'Doc

4127. Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 16:17:51 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <FJNf8.102235$2v1.2745083@e3500-atl1.usenetserver.com>
Source record: 147714

Please visit my website at www.qsl.net/k4kwh for your mobile HF antenna needs.

73

Jerry
K4KWH

4128. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 17:06:02 UTC
From: CAM <Cecil.A.Moore@ieee.org>
Message-ID: <3C7FB4FA.1020102@ieee.org>
Source record: 147716

'Doc wrote:

> Usually the second harmonic of an antenna doesn't work
> out too well. An 80 meter doesn't 'work' very well on 40,
> a 40 on 20, etc. I can't help it if someone doesn't like
> it, or disagrees, it's just what I've found to be true in
> most cases. (I'm one of those people who use a full wave
> length loop on the lowest band I can 'do'.) I think that
> has more to do with radiation patterns than anything else.
> 'Doc

IMO, that's an old wives' tale. Consider that an EDZ is known
to be a very good antenna with gain over a dipole. An EDZ is
1.28 wavelengths long. Wouldn't it stand to reason that a 1.0
wavelength antenna would have characteristics between a 1/2wl
dipole and a 1.28wl EDZ?

I believe this old wives' tale has it origin in coax fed antennas.
For sure, feeding a 6000 ohm dipole with coax resulting in an
SWR of 120:1 will burn up almost all the signal in the coax.
But feeding a 6000 ohm dipole with 450 ohm line (or 600 ohm
line) results in an SWR of 13:1 (or 10:1) which is perfectly
acceptable with ladder-line. If the antenna system is fed at
a current maximum point on the ladder-line, the impedance seen
by the transmitter is about 34 ohms with a 50 ohm SWR of 1.5:1
which is a perfectly acceptable SWR even without an antenna
tuner. With open wire line, that impedance is about 60 ohms,
again perfectly acceptable without a tuner.

My 130 ft dipole used on 40m almost always outperforms my 40m
1/4wl vertical with 8 elevated radials. On 40m, I feed the 1.0
wavelength dipole with 3/4 wavelength of ladder-line. That odd
multiple of 1/4wl transforms the high impedance at the antenna
to a low impedance acceptable to the transmitter.
--
cheers, CAM, W5DXP

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4129. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 17:25:39 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <nQOf8.8128$106.509997@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147717

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a5o9ct$8t2hb$1@ID-124126.news.dfncis.de...
> > If the EH antenna really had merit, it would have been out some time
> > ago. I'll believe in the EH antenna when it makes the Texas
> > Bugcatcher, Screwdriver, Isotron, magnetic loop, and other small HF
> > antennas obsolete.
> ====================================
>
> Hi Jason, there's no reason yet why it should be much worse than other
> antennas of the same size. Some of the criticism on this newsgroup is
> unfairly biassed. People are jealous of the publicity it has accumulated.
>

Hi Reg:

Your first statement is correct - it should not be much worse than other antennas of the same size. However, the criticism it has received has not been based on that premise. The criticism that it has received is based entirely on the ridiculous claims made by its proponents:

1) That placing an inductor in series with the antenna causes the feed current (not feed voltage) to be time delayed thus allowing the H-field to be in time phase with the E-field.

2) That bringing the E-field and H-field into time phase causes the antenna's radiation resistance to increase from less than 1 ohm to 50 ohms.

3) That the antenna [the radiating element] has 100% efficiency.

4) That it has a bandwidth far greater than any other antenna, regardless of size.

5) That the antenna will respond only to radiation and not to individual E- or H-fields (the source of man made noise), thus it is very quiet.

etc.

Criticizing these claims has little to do with jealousy.

Steve VE9SRB

> But it's a pity the inventor didn't give it a better name. What about
> "Screwcatcher" or " Bugsdriver" ?
> ---
> Teg.
>
>

4130. Heathkit SA 2040 - someone who has worked on these please.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 17:55:42 UTC
From: Scott <GAEL79@Peoplepc.com>
Message-ID: <u7vg5c7p08qj0b@corp.supernews.com>
Source record: 147718

Hello all,
I just purchased a Heathkit SA 2040. I opened it up, to check its condition, which overall is excellent. I have a question about the connections of the internal balun, for anyone who has actually worked on, or seen the inside of their own tuner.

The Balun, T1, in my tuner, has 4 white wires. Two of the wires are marked with a white cloth tape, and two are not. Of the two that are not marked with tape, one goes to J4 and one to J5 (the balanced wire hookups, on the back of the unit). Now to the problem. Of the two wires that are marked with tape, one is connected to ground, and one is tinned, but is not connected to anything, and it doesn't look like it ever was.

I don't have a manual yet, (so it may tell in the assemble procedures) but I did down load a copy of the schematic from the I-net. The schematic just shows three wires, One to J4, One to J5, and one to ground.

I would like help from anyone who has one of these units, and has hooked up the internal balun in the past.

Thank you,

Scott

4131. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 18:06:07 UTC
From: Edmond Cheng <echeng@logiccontrols.com>
Message-ID: <jqPf8.19704$lu2.7217408@news02.optonline.net>
Source record: 147619
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Agree. Bode Plot refers to the straight line asymptotic
approximation to the real frequency plots. It's a short-cut
to get an idea how the circuit responses.

"Kevin Aylward" <kevin@anasoft.co.uk> wrote in message
news:DQLf8.21014$R16.3125470@news11-gui.server.ntli.net...
> "John Popelish" <jpopelish@rica.net> wrote in message
> news:3C7F8547.EEAC08CB@rica.net...
> > Kevin Aylward wrote:
> >
> > > From looking at the other posts, I think that there is some confusion
here.
> A
> > > bode plot is not simply a plot of gain against frequency. It is the
> _straight_
> > > line approximation to the frequency response obtained by examining the
poles
> and
> > > zeros of the gain function. This can _only_ be done if the poles and
zeros
> are
> > > sufficiently apart from each other.
> > (snip)
> >
> > As I learned it, a Bode plot is the actual phase and amplitude plot
> > versus frequency with the amplitude and frequency scales plotted as
> > logarithms but the phase plot to a linear scale. There are no
> > inherent assumptions of any approximations on the plot, though, if the
> > poles are real and well separated, one can approximate the actual Bode
> > plot with straight lines and rounded corners and get pretty close to
> > the actual Bode plot.
>
> Well John, I would have to say that you learnt this incorrectly. There is no
> doubt, that a "Bode Plot" refers to the straight line asymptotic
approximation
> to the real frequency plots. This was certainly the way I first learnt to
some
> 24 years ago, probably 2nd year of my degree.
>
> _The_ fundamental point of a "Bode Plot" is that you find out all the poles
and
> zeros of a response and draw straight lines between them. That _is_ indeed
why

> it was invented.
>
> >Now that I have Mathcad, I can make accurate
> > Bode plots of any circuit I can describe by a LaPlace transform with
> > no approximations or pole zero placement restrictions.
>
> That is not a Bode Plot. It is a normal frequency response plot.
>
> > I don't think
> > making an accurate plot makes it any less of a Bode plot.
>
> It does. A frequency response curve is just that, a frequency response
curve.
> It is not what is defined as a "Bode Plot". I agree that this is a very
common
> misconception, but I am sure if you have a look on the web, you could find
the
> original paper by Bode where he introduced this method.
>
> Think about it this way. What would you call this specific method of using
> straight line approximations?
>
> Kevin Aylward , Warden of the Kings Ale
> kevin@anasoft.co.uk
> http://www.anasoft.co.uk
> SuperSpice, a very affordable Mixed-Mode
> Windows Simulator with Schematic Capture,
> Waveform Display, FFT's and Filter Design.
>
>

4132. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 18:08:34 UTC
From: Edmond Cheng <echeng@logiccontrols.com>
Message-ID: <CsPf8.19707$Iu2.7221673@news02.optonline.net>
Source record: 147620
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

> This means that the cutoff frequency is 321.2498999 radians (around
> 49.7 Hz). But why isn't this cutoff frequency 316.227766 radians? I
> realize there isn't a very big difference between these two
> frequencies, but the second one is the resonant one.
>

Cut off frequency is the -3dB point on the 2 sides of the response
curve. Resonance frequency is the point of max output. They are
not the same. The separation is affected by the Q-factor.

4133. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 18:11:40 UTC
From: Kevin Aylward <kevin@anasoft.co.uk>
Message-ID: <zvPf8.22309$R16.3257454@news11-gui.server.ntli.net>
Source record: 147621
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"John Woodgate" <jmw@jmwa.demon.co.uk> wrote in message
news:gL4t0NBK15f8EwFY@jmwa.demon.co.uk...
> I read in sci.electronics.design that Kevin Aylward
> <kevin@anasoft.co.uk> wrote (in <DQLf8.21014$R16.3125470@news11-gui.serv
> er.ntli.net>) about 'HELP needed in understanding Bode Plots', on Fri, 1
> Mar 2002:
> >There is no
> >doubt, that a "Bode Plot" refers to the straight line asymptotic
approximation
> >to the real frequency plots. This was certainly the way I first learnt to
some
> >24 years ago, probably 2nd year of my degree.
>
> I agree, except that '24' should be '45' (;-). The areas between the
> real response and the straight line approximations are called 'Bode
> fillets'.

This show that you are indeed correct, about your age. I have not heard of the
term 'Bode fillets' before.

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kevin@anasoft.co.uk
http://www.anasoft.co.uk
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Waveform Display, FFT's and Filter Design. do NOT copy news posts to me by
E-MAIL!

4134. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 18:45:11 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <gshv7u8b7q9653e00b6mhqa4elgqdvhfue@4ax.com>
Source record: 147622
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Fri, 1 Mar 2002 14:01:02 -0000, "Kevin Aylward"
<kevin@anasoft.co.uk> wrote:

>>Now that I have Mathcad, I can make accurate
>> Bode plots of any circuit I can describe by a LaPlace transform with
>> no approximations or pole zero placement restrictions.
>
>That is not a Bode Plot. It is a normal frequency response plot.
>
>> I don't think
>> making an accurate plot makes it any less of a Bode plot.
>
>It does. A frequency response curve is just that, a frequency response curve.
>It is not what is defined as a "Bode Plot". I agree that this is a very common
>misconception, but I am sure if you have a look on the web, you could find the
>original paper by Bode where he introduced this method.
>
>Think about it this way. What would you call this specific method of using
>straight line approximations?
>
>Kevin Aylward

Hi Kevin,

The complete reference is (Jason, take note):

"Network Analysis and Feedback Amplifier Design," Hendrik W. Bode,
Ph.D., Research Mathematician, Bell Telephone Laboratories, Inc., D.
Van Nostrand Company.

Bode exhibits BOTH representations. The point of the lecture series
this text grew from was the characteristics found in feedback
amplifier design. Bode's choice of illustration and the suite of
views were tailored to this. As such, "Bode plots" are a statement of
style and application.

73's
Richard Clark, KB7QHC

4135. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 19:05:15 UTC
From: CAM <Cecil.A.Moore@ieee.org>
Message-ID: <3C7FD0EB.3040204@ieee.org>
Source record: 147624

VE9SRB wrote:

> 4) That it has a bandwidth far greater than any other antenna, regardless of
> size.

I'll bet it's not any greater than my Bird Termaline. :-)
--
cheers, CAM, W5DXP

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4136. 5BTV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 19:07:03 UTC
From: Mark Tetrault <tetrault@mv.mv.com>
Message-ID: <l7kv7u4plsimpuhbdn1rmk701duf9k60kg@4ax.com>
Source record: 147623

Does anyone have the assembly instructions for the Hustler 5BTV they
can either scan and email attach or photocopy and mail to me?

I'll pay the postage if needed.

mark

4137. loop antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 19:23:34 UTC
From: IronHead <slipkid@kwiknet.net>
Message-ID: <WyQf8.3$Sab2.393379@news2.randori.com>
Source record: 147626

I recently made a loop antenna with about 98 ft. of #14 insulated wire. I am feeding it with about 50-60ft. of 300 ohm twin leed wire into the tuner on my rig. My question is, would the impedence too high using 300 ohm twin lead? Also, I have the wire lying on the perimeter of the roof of my house. A friend says when it rains, the SWR will go crazy. Any input on this is appreciated. The loop is recieving great and I'm getting out ok. I just hasn't rained yet to see.

4138. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 19:24:24 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <IzQf8.8313$106.521039@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147625

"CAM" <Cecil.A.Moore@ieee.org> wrote in message
news:3C7FD0EB.3040204@ieee.org...
> VE9SRB wrote:
>
> > 4) That it has a bandwidth far greater than any other antenna,
regardless of
> > size.
>
> I'll bet it's not any greater than my Bird Termaline. :-)
> --
> cheers, CAM, W5DXP
>

Its not much greater than my Bird Feeder either.

4139. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 19:48:28 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <3C7FDB0C.6504338F@rica.net>
Source record: 147627
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Kevin Aylward wrote:
>
> "John Popelish" <jpopelish@rica.net> wrote in message
> news:3C7F8547.EEAC08CB@rica.net...
> > Kevin Aylward wrote:
> >
> > > From looking at the other posts, I think that there is some confusion here.
> A
> > > bode plot is not simply a plot of gain against frequency. It is the
> _straight_
> > > line approximation to the frequency response obtained by examining the poles
> and
> > > zeros of the gain function. This can _only_ be done if the poles and zeros
> are
> > > sufficiently apart from each other.
> > (snip)
> >
> > As I learned it, a Bode plot is the actual phase and amplitude plot
> > versus frequency with the amplitude and frequency scales plotted as
> > logarithms but the phase plot to a linear scale. There are no
> > inherent assumptions of any approximations on the plot, though, if the
> > poles are real and well separated, one can approximate the actual Bode
> > plot with straight lines and rounded corners and get pretty close to
> > the actual Bode plot.
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> Well John, I would have to say that you learnt this incorrectly. There is no
> doubt, that a "Bode Plot" refers to the straight line asymptotic approximation
> to the real frequency plots. This was certainly the way I first learnt to some
> 24 years ago, probably 2nd year of my degree.
>
> _The_ fundamental point of a "Bode Plot" is that you find out all the poles and
> zeros of a response and draw straight lines between them. That _is_ indeed why
> it was invented.
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> >Now that I have Mathcad, I can make accurate
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> > no approximations or pole zero placement restrictions.
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> That is not a Bode Plot. It is a normal frequency response plot.
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> > I don't think
> > making an accurate plot makes it any less of a Bode plot.
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> It does. A frequency response curve is just that, a frequency response curve.
> It is not what is defined as a "Bode Plot". I agree that this is a very common
> misconception, but I am sure if you have a look on the web, you could find the
> original paper by Bode where he introduced this method.
>
> Think about it this way. What would you call this specific method of using
> straight line approximations?

I call that an approximate Bode plot, based on asymptotes. Bore plots, from my education are the frequency response that produces an easy to approximate form and one that allows easy visual identification of many real and complex poles and zeros, by virtue of the log log format. I was schooled in both exact and approximate versions. In all cases, the format (log log amplitude and log linear phase) was what was referred to as the Bode plot form of frequency response presentation. I guess you have not, so far convinced me that I was taught incorrectly, just because you say so.

--
John Popelish

4140. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 19:50:40 UTC
From: Kevin Aylward <kevin@anasoft.co.uk>
Message-ID: <nYQf8.28861$Hg1.4415934@news6-win.server.ntlworld.com>
Source record: 147628
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Richard Clark" <kb7qhc@attbi.com> wrote in message
news:gshv7u8b7q9653e00b6mhqa4elgqdvhfue@4ax.com...
> On Fri, 1 Mar 2002 14:01:02 -0000, "Kevin Aylward"
> <kevin@anasoft.co.uk> wrote:
>
> >>Now that I have Mathcad, I can make accurate
> >> Bode plots of any circuit I can describe by a LaPlace transform with
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> >Kevin Aylward
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> Hi Kevin,
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> The complete reference is (Jason, take note):
>
> "Network Analysis and Feedback Amplifier Design," Hendrik W. Bode,
> Ph.D., Research Mathematician, Bell Telephone Laboratories, Inc., D.
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> Bode exhibits BOTH representations. The point of the lecture series
> this text grew from was the characteristics found in feedback
> amplifier design. Bode's choice of illustration and the suite of
> views were tailored to this. As such, "Bode plots" are a statement of
> style and application.
>

I am having trouble actually understanding your overall meaning here. Anyway, the main utility of the bode plot is this.

Draw the straight line asymptotes relating to all of the poles and zeros for the open loop gain and closed loop gain. These slopes will all be n*20db/dec. If the intersection of these two plots intersect at a rate of <20db, the system will be stable. There are pathological cases where this is not strictly true, but by and large, is correct enough for the majority of applications. The utility of this approach is that it includes conditional stable systems, i.e. systems that have gain greater then unity and net phase shift of zero, yet still be completely stable. For example, if you do an n multy pole rolloff, then introduced n-1 zeros just before the intersection point, although the phase goes way over -180 (in an inverting system), the system will indeed be stable.

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4141. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 19:58:04 UTC
From: Kevin Aylward <kevin@anasoft.co.uk>
Message-ID: <n3Rf8.28899$Hg1.4425223@news6-win.server.ntlworld.com>
Source record: 147629
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"John Popelish" <jpopelish@rica.net> wrote in message
news:3C7FDB0C.6504338F@rica.net...
> Kevin Aylward wrote:
> >
> > "John Popelish" <jpopelish@rica.net> wrote in message
> > news:3C7F8547.EEAC08CB@rica.net...
> > > Kevin Aylward wrote:
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> > straight line approximations?
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> identification of many real and complex poles and zeros, by virtue of
> the log log format. I was schooled in both exact and approximate
> versions. In all cases, the format (log log amplitude and log linear
> phase) was what was referred to as the Bode plot form of frequency
> response presentation. I guess you have not, so far convinced me that
> I was taught incorrectly, just because you say so.
>
> --
> John Popelish

We will probably have to agree to disagree. I made another post on how the
asymptotic slope point of view is used in practise.

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Waveform Display, FFT's and Filter Design.

4142. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 20:05:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5onaj$8sdia$1@ID-124126.news.dfncis.de>
Source record: 147630

> For sure, feeding a 6000 ohm dipole with coax resulting in an
> SWR of 120:1 will burn up almost all the signal in the coax.
==========

Where did you get your 6000 ohms from ?

Another figment of your old-wives' imagination ?

Unless you have something to contribute, don't bother.

Reg

4143. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 20:45:14 UTC
From: CAM <Cecil.A.Moore@ieee.org>
Message-ID: <3C7FE85A.7050906@ieee.org>
Source record: 147631

Reg Edwards wrote:

>>For sure, feeding a 6000 ohm dipole with coax resulting in an
>>SWR of 120:1 will burn up almost all the signal in the coax.
>
> Where did you get your 6000 ohms from ?

EZNEC sez that's about the feedpoint impedance of a
one wavelength dipole.

> Another figment of your old-wives' imagination ?

Hope not. Does EZNEC have an imagination?

> Unless you have something to contribute, don't bother.

What is your estimate of the feedpoint impedance of a
one wavelength dipole?
--
cheers, CAM, W5DXP

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4144. Re: loop antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 22:49:08 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C800558.ED462662@shaw.ca>
Source record: 147632

IronHead wrote:
>
> I recently made a loop antenna with about 98 ft. of #14 insulated wire. I am
> feeding it with about 50-60ft. of 300 ohm twin leed wire into the tuner on
> my rig. My question is, would the impedence too high using 300 ohm twin
> lead? Also, I have the wire lying on the perimeter of the roof of my house.
> A friend says when it rains, the SWR will go crazy. Any input on this is
> appreciated. The loop is recieving great and I'm getting out ok. I just
> hasn't rained yet to see.

You can always run out and hose it down! Chances are that
you won't notice any
big difference.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4145. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 23:09:55 UTC
From: Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna802hi.pb2.Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 147522

On Fri, 01 Mar 2002 04:04:23 GMT, Jim Walker <walkerjd1@worldnet.att.net.net> wrote:
> antenna was not specifically designed for HDTV, in fact to be honest it is a
> rather inexpensive Radio Shack VHF/UHF antenna, medium gain. It has been

Might be OK... OTOH, one of the problems with multipath can often
be cured by a better front/back ratio on the antenna, which usually
(in consumer TV antennas) comes along with higher gain.

> installed for one year and I am using coax to connect to the TV. I believe

One year means it probably has not weathered too badly.

> that it is RG 59. It is definitely not RG 6. The antenna is about eight

"not RG-6" is not good... RG-6 should definitely be used. It has
less loss and better shielding than rg59 (the other typically used
"tv" coax). Radio Shack rg-6 wouldn't be my first choice either...
Home Depot usually sells a decent brand for less than the RS price.

I hope you used decent matching transformer at the antenna, and made
sure all exterior connections to the coax are well waterproofed.

The preamp as someone else mentioned might help, if weak signal were
the problem. (preamp at the antenna) But it sounds like that is
not likely the issue.

> feet above the top of my chimney and I hate to raise it further, or at least
> at last resort.

8ft is pretty good, if you can get decent LoS at that height.
Raising higher than that is a pain (more guys, etc).

Directionality and LoS is still a question...

> Sylvan Butler <Znospam+noZs_0202@hpb13799Z.Zboi.hpZ.com.invalid> wrote in
> message
>> What happens if you aim directly at the transmitting antenna?

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

4146. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 23:15:08 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203011515.3d2d7e63@posting.google.com>
Source record: 147633

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:<QGNf8.102212$2v1.2744615@e3500-atl1.usenetserver.com>...
> Far be it from me to promote myself as an antenna guru, and I defer to Doc,
> at al, on this.
> However, I believe there would be *some* difference in discrete coils and a
> tapped, multi-
> band single coil. It's because, inspite of being "tapped", those jumpered
> turns "try" to load as well. Since these turns aren't truly "shorted", but
> rather "bypassed", they still factor into the
> equation. That is not to say that such an arrangement doesn't work--it
> does---, but suffice it
> to say that, IMHO, there is *some* effect from it. I have heard of coils
> catching fire due to this, but never experienced it myself. I used a Texas
> Bugcatcher for a number of years this way.
>
> I do, however, believe that this is one of the reasons screwdriver antennas
> work so well---be-
> cause any unused coil turns are down inside the mast and, in effect, are
> part of the mast itself.

It's a plus to that design, but I'm not sure how big an impact it has
on the performance over other factors such as coil placement, length
of mast below and above the coil etc. I bet a "tapped" bugcatcher on
40m using an 80m coil is just about as good as any screwdriver in
overall performance. The bugcatcher might lose a small tad from the
tapped coil, but it might make up for it with the usually longer lower
mast that the bugcatcher has. It's the lower mast length of most
screwdrivers that scares me away from them. It doesn't seem too easy
to add lower masts to them in order to raise the coil height. The coil
height on a given antenna length is probably more important than
whether the coil is tapped or not. Of course, if he's looking for the
utmost in performance as he was earlier, then I'd use a bugcatcher
with a fixed coil. Most screwdrivers I see have way too short a lower
mast for optimum performance. Of course, I may be seeing mainly lousy
screwdrivers though. I know one I checked out was a sorry device. You
were the one that told me about the guy that built them, and his "easy
SWR with high coil loss" theories. It was horrible overall. The coil
was junk, too low also. I'm sure yours are way better... MK
>
> Jerry
> K4KWH
> Gary - KJ6Q <davison7@gte.net> wrote in message
> news:J1yf8.9522$G7.6587@nwrddc01.gnilink.net...
> > I shoulda been more precise - I'm referring to the LOADING coil - in my

> case, in the upper half of
> > the antenna...
> >
> > --
> > Gary - KJ6Q
> > **********
> > Two things we'll never see:
> > 1. Perpetual motion...
> > 2. A liberal Democrat complaining
> > about "Too much government"
> > "Mark Keith" <nm5k@wt.net> wrote in message
> news:25eb70d7.0202281125.3cf30e45@posting.google.com...
> > > "Gary - KJ6Q" <davison7@gte.net> wrote in message
> news:<8cdf8.5415$G7.3650@nwrddc01.gnilink.net>...
> > > > It's my understanding that monoband antennas using coils for matching
> purposes are more
> efficient -
> > > > all things being equal - than larger multi-band coils using taps for
> various bands - but have
> not
> > > > seen actual data as to what percentage losses might be involved...
> > > >
> > > > I have arrived at a 20/40 mobile designe that seems to provide
> excellent efficiency on both
> bands,
> > > > and I'm wondering how much loss I might be experiencing due to the
> dualband tapped coil as
> opposed
> > > > to 2 separate antennas/coils...
> > > >
> > > > Comments?
> > >
> > > I'm not sure if you mean the loading coils, or the matching coils, but
> > > if you mean the loading coils, the difference won't be huge on 40/20.
> > > I've got two 40m antennas. One a multiband coil and a tap for 40m, and
> > > the other is single band 40m. I can tell very little difference
> > > between them in everyday use. But I haven't done a direct comparison.
> > > It's best to use a single band coil, I know that, but I've never
> > > actually done an A/B test to see how much difference there is. If you
> > > mean the matching coil, Dunno about that as I use a small tuner for
> > > impedance matching. It works all bands. Never tried a single coil
> > > matcher such as a "dollar special". It may be a slight improvment over
> > > my tuner. I should try that sometime. MK
> >

4147. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-01 23:51:31 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <%mUf8.105596$2v1.2843107@e3500-atl1.usenetserver.com>
Source record: 147634

Mark,

It isn't hard to make an SD with a long lower mast. I saw one at a hamfest on a van that had
a 6 FOOT lower mast. This allowed the guy to bumper mount and still get the coil above the
top of the van. I've been meaning to build one as an experiment. After all, if it didn't work,
I can always cut off the bottom, right? I see no reason for the long lower mast not to work.
The one I saw was configured like the bugcatcher you describe; long lower mast, short whip
with a cap. hat.

I'd almost bet the the 3" Texas Bugcatcher and my Carolina Cyclone II (also 3") would be
just about equal. Hmm, maybe I'll "stretch" a CC II and see what happens.

Ya want one? <<g>>

73

Jerry
K4KWH
Mark Keith <nm5k@wt.net> wrote in message
news:25eb70d7.0203011515.3d2d7e63@posting.google.com...
> "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:<QGNf8.102212$2v1.2744615@e3500-atl1.usenetserver.com>...
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> > band single coil. It's because, inspite of being "tapped", those jumpered
> > turns "try" to load as well. Since these turns aren't truly "shorted", but
> > rather "bypassed", they still factor into the
> > equation. That is not to say that such an arrangement doesn't work--it
> > does---, but suffice it
> > to say that, IMHO, there is *some* effect from it. I have heard of coils
> > catching fire due to this, but never experienced it myself. I used a Texas
> > Bugcatcher for a number of years this way.

> >
> > I do, however, believe that this is one of the reasons screwdriver
antennas
> > work so well---be-
> > cause any unused coil turns are down inside the mast and, in effect, are
> > part of the mast itself.
>
> It's a plus to that design, but I'm not sure how big an impact it has
> on the performance over other factors such as coil placement, length
> of mast below and above the coil etc. I bet a "tapped" bugcatcher on
> 40m using an 80m coil is just about as good as any screwdriver in
> overall performance. The bugcatcher might lose a small tad from the
> tapped coil, but it might make up for it with the usually longer lower
> mast that the bugcatcher has. It's the lower mast length of most
> screwdrivers that scares me away from them. It doesn't seem too easy
> to add lower masts to them in order to raise the coil height. The coil
> height on a given antenna length is probably more important than
> whether the coil is tapped or not. Of course, if he's looking for the
> utmost in performance as he was earlier, then I'd use a bugcatcher
> with a fixed coil. Most screwdrivers I see have way too short a lower
> mast for optimum performance. Of course, I may be seeing mainly lousy
> screwdrivers though. I know one I checked out was a sorry device. You
> were the one that told me about the guy that built them, and his "easy
> SWR with high coil loss" theories. It was horrible overall. The coil
> was junk, too low also. I'm sure yours are way better... MK
> >
> > Jerry
> > K4KWH
> > Gary - KJ6Q <davison7@gte.net> wrote in message
> > news:J1yf8.9522$G7.6587@nwrddc01.gnilink.net...
> > > I shoulda been more precise - I'm referring to the LOADING coil - in
my
> > case, in the upper half of
> > > the antenna...
> > >
> > > --
> > > Gary - KJ6Q
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> > > Two things we'll never see:
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> > > "Mark Keith" <nm5k@wt.net> wrote in message
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for
> > various bands - but have
> > not
> > > > > seen actual data as to what percentage losses might be involved...
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> > > > > I have arrived at a 20/40 mobile designe that seems to provide
> > excellent efficiency on both
> > bands,
> > > > > and I'm wondering how much loss I might be experiencing due to the
> > dualband tapped coil as
> > opposed
> > > > > to 2 separate antennas/coils...
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> > > > if you mean the loading coils, the difference won't be huge on
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> > > > I've got two 40m antennas. One a multiband coil and a tap for 40m,
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> > > > the other is single band 40m. I can tell very little difference
> > > > between them in everyday use. But I haven't done a direct
comparison.
> > > > It's best to use a single band coil, I know that, but I've never
> > > > actually done an A/B test to see how much difference there is. If
you
> > > > mean the matching coil, Dunno about that as I use a small tuner for
> > > > impedance matching. It works all bands. Never tried a single coil
> > > > matcher such as a "dollar special". It may be a slight improvment
over
> > > > my tuner. I should try that sometime. MK
> > >

4148. Re: WTB Bendix King HT antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 00:08:21 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c801f6f_2@news1.prserv.net>
Source record: 147635

There are several aftermarket manufacturers, one is Centurion:

http://130.94.151.161/antenna_2way.asp

They used to show a much more extensive set of choices, but this page should be a starting point. If you are unsuccessful, e-mail me and I will dig into my catalog file for the other manufacturers, whose names escape me for the moment.
--
Crazy George
W5VPQ
Remove NO and SPAM from return address
Dan Yemiola <ai8o@Yahoo.com> wrote in message
news:a5aurv$862a$1@news3.infoave.net...
> I have a Bendix -King LPU-4991 UHF HT.
> The 1/4 wave whip has broken off where the flexible part of the antenna
> connects to the connector fixture that screws into the HT case.
> It looks similar to the antenna connector used by Motorola on HT-220's. I
> think they may be called 1/4-20 connectors, but I am not sure.
>
> I am looking for two antennas:
> One 1/4 wave whip,
> and one "stubby" helically wound antenna.
>
> If you have either of these items for sale please e-mail to:
> aga4fl@yahoo.com
>
> TIA
> Dan Yemiola
> ai8o
>
>

4149. Re: loop antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:00:41 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C802318.8F2734F5@bellatlantic.net>
Source record: 147636

98' would be like 3 wavelengths on 10 meters. It would work much better if you could make it 132', which would be one wavelength on 40, two wavelengths on 20, and 4 Wavelengths on 10. If it was that length, tuning would be much smoother since the antenna impedance would be from about 30 to 100 ohms. Would be much better if you could put the loop up on standoffs, so it isn't sitting in a puddle when it rains.

'73 KI4Z

IronHead wrote:

> I recently made a loop antenna with about 98 ft. of #14 insulated wire. I am
> feeding it with about 50-60ft. of 300 ohm twin leed wire into the tuner on
> my rig. My question is, would the impedence too high using 300 ohm twin
> lead? Also, I have the wire lying on the perimeter of the roof of my house.
> A friend says when it rains, the SWR will go crazy. Any input on this is
> appreciated. The loop is recieving great and I'm getting out ok. I just
> hasn't rained yet to see.

4150. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:07:22 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C8024A8.6459DD1A@bellatlantic.net>
Source record: 147637

Bigger the Better! I had a 528' (4 WL on 80) loop of #10 THHN, and I could work Austrailia pileups on 40 CW at 4 in the morning with 200 Watts.. Fed it with a 4:1 Balun, 50 ohm Coax and occasionally a Johnson Matchbox. Performance on the other bands (10 was a bit finicky) was similar. Not bad for a multiband wire antenna!

'73 KI4Z

Ken Johnson wrote:

> I have read good things about full wave loop antennas that has me ready
> to put one up. One thing that I cannot seem to find out is what if
> instead of putting up one wavelength on 3.9 mhz, I put up 1000'- 1200' of
> wire? Will that be better than one wavelength's worth? Does
> "Bigger is Better" apply here? Thanks... Ken WB8VTW

4151. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:14:47 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C802787.8010400@sympatico.ca>
Source record: 147639

has anyone ever tried building one other then the people that make the
claims on it's great performance?

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

VE9SRB wrote:

> "CAM" <Cecil.A.Moore@ieee.org> wrote in message
> news:3C7FD0EB.3040204@ieee.org...
>
>>VE9SRB wrote:
>>
>>
>>>4) That it has a bandwidth far greater than any other antenna,
>>>
> regardless of
>
>>>size.
>>>
>>I'll bet it's not any greater than my Bird Termaline. :-)
>>--
>>cheers, CAM, W5DXP
>>
>>
>
> Its not much greater than my Bird Feeder either.
>
>
>

4152. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:15:59 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C802677.A9E6503C@bellatlantic.net>
Source record: 147638

Nope! To have any gain at all the dish has to be at least a "Few"
wavelengths across. Assuming it's a 10' (~3 Meters), you might get a few dB
gain on 220, but the antenna feed would be hairy, and very inefficient. Now
on High UHF (1296 MHz?), you might have something.

'73 KI4Z

Ravi R wrote:

> This might sound silly.. but i was just curious to know if my existing
> Satellite Dish (You know the huge one that rotates..).. can in any way
> modified to be used as a Shortwave Antenna ?

4153. Re: Heathkit SA 2040 - someone who has worked on these please.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:22:06 UTC
From: kf4toh@aol.com
Message-ID: <20020301202206.27894.00001184@mb-ca.aol.com>
Source record: 147640

hey
there are 4 wires off the balun
only 2 have tape on the ends
both wires with tape on them
go to the ground lug beside
the balun.
the other 2 wires with no tape
hook to J4 and J5
hope this helps

joe kf4toh

4154. Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:24:00 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C802890.FE3E6508@bellatlantic.net>
Source record: 147641

Just wondering if a Quad with 2 or more turn elements would be worth experimenting with? Seems to work on those small loop antennas. Any ideas?

'73 KI4Z

4155. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:30:30 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C802A15.C2D34D21@bellatlantic.net>
Source record: 147643
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Bode plots are kind of obsolete these days with all the analysis programs out there. EE's today have it rather easy compared to when I graduated!

'73 KI4Z

Jason Hsu wrote:

> NOTE: This is NOT a homework assignment. (I graduated from college
> nearly 6 years ago, so there is no grade at stake.) Yes, I am truly
> interested in understanding how filters work.
>
> Can anyone help me with the Bode Plot for the following bandpass
> filter circuit? Have I stumbled across limitations of Bode Plots?
>
> vin---R---------vout
> | |
> | |
> C L
> | |
> | |
> ground
>
> As usual, the input voltage is on the left and the output voltage is
> on the right.
>
> The transfer function is H(s)=vout/vin=sL/(s^2*CLR+sL+R).
>
> If R=100 ohms, C=100 microF, and L=100 mH, then the transfer function
> is:
> H(s)=.1s/(.001s^2 + .1s + 100) = 100/(s^2+100s+100,000)
>
> The dB of the transfer function is:
> HdB(w)= 10 log [(.01 w^2)/(.01 w^2 + 10^4 (10^-5 w^2 -1)^2)]
>
> The phase of the transfer function is:
> Hangle(w) = -arctan[100 (10^-5 w^2 -1)/(.1 w)]
>
> The poles of the transfer function are s=-50+-j312.2498999
>
> This means that the cutoff frequency is 321.2498999 radians (around
> 49.7 Hz). But why isn't this cutoff frequency 316.227766 radians? I
> realize there isn't a very big difference between these two
> frequencies, but the second one is the resonant one.
>

> And why is the dB slope per decade irregular? The cutoff frequency is
> 49.7 Hz, and the gain is near 0 dB here. At 497 Hz, the gain is -29.8
> Hz. At 4970 Hz, the gain is -49.9 dB. The gain is -30.0 dB at 4.97
> Hz and -50.1 dB at .497 Hz.
>
> Can someone tell me how you would draw the Bode Plot for this circuit?
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio.html

4156. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:34:12 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C802C14.C8730FE5@coqui.net>
Source record: 147642

Mark Hall wrote:
>
> Just wondering if a Quad with 2 or more turn elements would be worth
> experimenting with? Seems to work on those small loop antennas. Any
> ideas?
>
> '73 KI4Z

As I understand it, a quad element behaves as two half-wave elements 'stacked' with quarter-wave spacing. I don't see how you could do that with multiple-turns.
As for small loop antennas, they are well down in the negative gain range.
-Bill

4157. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:35:28 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C802B3F.EA95CE13@bellatlantic.net>
Source record: 147644

I think you mean two full wave elements Stacked. Another question.. how come a 20 Meter Quad doesn't work on 10?

'73 KI4Z

-Your Friend Bill- wrote:

> Mark Hall wrote:
> >
> > Just wondering if a Quad with 2 or more turn elements would be worth
> > experimenting with? Seems to work on those small loop antennas. Any
> > ideas?
> >
> > '73 KI4Z
>
> As I understand it, a quad element behaves as two half-wave elements
> 'stacked' with quarter-wave spacing. I don't see how you could do that
> with multiple-turns.
> As for small loop antennas, they are well down in the negative gain
> range.
> -Bill

4158. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:38:56 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <l3708ugcgiv2mofq9det8nk57uhpguv49a@4ax.com>
Source record: 147645
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Fri, 1 Mar 2002 19:50:40 -0000, "Kevin Aylward"
<kevin@anasoft.co.uk> wrote:

>
>I am having trouble actually understanding your overall meaning here. Anyway,
>the main utility of the bode plot is this.
>
>Draw the straight line asymptotes relating to all of the poles and zeros for the
>open loop gain and closed loop gain. These slopes will all be n*20db/dec.

Hi Kevin,

Yes, I've no doubt of the trouble.

Issues of poles and zeros do not find much representation in what are
characteristically called "Bode Plots;" rather, they are inhabitants
of his first 300 pages of discussion relating to the complex frequency
plane. Bode does not go into the matter of "graphical computation"
until he establishes on pg. 315:
"A unit slope is evidently the same as a change of 6 dB per octave
or 20 dB per decade...."

However, Bode goes to some effort to describe on pg. 181 of his work
(Jason, take note):
"Theorem: The slope of the reactance characteristic of a general
reactive network at any frequency is always greater than that
of a simple inductance or capacity having the same reactance
at a given frequency."

On page 327, Bode provides a nearly identical treatment to Jason's
problem to illustrate the difference between theoretical and observed
differences in the network analysis.

He then on ppg. 337-338 (Graphical Computation of Relations)
illustrates:
"... it is sufficient to consider only one elementary
characteristic, the semi-infinite [unit] slope. ... For practical
purposes it is consequently preferable to regard the individual
finite line segments themselves as the elementary characteristics
upon which the analysis is based."
by showing three such unit slopes (correlating to three reactive
relations) combined (through addition of their slopes) into one
overall network characteristic. The material that immediately follows
goes into the nature of how these straight line approximations depart
from observed data on the basis of the inflection of the lines added

(the occurrence of sharp bends). Bode then goes to illustrate a simple RC circuit employing the second order approximation in section 15.5 "Illustrative Application of the Charts." Bode thus provides not only the first order approximation (noting is shortfall), but also the second order approximation, and the theoretical solution. None of the three are identical, but the second order approximation is very, very close; and Bode would argue, the first order approximation is sufficient.

73's
Richard Clark, KB7QHC

4159. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:47:15 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C802F23.FC24C9F@coqui.net>
Source record: 147646

Mark Hall wrote:
>
> I think you mean two full wave elements Stacked. Another question.. how
> come a 20 Meter Quad doesn't work on 10?
>
> '73 KI4Z

No, two half-wave elements. Assuming a typical horizontal
configuration, the bottom 1/2 wave has its ends bent upwards and the top
half-wave has its ends bent downwards.
And thats why a 20 won't work on 10 because of the high impedance at the
feedpoint of a full-wave 'dipole'.
-Bill

>
> -Your Friend Bill- wrote:
>
> > Mark Hall wrote:
> > >
> > > Just wondering if a Quad with 2 or more turn elements would be worth
> > > experimenting with? Seems to work on those small loop antennas. Any
> > > ideas?
> > >
> > > '73 KI4Z
> >
> > As I understand it, a quad element behaves as two half-wave elements
> > 'stacked' with quarter-wave spacing. I don't see how you could do that
> > with multiple-turns.
> > As for small loop antennas, they are well down in the negative gain
> > range.
> > -Bill

4160. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 01:54:17 UTC
From: Win Hill <whill@mediaone.net>
Message-ID: <3C802F17.C145BAC@mediaone.net>
Source record: 147647
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Mark Hall wrote:
>
> Bode plots are kind of obsolete these days with all the analysis programs
> out there. EE's today have it rather easy compared to when I graduated!

This, I think is wrong. It's quicker and more productive to play with Bode plots and casually inspect them in a thoughtful frame of mind than it is to mindlessly run a spiffy analysis program. In my experience these programs tend to stiffle the creative thought process. I find it especially useful to quickly sketch a few families of Bode plots and to make small scribbled notes on the same piece of paper, then contemplate the result, thinking of alternate circuit configurations. Most programs don't lend themselves to this process. My computer is usually turned on and dominating the desk in front of me as I do this but its serious role comes later on, in confirming, refining and documenting the design.

Note, one can be anywhere, sitting on the john or whatever, when playing with Bode plots, that's a totally cool aspect. Having memorized the phase shift of a few frequency ratios away from a pole location, one can use these to quickly sketch useful phase curves for the Bode plots.

Thanks, /.-.\
((( ))
- Win \\\//
\\\
Winfield Hill //\\\
Rowland Institute for Science /// \\\
Cambridge, MA \/ \/

4161. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 02:06:02 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C80338A.79058F7B@IEEE.org>
Source record: 147649

Mark Hall wrote:
> Bigger the Better!

Don't you think it might depend upon what characteristics are desired
from the antenna?
--
cheers, CAM http://www.qsl.net/w5dxp

4162. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 02:06:57 UTC
From: tdonaly@cs.com
Message-ID: <20020301210657.04589.00001153@mb-mw.news.cs.com>
Source record: 147648

>
Cecil wrote,
>Reg Edwards wrote:
>
>>>For sure, feeding a 6000 ohm dipole with coax resulting in an
>>>SWR of 120:1 will burn up almost all the signal in the coax.
>>
>> Where did you get your 6000 ohms from ?
>
>
>EZNEC sez that's about the feedpoint impedance of a
>one wavelength dipole.
>
>
>> Another figment of your old-wives' imagination ?
>
>
>Hope not. Does EZNEC have an imagination?
>
>
>> Unless you have something to contribute, don't bother.
>
>
>What is your estimate of the feedpoint impedance of a
>one wavelength dipole?
>--
>cheers, CAM, W5DX
>

It depends on where you feed it.

Tom Donaly KA6RUH

4163. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 02:15:09 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8035AD.3685D5A3@IEEE.org>
Source record: 147650

Tdonaly wrote:
>
> >
> Cecil wrote,
> >What is your estimate of the feedpoint impedance of a
> >one wavelength dipole?
>
> It depends on where you feed it.

Dipole implies equal poles, i.e. center-fed. If it is not center-fed,
then an adjective like, "off-center-fed", is necessary.
--
cheers, CAM http://www.qsl.net/w5dxp

4164. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 02:25:42 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <3C803826.BDB648F8@rica.net>
Source record: 147651
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Win Hill wrote:
>
> Mark Hall wrote:
> >
> > Bode plots are kind of obsolete these days with all the analysis programs
> > out there. EE's today have it rather easy compared to when I graduated!
>
> This, I think is wrong. It's quicker and more productive to play with
> Bode plots and casually inspect them in a thoughtful frame of mind than
> it is to mindlessly run a spiffy analysis program. In my experience
> these programs tend to stiffle the creative thought process. I find it
> especially useful to quickly sketch a few families of Bode plots and to
> make small scribbled notes on the same piece of paper, then contemplate
> the result, thinking of alternate circuit configurations. Most programs
> don't lend themselves to this process. My computer is usually turned on
> and dominating the desk in front of me as I do this but its serious role
> comes later on, in confirming, refining and documenting the design.
>
> Note, one can be anywhere, sitting on the john or whatever, when playing
> with Bode plots, that's a totally cool aspect. Having memorized the
> phase shift of a few frequency ratios away from a pole location, one can
> use these to quickly sketch useful phase curves for the Bode plots.

I am afraid I have to vote in favor of having a good live Bode
plotting tool, like Mathcad when doing basic design work. My latest
application involved design of a multi pole and zero active high pass
filter that had a gain of 100 in the pass band.
I developed the configuration by hunch and extrapolation of published
designs by using Mathcad to help me create a LaPlace transform of the
configuration under consideration and then give me a live Bode plot
(amplitude and phase) as I twiddled the component values, to explore
the performance and value sensitivities, trying quite a few
possibilities in a very short time. Then, with the lessons learned
(and hunches gained) with that configuration, select a new
configuration that (hopefully) minimized the weaknesses of the last
one, and repeat the process. In a day or two of work, I came up with
a configuration that had low sensitivities and made goo use of the
opamps capabilities. This method allows me to brainstorm a concept
and get real predictive results almost as fast as I can think, and
produces a publication quality printout of the work for me to put away
till I need to remember what I was doing. This is as close as
engineering gets to sculpting in clay.

Solving LaPlace transforms that take the real world properties of the opamp as well as an arbitrary array of passive parts is just not practical with a calculator and graph paper once you get above a couple poles and zeros. One of the solutions I produced was a LaPlace transform 23 pages wide. Mathcad produced a new Bode plot of 100 frequency points in less than a second each time I altered a component value in the network. As a final step, If I define a definition of the figure of merit for the filter, Mathcad will select the component values that maximize that figure of merit.

--
John Popelish

4165. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 02:45:33 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <b1Xf8.22391$tA.3736659@news20.bellglobal.com>
Source record: 147652

"Mark Hall"
> Just wondering if a Quad with 2 or more turn elements
> would be worth experimenting with? Seems to work
> on those small loop antennas. Any ideas?

I think that I understand your idea. For transmit, the 'field' <smirk> is proportional to the current. More turns would seem to imply that you would have more contributions to the field. Unfortunately, the feed point impedance would go up with every turn and would reduce the current. It would be a losing proposition. Is this what you were driving at ?

4166. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 02:50:52 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C803CEC.1CD9E5ED@bellatlantic.net>
Source record: 147653

Sounds like a reasonable explaination.. thanks

"J. Harvey" wrote:

> "Mark Hall"
> > Just wondering if a Quad with 2 or more turn elements
> > would be worth experimenting with? Seems to work
> > on those small loop antennas. Any ideas?
>
> I think that I understand your idea. For transmit, the 'field' <smirk> is
> proportional to the current. More turns would seem to imply that you would
> have more contributions to the field. Unfortunately, the feed point
> impedance would go up with every turn and would reduce the current. It
> would be a losing proposition. Is this what you were driving at ?

4167. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 03:00:31 UTC
From: richardharrison@webtv.net
Message-ID: <9742-3C804E5F-341@storefull-118.iap.bryant.webtv.net>
Source record: 147658

I found my "Radio Handbook" with the "MULTEE", a 2-band antenna for 160/80 or 80/40 meters. It seems the intent is to use the antenna as a folded dipole on the higher frequency and as a capacitively loaded vertical on the lower frequency. I think the authors or their staff made mistakes in the presentation.

The folded dipole has its first resonance at an overall length of only 1/4-wavelength, end-to-end. The conductor has a periphery or total length of about 1/2-wavelength which permits this resonance. 1/4-wave vs 1/2-wavelength for an antenna is a real space-saver.

The 1/4-wave folded dipole does not present 300-ohms to its feedpoint as the most common folded dipoles do. Maximum current in the 1/4-wave folded dipole occurs opposite the feedline, and 1/4-wavelength away from the feedline. That makes the impedance character of this antenna a lot like a short-circuit 1/4-wave stub. But, the antenna has a radiation resistance, so it doesn`t present an open-circuit to the feedline. The feedpoint of Arnold B. Bailey`s 1/4-wave folded dipole is 35.6 ohms.

At 80-meters, a twinlead Q-section is nearly 20 meters long, or about 65.6 feet. "The Radio Handbook" put the length of the folded dipole at 70 feet or a nominal 1/4-wave at 80-meters. The feedline length between the antenna and coax is 52 feet, which may have been intended to make some sort of match, but it steps the 35.6 ohm impedance up to a very high value, nowhere near 50 ohms. 46 feet of 43-ohm coax might have matched the antenna to 50-ohm coax. But, I guess they couldn`t readily find the 43-ohm coax.

A feedline could be made from two pieces of 75-ohm coax in parallel to closely match the antenna. Then any length of feedline could have been used with the antenna, within reason. The 35 ohm, or so, impedance presented to the the radio should be satisfactory.

At 160-meterss, the 1/8-wave folded dipole would present a very reactive and unsatisfactory load to a radio transmitter. I think a switch was omitted which would be used to reconnect the antenna as a loaded vertical antenna. The idea was probably to use a length of feedline that would resonate with the tophat at 160-meters. The radials shown in the handbook are evidence of this.

As Cecil said, as it stands it is a bogus antenna. But, with a little refinement, the idea will work.

Best regards, Richard Harrison, KB5WZI

4168. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 03:28:46 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <JFXf8.22684$tA.3772313@news20.bellglobal.com>
Source record: 147654

Mark Hall wrote:
> Bigger the Better!

"CAM" agreeably offered:
> Don't you think it might depend upon what
> characteristics are desired from the antenna?

Of course, a 'BIG' signal... :-)

4169. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 03:49:33 UTC
From: macve3gro@aol.com
Message-ID: <20020301224933.04615.00001149@mb-mw.aol.com>
Source record: 147655

I remember seeing somthing about this in CQ mag years ago. If I remember correctly, a two-turn quad (2-wavelengths of wire on a 1-wavelength form) has a feed impedence four times that of a single-turn quad--just as a folded dipole has a feed impedence four times that of a single-wire dipole. A two-turn quad--after you bring down the feed impedence to around 50 ohms with a 4:1 balun-- will likely show a greater >2:1 SWR bandwidth than a single-turn quad. Other than that, no particular advantage. Hope this helps. 73. Harry, VE3GRO
Harry MacLean, VE3GRO
500 Riverside Drive, London, ON N6H 2R7
(519) 473-1668

4170. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 03:53:30 UTC
From: macve3gro@aol.com
Message-ID: <20020301225330.04615.00001150@mb-mw.aol.com>
Source record: 147656

My friend, Bill Skidmore, VE3AUI, put up about that much wire in a loop around his country property and used the loop on 80, 40 and 20 metres. Lobes were unpredictable, but there were many directions in which he had a big signal, and there were no directions in which he didn't have a good signal. In other words, it worked great. Cheers es 73. Harry, VE3GRO

Harry MacLean, VE3GRO
500 Riverside Drive, London, ON N6H 2R7
(519) 473-1668

4171. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 04:04:35 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <hbYf8.22905$tA.3801626@news20.bellglobal.com>
Source record: 147657

"Ravi R" was LOL:
Good ! :-)

> I am scared that such high power antennas
> might damage my radio.
I don't think that you'll every achieve sufficent gain on HF to damage a radio. But you might 'damage' the reception by overloading a front end designed for a 12" whip. If you hear signals on the 'obviously wrong' frequencies, then you might have too much signal.

> The one from SONY especially AN-1 and AN-LP1
> are expensive. Anyone has any idea about these antennas ?
I have the Sony AN-1 Active Antenna and it does pretty much exactly what it sets out to do. It is nice in that it doesn't need constant tuning (just a few switches to adjust once in a while). It more or less replaces a random wire.

> So harvey, how do i connect that coaxial cable that comes
> into the house from my dish into the radio ?
Are you asking about the use of the old C-band system to receive various 'interesting' audio ? You'll need a C-Band receiver to start. The SW radio might not enter into it (for starters anyway).

For the SW radio, just install a random wire to a convenient tree. Forget about the dish - unless you can use it to support the other end of your random wire antenna. :-)

> And how do i prevent Lighting and other factors from affecting my set.
Disconnect when not in use. Don't use when there is lightning about. Too much static anyway...

4172. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 04:54:05 UTC
From: legg@magma.ca
Message-ID: <e715b5cc.0203012054.19b86a34@posting.google.com>
Source record: 147659
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

A tasty little applet showing linear response and accompanying Bode plot.

http://infosys.korea.ac.kr/applets/PZeffect/pzeffect.html

RL

jason_hsu@my-deja.com (Jason Hsu) wrote in message
news:<f7d9a152.0202281922.2bf73b9d@posting.google.com>...
> NOTE: This is NOT a homework assignment. (I graduated from college
> nearly 6 years ago, so there is no grade at stake.) Yes, I am truly
> interested in understanding how filters work.
>
> Can anyone help me with the Bode Plot for the following bandpass
> filter circuit? Have I stumbled across limitations of Bode Plots?
>
> vin---R---------vout
> | |
> | |
> C L
> | |
> | |
> ground
>
> As usual, the input voltage is on the left and the output voltage is
> on the right.
>
> The transfer function is H(s)=vout/vin=sL/(s^2*CLR+sL+R).
>
> If R=100 ohms, C=100 microF, and L=100 mH, then the transfer function
> is:
> H(s)=.1s/(.001s^2 + .1s + 100) = 100/(s^2+100s+100,000)
>
> The dB of the transfer function is:
> HdB(w)= 10 log [(.01 w^2)/(.01 w^2 + 10^4 (10^-5 w^2 -1)^2)]
>
> The phase of the transfer function is:
> Hangle(w) = -arctan[100 (10^-5 w^2 -1)/(.1 w)]
>
> The poles of the transfer function are s=-50+-j312.2498999
>
> This means that the cutoff frequency is 321.2498999 radians (around
> 49.7 Hz). But why isn't this cutoff frequency 316.227766 radians? I
> realize there isn't a very big difference between these two
> frequencies, but the second one is the resonant one.

>
> And why is the dB slope per decade irregular? The cutoff frequency is
> 49.7 Hz, and the gain is near 0 dB here. At 497 Hz, the gain is -29.8
> Hz. At 4970 Hz, the gain is -49.9 dB. The gain is -30.0 dB at 4.97
> Hz and -50.1 dB at .497 Hz.
>
> Can someone tell me how you would draw the Bode Plot for this circuit?
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio.html

4173. Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 05:41:26 UTC
From: Darryl <tidddl@gbronline.com>
Message-ID: <aCZf8.3593$pN4.537670@bin8.nnrp.aus1.giganews.com>
Source record: 147660

I need plans for a good dual band (144/444) antenna. Someone told me about
a j-pole, but I cant find anything.
Thanks
Darryl
KC5VZW

4174. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 05:47:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C80677B.E0F09CB3@eznec.com>
Source record: 147661

Hm. You seem to have stumbled across a new law of physics. The antenna must be radiating more power than is applied to it. If you can just figure out how to intercept a fraction of that power and use it to power the rig, you'll have invented perpetual QRM.

Roy Lewallen, W7EL

Harry MacLean VE3GRO wrote:
>
> My friend, Bill Skidmore, VE3AUI, put up about that much wire in a loop around
> his country property and used the loop on 80, 40 and 20 metres. Lobes were
> unpredictable, but there were many directions in which he had a big signal, and
> there were no directions in which he didn't have a good signal. In other words,
> it worked great. Cheers es 73. Harry, VE3GRO
> Harry MacLean, VE3GRO
> 500 Riverside Drive, London, ON N6H 2R7
> (519) 473-1668

4175. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 05:52:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C806882.CAE17D1A@eznec.com>
Source record: 147662

Yep, if there wasn't any loss, you'd just break even, with exactly the same field regardless of how many turns you use. But there is loss, and as it turns out, you end up with poorer efficiency with more turns. In a large loop the difference wouldn't be significant, but in a small loop it would.

Roy Lewallen, W7EL

Mark Hall wrote:
>
> Sounds like a reasonable explaination.. thanks
>
> "J. Harvey" wrote:
>
> > "Mark Hall"
> > > Just wondering if a Quad with 2 or more turn elements
> > > would be worth experimenting with? Seems to work
> > > on those small loop antennas. Any ideas?
> >
> > I think that I understand your idea. For transmit, the 'field' <smirk> is
> > proportional to the current. More turns would seem to imply that you would
> > have more contributions to the field. Unfortunately, the feed point
> > impedance would go up with every turn and would reduce the current. It
> > would be a losing proposition. Is this what you were driving at ?

4176. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 06:15:26 UTC
From: Don Kelly <dhky@peeshaw.ca>
Message-ID: <26_f8.189245$A44.11028499@news2.calgary.shaw.ca>
Source record: 147663
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message
news:3C802A15.C2D34D21@bellatlantic.net...
> Bode plots are kind of obsolete these days with all the analysis programs
> out there. EE's today have it rather easy compared to when I graduated!

True- except that the analysis programs are often used to replace thinking. In the old days thought was required. i.e. is the result reasonable? The programming capability does allow consideration of more realistic problems but the concepts behind those programs are important. Any fool can plug in numbers but understanding of concepts is needed to say whether or not the output is correct. The old adage GIGO (garbage in garbage out) holds. I particularily appliy this to income tax programs -my money is at stake!

In the days of slide rules, it was necessary to make an estimate as to the magnitude of a solution , just to set the decimal place. Since then, this has (regrettably been lost- if 2 times 4 as punched into a calculator gives 5.95 - that is assumed to be true. It was amusing to find that when one eyeballed an answer to a complex numerical problem, say 4, some student , 2 minutes later, after deep consultation with his calculator, would announce that the answer was 4.1.

Excreta Tauri Cerebrum Vincit
--
Don Kelly
dhky@peeshaw.ca
remove the urine to answer

4177. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 06:36:45 UTC
From: Don Kelly <dhky@peeshaw.ca>
Message-ID: <1q_f8.189391$A44.11050618@news2.calgary.shaw.ca>
Source record: 147664
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"John Popelish" <jpopelish@rica.net> wrote in message
news:3C803826.BDB648F8@rica.net...
> Win Hill wrote:
> >
> > Mark Hall wrote:
> > >
> > > Bode plots are kind of obsolete these days with all the analysis
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> > > out there. EE's today have it rather easy compared to when I
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> > This, I think is wrong. It's quicker and more productive to play with
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> > Note, one can be anywhere, sitting on the john or whatever, when
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> > use these to quickly sketch useful phase curves for the Bode plots.
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> plotting tool, like Mathcad when doing basic design work. My latest
> application involved design of a multi pole and zero active high pass
> filter that had a gain of 100 in the pass band.
> I developed the configuration by hunch and extrapolation of published
> designs by using Mathcad to help me create a LaPlace transform of the
> configuration under consideration and then give me a live Bode plot
> (amplitude and phase) as I twiddled the component values, to explore
> the performance and value sensitivities, trying quite a few
> possibilities in a very short time. Then, with the lessons learned
> (and hunches gained) with that configuration, select a new

> configuration that (hopefully) minimized the weaknesses of the last
> one, and repeat the process. In a day or two of work, I came up with
> a configuration that had low sensitivities and made goo use of the
> opamps capabilities. This method allows me to brainstorm a concept
> and get real predictive results almost as fast as I can think, and
> produces a publication quality printout of the work for me to put away
> till I need to remember what I was doing. This is as close as
> engineering gets to sculpting in clay.
>
> Solving LaPlace transforms that take the real world properties of the
> opamp as well as an arbitrary array of passive parts is just not
> practical with a calculator and graph paper once you get above a
> couple poles and zeros. One of the solutions I produced was a LaPlace
> transform 23 pages wide. Mathcad produced a new Bode plot of 100
> frequency points in less than a second each time I altered a component
> value in the network. As a final step, If I define a definition of
> the figure of merit for the filter, Mathcad will select the component
> values that maximize that figure of merit.
>
> --
> John Popelish

John,
You have the experience and background to look at the results that Mathcad gives you. How much of this is an intuitive, based on your knowledge, estimate of the reasonableness of the solution.. If the solution sets off a little alarm in your head, do you accept the solution or do you check your data input? I just did this today, on a simple problem -the results were different (particularly in phase) from what I expected from a "sit on the John analysis". It was a data entry error in a program which I wrote and tested some godoffal time in the past. A correction led to bliss.

I really think this is what Win Hill was referring to.

Mathcad is great (Oh to have had it as a student-maybe) for the reasons you say- the programming is great and well tested but YOU (excuse the shout) must be sure that the correct data is entered. Used with insufficient understanding can lead to disaster.
--
Don Kelly
dhky@peeshaw.ca
remove the urine to answer

4178. Re: loop antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 07:30:39 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C807F8D.7D76AA0B@icok.net>
Source record: 147665

IronHead,
Your friend is probably right, sort of. The
SWR will change. Just depending on what your
roof is shingled with, how much contamination
there is in the rain, and who knows what else.
It should also be easy to compensate for, just
retune the tuner. If your happy with how the
antenna is performing, that's the 'main' thing
isn't it?
'Doc

4179. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 07:40:12 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C8081CA.C6AB0564@icok.net>
Source record: 147666

Cecil,
Evidently you didn't pay attention to what I
said. Also, your mixed comparisons make better
sense as 'fruit salad' than anything pertaining
to what is being discussed (apples and oranges).
The EZNEC is a nice program, but one of it's faults
is that 'imagination' it doesn't have, GIGO, you
know...
'Doc

4180. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 07:45:47 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C808319.8BE4E24E@icok.net>
Source record: 147667

Roy Lewallen wrote in part:

" The antenna must be radiating more power than is applied to
it."

Roy,
You know, I've seen that happen in a number of different
cases! I think it's called "ERP"...
'Do

PS - I know this seems like a 'frivolous' observation,
but so was yours.

4181. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 07:59:53 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C808666.F9F17D6A@icok.net>
Source record: 147668

Jerry,
I don't 'see' how a 'shorting lead' and the unused
coil turns of a 'Bug Catcher' antenna are any different,
other than mechanical, than the unused coil turns inside
the tube of a screw driver antenna. The length of the
shorting lead does have some affect on things just as the
'finger-stock' (or whatever other method of shorting the
'SD' coils) does on the screw driver antenna. They're
both 'factored' into the tuning process on each antenna.
I don't think that there is any significant affect of
the unused coil turns of either antenna, especially at
HF. Even if there is, it's still 'handled' when you tune
the antenna. Right?
'Doc

4182. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 08:14:54 UTC
From: Kevin Aylward <kevin@anasoft.co.uk>
Message-ID: <7S%f8.25987$R16.3619491@news11-gui.server.ntli.net>
Source record: 147519
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"John Popelish" <jpopelish@rica.net> wrote in message
news:3C803826.BDB648F8@rica.net...
> Win Hill wrote:
> >
> > Mark Hall wrote:
> > >
> > > Bode plots are kind of obsolete these days with all the analysis programs
> > > out there. EE's today have it rather easy compared to when I graduated!
> >
> > This, I think is wrong. It's quicker and more productive to play with
> > Bode plots and casually inspect them in a thoughtful frame of mind than
> > it is to mindlessly run a spiffy analysis program. In my experience
> > these programs tend to stiffle the creative thought process. I find it
> > especially useful to quickly sketch a few families of Bode plots and to
> > make small scribbled notes on the same piece of paper, then contemplate
> > the result, thinking of alternate circuit configurations. Most programs
> > don't lend themselves to this process. My computer is usually turned on
> > and dominating the desk in front of me as I do this but its serious role
> > comes later on, in confirming, refining and documenting the design.
> >
> > Note, one can be anywhere, sitting on the john or whatever, when playing
> > with Bode plots, that's a totally cool aspect. Having memorized the
> > phase shift of a few frequency ratios away from a pole location, one can
> > use these to quickly sketch useful phase curves for the Bode plots.
>
> I am afraid I have to vote in favor of having a good live Bode
> plotting tool, like Mathcad when doing basic design work. My latest
> application involved design of a multi pole and zero active high pass
> filter that had a gain of 100 in the pass band.
> I developed the configuration by hunch and extrapolation of published
> designs by using Mathcad to help me create a LaPlace transform of the
> configuration under consideration and then give me a live Bode plot
> (amplitude and phase) as I twiddled the component values, to explore
> the performance and value sensitivities, trying quite a few
> possibilities in a very short time. Then, with the lessons learned
> (and hunches gained) with that configuration, select a new
> configuration that (hopefully) minimized the weaknesses of the last
> one, and repeat the process. In a day or two of work, I came up with
> a configuration that had low sensitivities and made goo use of the
> opamps capabilities. This method allows me to brainstorm a concept
> and get real predictive results almost as fast as I can think, and
> produces a publication quality printout of the work for me to put away
> till I need to remember what I was doing. This is as close as

> engineering gets to sculpting in clay.
>
> Solving LaPlace transforms that take the real world properties of the
> opamp as well as an arbitrary array of passive parts is just not
> practical with a calculator and graph paper once you get above a
> couple poles and zeros. One of the solutions I produced was a LaPlace
> transform 23 pages wide. Mathcad produced a new Bode plot of 100
> frequency points in less than a second each time I altered a component
> value in the network. As a final step, If I define a definition of
> the figure of merit for the filter, Mathcad will select the component
> values that maximize that figure of merit.
>

Apart from your reference to an ordinary gain verses frequency plot as a Bode plot (nails down blackboard sound....), I have to agree with you John.

Designs are just too complicated for pen and paper. I agree that you need to have the background understanding of what's going on, but design by pure simulation is very, very effective when used correctly. Its just a matter of moving on with the times.

As an additional point, even the plotting of AC gain can be dubious in designing a feedback amp. It is not uncommon to have designs that show good small signal ac stability, but in fact are unstable due to various non-linear effects. I generally just use the ac response as a general guide, but do all the stability work using transient analysis.

Kevin Aylward , Warden of the Kings Ale
kevin@anasoft.co.uk
http://www.anasoft.co.uk
SuperSpice, a very affordable Mixed-Mode
Windows Simulator with Schematic Capture,
Waveform Display, FFT's and Filter Design.

4183. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 08:36:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C808EFC.6C97F34B@eznec.com>
Source record: 147520

Like I said, just intercept some of that power and feed it back, and you're on your way to riches. Put 50 watts into the antenna having 200 watts ERP. Intercept 50 of those watts to run your transmitter, and you have 150 left over. Scale this whole idea up, and you can take your whole house off grid and say goodbye to your electric bills. You can even sell the surplus back to the power company, and before you know it you can quit your day job and retire in luxury.

I'll be watching for you on late night TV, sitting in front of the pool with the palm trees in the background, telling us all how you did it and how we can do it too for just 29.95 plus handling. . .

Roy Lewallen, W7EL

'Doc wrote:
>
> Roy Lewallen wrote in part:
>
> " The antenna must be radiating more power than is applied to
> it."
>
> Roy,
> You know, I've seen that happen in a number of different
> cases! I think it's called "ERP"...
> 'Do
>
> PS - I know this seems like a 'frivolous' observation,
> but so was yours.

4184. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 09:05:53 UTC
From: Pie`` IK2VTJ <picarusoNONVOGLIOSPAM@writeme.com>
Message-ID: <a5q4l0$9b27r$1@ID-83989.news.dfncis.de>
Source record: 147521

"VA3ATD" <a.duffy@sympatico.ca> ha scritto nel messaggio
news:3C802787.8010400@sympatico.ca...
> has anyone ever tried building one other then the people that make the
> claims on it's great performance?
>
Yes, I know people in Italy that made the 40 mt, 20 mt and trying the 160mt
versions.
Some say that it performs well, other say so and so and other are in
trouble!
The only sure fact is that the specifications are not sure, but if you are
lucky you could have a medium performer short antenna, most for DX than for
local qso.
--
73 de IK2VTJ, Piero.

http://www.qsl.net/ik2vtj
http://www.ardf.it

Togli / Remove
NONVOGLIOSPAM
dall'indirizzo / from address

4185. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 11:47:42 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C80BABD.1C1D3609@bellatlantic.net>
Source record: 147523

Thanks, the multi-turn idea's out the window.. How come a 20 Meter quad with 1 WL elements doesn't work on 10, whereas a horizontal loop would?

'73 KI4Z

Harry MacLean VE3GRO wrote:

> I remember seeing somthing about this in CQ mag years ago. If I remember
> correctly, a two-turn quad (2-wavelengths of wire on a 1-wavelength form) has a
> feed impedence four times that of a single-turn quad--just as a folded dipole
> has a feed impedence four times that of a single-wire dipole. A two-turn
> quad--after you bring down the feed impedence to around 50 ohms with a 4:1
> balun-- will likely show a greater >2:1 SWR bandwidth than a single-turn quad.
> Other than that, no particular advantage. Hope this helps. 73. Harry, VE3GRO
> Harry MacLean, VE3GRO
> 500 Riverside Drive, London, ON N6H 2R7
> (519) 473-1668

4186. My appologies to old wives

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 11:53:46 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5qf3p$9asih$1@ID-124126.news.dfncis.de>
Source record: 147524

In my mental haste to jump in I forgot to multiply by two.

Using program Dipole2 I find that at 14 MHz, a 1-wavelength resonant centre-fed dipole, at a height of 33 feet, has a feedpoint impedance of 6365+j0 ohms.

Very sorry folks.

Reg G4FGQ

4187. Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 13:18:30 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <Si4g8.47$bA2.89314@newsfeed.slurp.net>
Source record: 147525

Anybody know, with Jack Belrose, LB Cebik, Kraus, and others well-id'ed out there in antenna-land, why this disturbin' kert individual seems to be obsessed with anonymity?

Is it because he's after the same effect as Larson E. Rapp WIOU and Hashafisti Scratchi's author?

K3BHJ

4188. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 13:26:56 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C80D320.ED50FB16@IEEE.org>
Source record: 147526

'Doc wrote:
> I don't 'see' how a 'shorting lead' and the unused
> coil turns of a 'Bug Catcher' antenna are any different,
> other than mechanical, than the unused coil turns inside
> the tube of a screw driver antenna.

The difference is that the neutralized part of the screwdriver
coil below the finger stock doesn't carry much RF. Most of the
RF is flowing on the outside of the shorting tube due to skin
effect. OTOH, the shorted part of the bugcatcher coil is carrying
considerable RF.
--
cheers, CAM http://www.qsl.net/w5dxp

4189. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 13:42:22 UTC
From: k1bqt@aol.com
Message-ID: <20020302084222.16994.00001321@mb-co.aol.com>
Source record: 147527

> why this disturbin' kert individual seems to be obsessed with anonymity?<

Many in the radio/antenna industry know who he is, but would never risk losing
their secret decoder ring by ratting him out.

Rick K1BQT

4190. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 13:54:46 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C80D9A6.4146EF4F@IEEE.org>
Source record: 147528

'Doc wrote:
> Evidently you didn't pay attention to what I
> said.

Here's what you said:

> Usually the second harmonic of an antenna doesn't work
> out too well.

I just wanted to point out that your statement was too broad
and didn't apply to all antennas including dipoles.
--
cheers, CAM http://www.qsl.net/w5dxp

4191. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 13:57:52 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C80DA60.D5D5BDA8@IEEE.org>
Source record: 147529

"J. Harvey" wrote:
>
> Mark Hall wrote:
> > Bigger the Better!
>
> "CAM" agreeably offered:
> > Don't you think it might depend upon what
> > characteristics are desired from the antenna?
>
> Of course, a 'BIG' signal... :-)

In which direction? An extremely long wire turns into an end-fired
"array". If broadside radiation is desired, that wouldn't be a
good choice for an antenna. So "bigger is better" is subject to
a host of boundary conditions.
--
cheers, CAM http://www.qsl.net/w5dxp

4192. how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 14:11:56 UTC
From: AB Brown <abbrown@nospammail.com>
Message-ID: <a5qmn8$ug0$1@slb5.atl.mindspring.net>
Source record: 147530

I am planning on installing a slightly shortened ground vertical for 80 meters. I have never before worked with a radial wire grounding system, but I would like to install the 16 radials on the *surface* of the ground. I have two questions: 1) How can I install the radial wires so that I can continue to mow the lawn without the mower catching them? 2) Bill Orr's "Vertical Antennas" book describes chicken wire being used as an effective ground screen. I'd like an opinion as to the effectiveness of this wire as well as tips for installing it on the ground surface.

Thanks, in advance.

AB

4193. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 14:20:50 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C80DFC2.E81D721@IEEE.org>
Source record: 147531

Mark Hall wrote:
> Thanks, the multi-turn idea's out the window.. How come a 20 Meter quad with 1 WL
> elements doesn't work on 10, whereas a horizontal loop would?

In addition to the beam spacing (phasing) being off, the takeoff angle
for the 20m quad on 10m is high, the opposite of what you want on 10m.
Turning a two-wavelength vertical loop on it's side (horizontal)
redirects the previous high angle radiation to a lower takeoff angle.

The same thing happens with a vertical. A two-wavelength vertical is
a lousy antenna for 10m because of the high takeoff angle but a two-
wavelength horizontal is a very good antenna for 10m - low takeoff
angles with four major lobes. (For the purists, I am using the term,
"takeoff angle", to signify the elevation angles of the maximum gain
vectors.)
--
cheers, CAM http://www.qsl.net/w5dxp

4194. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 14:21:57 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <5e5g8.83919$JZ.11040882@news20.bellglobal.com>
Source record: 147532

"Jim Walker"
> ...digital TV....some trouble getting the signal strength...
> ...I find the signal fluctuates... It does look like multipath.

There is some good background information on:
http://www.zenith.com/sub_hdtv/hdtv_papers.html
especially...
http://www.zenith.com/sub_hdtv/hdtv_papers_atsc_test.html
and...
http://www.zenith.com/sub_hdtv/hdtv_papers_atsc_system.html

HDTV sales person, "May I answer any questions ?"

Potential HDTV set purchaser, "Yeah, I live in an area with rapidly varying multipath. How do these different models of HDTVs compare with respect to the cycle time for the integration and tap-weight update for the Feed Forward Transversal Filter Equalizer sub-systems ? I want one that is fast."

:-)

4195. Re: Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 14:22:48 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C80E038.E3F8F081@IEEE.org>
Source record: 147533

Darryl wrote:
> I need plans for a good dual band (144/444) antenna. Someone told me about
> a j-pole, but I cant find anything.

A Google search for "J-pole" just turned up 3,820 hits.
--
cheers, CAM http://www.qsl.net/w5dxp

4196. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 14:29:45 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <pl5g8.83921$JZ.11045207@news20.bellglobal.com>
Source record: 147534

Mark Hall wrote:
> Bigger the Better!

"CAM" agreeably offered:
> Don't you think it might depend upon what
> characteristics are desired from the antenna?

"J. Harvey" joshed about the desired characteristic:
> Of course, a 'BIG' signal... :-)

"CAM" elucidated on 'BIG' antennas:
> So "bigger is better" is subject to
> a host of boundary conditions.

Especially the 'boundary' with the neighbour's property...

:-) !!!

4197. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 14:43:31 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C80E513.503B47CC@IEEE.org>
Source record: 147537

"David J. Windisch" wrote:
> Anybody know, with Jack Belrose, LB Cebik, Kraus, and others well-id'ed out
> there in antenna-land, why this disturbin' kert individual seems to be
> obsessed with anonymity?

His Don Rickles approach to column writing might explain that.
But it's not an extremely well kept secret. His picture appeared
in Jan 2002 "Worldradio". He was in WWII so he is at least ~77+
years old and holds an Advanced license.
--
cheers, CAM http://www.qsl.net/w5dxp

4198. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 14:47:07 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C80E4AC.6E016CA8@bellatlantic.net>
Source record: 147535

Thanks Cam.. How about phasing a Quad with feedline (like is done with phased verticals) instead of depending on parasitic elements? More Gain, or More Gain on a shorter boom you think?

CAM wrote:

> Mark Hall wrote:
> > Thanks, the multi-turn idea's out the window.. How come a 20 Meter quad with 1 WL
> > elements doesn't work on 10, whereas a horizontal loop would?
>
> In addition to the beam spacing (phasing) being off, the takeoff angle
> for the 20m quad on 10m is high, the opposite of what you want on 10m.
> Turning a two-wavelength vertical loop on it's side (horizontal)
> redirects the previous high angle radiation to a lower takeoff angle.
>
> The same thing happens with a vertical. A two-wavelength vertical is
> a lousy antenna for 10m because of the high takeoff angle but a two-
> wavelength horizontal is a very good antenna for 10m - low takeoff
> angles with four major lobes. (For the purists, I am using the term,
> "takeoff angle", to signify the elevation angles of the maximum gain
> vectors.)
> --
> cheers, CAM http://www.qsl.net/w5dxp

4199. Re: how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 14:47:31 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C80E5EF.E7BB1148@icok.net>
Source record: 147536

AB,
Almost anything can be used for ground wires, it
just has to be conductive. Doesn't make much difference
if it's wire, or chicken wire, 6" pipe, or what ever.
One way of getting the wire under the grass is to 'stake'
it down, then let the grass grow over it. This would
be the time of year for it, too, I'd guess.
'Doc

4200. Re: how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 14:52:03 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C80E5D4.40240747@bellatlantic.net>
Source record: 147538

I'd use a roto-tiller (Set to till minimum width) to bury the radials a few inches, holding them down under the ground with home-made heavy gauge steel wire "Staples" until the backfill solidifies and the grass grows back. Nothing worse than hitting a ground radial with the mower!

'73 KI4Z

AB Brown wrote:

> I am planning on installing a slightly shortened ground vertical for 80
> meters. I have never before worked with a radial wire grounding system, but
> I would like to install the 16 radials on the *surface* of the ground. I
> have two questions: 1) How can I install the radial wires so that I can
> continue to mow the lawn without the mower catching them? 2) Bill Orr's
> "Vertical Antennas" book describes chicken wire being used as an effective
> ground screen. I'd like an opinion as to the effectiveness of this wire as
> well as tips for installing it on the ground surface.
>
> Thanks, in advance.
>
> AB

4201. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 15:01:02 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <LO5g8.83967$JZ.11058927@news20.bellglobal.com>
Source record: 147539

"CAM"
> His picture appeared in Jan 2002 "Worldradio".
> He was in WWII so he is at least ~77+
> years old and holds an Advanced license.

http://www.sports.com/it/images/calcio/serie_b/sturba53.jpg
Looks healthy for ~77+...

:-) !

4202. Re: how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 15:14:51 UTC
From: "Carl R. Stevenson" <wa6vse-shack@fast.net>
Message-ID: <3c80eedb_1@news7.fast.net>
Source record: 147543

Another means, IF you have good, soft topsoil, is to use a flat
(straight-bladed) spade to cut a "slit" in the sod, then push the
wires down into the slits with a suitably-sized piece of wood.
(This method won't work for me, as there is a CONSIDERABLE
amount of stone in the soil at my QTH.)

I'm thinking of mowing the grass REALLY close, then putting
in the radial system, using wire "staples" as someone else
suggested, then having a load or two of topsoil brought in
and spreading it over the area about 2" thick ... the grass
should come up through that ... if not, I can always re-seed
the area ... but this will have to wait until spring ...

The "chicken wire" approach could potentially present some
problems over time, if you use inexpensive material, as it
will corrode ... also, joints between sections should be bonded
well electrically, not just "overlapped" (IMHO). While more
expensive, I think you'll find if you research it that "professional"
installations use copper mesh ... not galvanized chicken wire.

Carl - wa6vse

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message
news:3C80E5D4.40240747@bellatlantic.net...
> I'd use a roto-tiller (Set to till minimum width) to bury the radials a
few
> inches, holding them down under the ground with home-made heavy gauge
steel wire
> "Staples" until the backfill solidifies and the grass grows back. Nothing
worse
> than hitting a ground radial with the mower!
>
> '73 KI4Z
>
> AB Brown wrote:
>
> > I am planning on installing a slightly shortened ground vertical for 80
> > meters. I have never before worked with a radial wire grounding system,
but
> > I would like to install the 16 radials on the *surface* of the ground.
I
> > have two questions: 1) How can I install the radial wires so that I can
> > continue to mow the lawn without the mower catching them? 2) Bill Orr's
> > "Vertical Antennas" book describes chicken wire being used as an
effective

> > ground screen. I'd like an opinion as to the effectiveness of this wire
as
> > well as tips for installing it on the ground surface.
> >
> > Thanks, in advance.
> >
> > AB
>

4203. Re: how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 15:14:54 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C80EC6E.4867E997@IEEE.org>
Source record: 147540

AB Brown wrote:
> How can I install the radial wires so that I can
> continue to mow the lawn without the mower catching them?

Hardware stores have aluminum stake pins that work well for the purpose.
I assume they are for holding down the bottom of a fence.
--
cheers, CAM http://www.qsl.net/w5dxp

4204. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 15:18:48 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C80ED58.356673EF@IEEE.org>
Source record: 147542

Mark Hall wrote:
> Thanks Cam.. How about phasing a Quad with feedline (like is done with phased
> verticals) instead of depending on parasitic elements? More Gain, or More Gain on a
> shorter boom you think?

That should work. I have experimented with non-resonant driven loops
and there seems to be nothing to prohibit such.
--
cheers, CAM http://www.qsl.net/w5dxp

4205. Re: how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 15:23:05 UTC
From: Thomas Giella <kn4lf@earthlink.net>
Message-ID: <t76g8.28464$ZC3.2313733@newsread2.prod.itd.earthlink.net>
Source record: 147541

I use anywhere from #12-#16 stranded and double coated house wire. It resists breakage and corrosion. I have used this technique for years and have the same radials in the ground in a like new condition for 14 years. I lay mine "on" the ground surface and tack them down every 10 feet with U shaped wire fasteners made out of old metal coat hangers. In time the grass will grow over them and the lawn mower will not get them in the interim. Also studies have shown that radial effectiveness diminishes as the radials are buried. I have run experiments on 160 that have shown that radials in the form of a counterpoise 15 feet above ground produces the best far field field strength, followed by a counterpoise 5 feet above ground, then radials on the surface and then "in" the ground.

--
73,
Thomas Giella, KN4LF

Plant City, FL
Grid Square- EL88wx
CQ Zone 5
ITU Zone 8

KN4LF 160 Meter Amateur Radio Resources And More:
http://www.kn4lf.com

KN4LF 7 Day Medium Wave Radio Propagation Outlook:
http://www.kn4lf.com/kn4lf5.htm

Florida Meteorological & Climatic Institute:
http://64.176.157.9/sub/fmci.htm

Giella Website Designs:
http://www.giellawoodsignandwebsitedesigns.com
"AB Brown" <abbrown@nospammail.com> wrote in message
news:a5qmn8$ug0$1@slb5.atl.mindspring.net...
> I am planning on installing a slightly shortened ground vertical for 80
> meters. I have never before worked with a radial wire grounding system,
but
> I would like to install the 16 radials on the *surface* of the ground. I
> have two questions: 1) How can I install the radial wires so that I can
> continue to mow the lawn without the mower catching them? 2) Bill Orr's
> "Vertical Antennas" book describes chicken wire being used as an effective
> ground screen. I'd like an opinion as to the effectiveness of this wire
as
> well as tips for installing it on the ground surface.
>
> Thanks, in advance.

>
> AB
>
>
>

4206. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 15:30:58 UTC
From: Jim Walker <walkerjd1@worldnet.att.net.net>
Message-ID: <Se6g8.8911$gK2.651291@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147544

The transformer is built into the VHF/UHF antenna. Should this be
replaced with another one? My tendency would be to replace the whole
antenna instead.
--
Jim Walker
Northern Virginia

> I hope you used decent matching transformer at the antenna, and made
> sure all exterior connections to the coax are well waterproofed.

4207. Re: UHF Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 15:39:36 UTC
From: Jim Walker <walkerjd1@worldnet.att.net.net>
Message-ID: <Ym6g8.8926$gK2.651798@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147545

Thanks for the links. I suspect that my receiver could be a first
generation one. It is a Sony HD 100 and it was just discontinued. Zenith
has been recommended on the HDTV NG. I should definitely get the receiver
with the most multipath rejection. Your reference the sales person is a
riot.
--
Jim Walker
Northern Virginia
J. Harvey <JM001.Harvey@sympatico.ca> wrote in message
news:5e5g8.83919$JZ.11040882@news20.bellglobal.com...
> http://www.zenith.com/sub_hdtv/hdtv_papers.html
> especially...
> http://www.zenith.com/sub_hdtv/hdtv_papers_atsc_test.html
> and...
> http://www.zenith.com/sub_hdtv/hdtv_papers_atsc_system.html
>
>
> HDTV sales person, "May I answer any questions ?"
>
> Potential HDTV set purchaser, "Yeah, I live in an area with rapidly
varying
> multipath. How do these different models of HDTVs compare with respect to
> the cycle time for the integration and tap-weight update for the Feed
> Forward Transversal Filter Equalizer sub-systems ? I want one that is
> fast."
>
> :-)
>
>
>
>

4208. Re: how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 15:50:13 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <Vw6g8.21844$s03.776142@news2.east.cox.net>
Source record: 147546

Rick Littlefield had suggested using a lawn edger -- a cheap gizmo
made by Black and Decker for edging between lawn and sidewalks,
etc.

Pete

"Carl R. Stevenson" <wa6vse-shack@fast.net> wrote in message
news:3c80eedb_1@news7.fast.net...
> Another means, IF you have good, soft topsoil, is to use a flat
> (straight-bladed) spade to cut a "slit" in the sod, then push the
> wires down into the slits with a suitably-sized piece of wood.
> (This method won't work for me, as there is a CONSIDERABLE
> amount of stone in the soil at my QTH.)
>

4209. Re: Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 16:01:24 UTC
From: arrow146@aol.com
Message-ID: <20020302110124.23077.00001212@mb-fy.aol.com>
Source record: 147547

>Subject: Antenna
>From: "Darryl" tidddl@gbronline.com
>Date: Fri, Mar 1, 2002 10:41 PM
>Message-id: <aCZf8.3593$pN4.537670@bin8.nnrp.aus1.giganews.com>
>
>I need plans for a good dual band (144/444) antenna. Someone told me about
>a j-pole, but I cant find anything.
>Thanks
>Darryl
>KC5VZW

Construction Plans for the Model J146/440 Dual Band Solid Aluminum J-Pole

Parts Needed:

Radio Shack # 21-961   3/8”-24/SO239 Mount (Mobile CB Antenna) Radio Shack # 15-826   TV Mast U-Bolt Clamp Assembly
About 90 inches of 3/8” diameter Solid Aluminum Rod.
5 1/2 inch piece of strut angle Aluminum 1 1/2” X 1 1/2” X 3/16” Thick.
4 Stainless Jam Nuts 3/8-24 thread

Tools needed:

Drill Press with drill Bits up to 1/2”.
Tap & Die for 3/8-24 thread.
Sander or file to de-burr the cut edges.
2 9/16 wrenches & a 3/4 wrench. Vice-grips
 <A HREF="http://arrowantennas.com/inst/ijpole.html">J-Pole Instructions</A>
Make sure the piece of angle Aluminum is exactly 5 1/2 inches long. Drill 2 1/4” holes on one side, centered to fit the U-Bolt for mounting. On the other surface of the angle From the left side measure in 1/2” and drill a 1/4” pilot hole. From the left side measure in 1 15/16” and drill a 1/4” pilot hole. From the left side measure in 5” and drill a 1/4” pilot hole. This should give you 1 7/16” from center to center of the first 2 holes. This should give you 4 1/2” from center to center of the two outside holes. Redrill the left pilot hole to 1/2” Redrill the other 2 pilot holes to 11/32” Then tap the hole with a 3/8-24 Tap. Finish as required.

Cut a piece of the 3/8” Aluminum rod to about 21”. Attach a vice-grip to one end. Using a 3/8-24 Die cut in about 8 threads in the other end. Screw on the Coupling Nut that came with the SO239 Mount Tighten as much as you can. Measure the rod & coupling nut & cut to exactly 19 1/4”

Cut a piece of the 3/8” Aluminum rod to about 59” Cut another piece about 8” Attach a vice-grip to one end. Using a 3/8-24 Die cut in about 15 threads in the other end. repeat for the 8” rod. (If you don’t have jam nuts, cut

enough threads for 2 nuts & the thickness of the angle bracket.) Screw on one of the Jam nuts & tighten as much as you can. Measure from the bottom of the nut and cut the rod to exactly 57 1/2" Measure from the bottom of the nut and cut the other rod to exactly 6 1/4" (Remember the nut must be included in the Measurement.) (Put a small amount of grease on the threads) Screw the elements into the threaded hole of the angle bracket and tighten. Screw on the other nut and tighten it.
Attach the 19 1/4" element in the 1/2" hole using the rest of the SO239 Mount. Mount & test your new antenna.

SWR should be 1.1:1 at 146 MHz and about 1.2:1 at 144 &148 MHz.

SWR should be 1.1:1 at 443 MHz. and about 1.2:1 at 437 & 450 MHz.
73 Al Lowe N0IMW

4210. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 16:07:41 UTC
From: Jaggarao Nattama <njaggarao@hotmail.com>
Message-ID: <hN6g8.46850$0y2.2001451@typhoon.austin.rr.com>
Source record: 147548

You need a huge dish even on 28mhz. , furthernore poimnting atr a signal
becomes quite difficult
Jag
N2EP
"Ravi R" <krravi@yahoo.com> wrote in message
news:cxzf8.233320$d34.17348230@bin8.nnrp.aus1.giganews.com...
> This might sound silly.. but i was just curious to know if my existing
> Satellite Dish (You know the huge one that rotates..).. can in any way
> modified to be used as a Shortwave Antenna ?
>
>

4211. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 16:15:24 UTC
From: n7ws@yahoo.com
Message-ID: <3c80f9a8.88048451@news.triconet.org>
Source record: 147549

On Sat, 02 Mar 2002 08:43:31 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

|"David J. Windisch" wrote:
|> Anybody know, with Jack Belrose, LB Cebik, Kraus, and others well-id'ed out
|> there in antenna-land, why this disturbin' kert individual seems to be
|> obsessed with anonymity?
|
|His Don Rickles approach to column writing might explain that.
|But it's not an extremely well kept secret. His picture appeared
|in Jan 2002 "Worldradio". He was in WWII so he is at least ~77+
|years old and holds an Advanced license.

Come on, Cecil. You keep saying this but there are three hams with the last
name Sturba. None are "Kurt" and none are Advanced licensees. The Noble thing
to do would be admit your mistake.

4212. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 16:31:28 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <3C80FE60.88F5DAD4@rica.net>
Source record: 147550
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Don Kelly wrote:

> John,
> You have the experience and background to look at the results that Mathcad
> gives you. How much of this is an intuitive, based on your knowledge,
> estimate of the reasonableness of the solution.. If the solution sets off a
> little alarm in your head, do you accept the solution or do you check your
> data input? I just did this today, on a simple problem -the results were
> different (particularly in phase) from what I expected from a "sit on the
> John analysis". It was a data entry error in a program which I wrote and
> tested some godoffal time in the past. A correction led to bliss.
>
> I really think this is what Win Hill was referring to.
>
> Mathcad is great (Oh to have had it as a student-maybe) for the reasons
> you say- the programming is great and well tested but YOU (excuse the shout)
> must be sure that the correct data is entered. Used with insufficient
> understanding can lead to disaster.

Any math analysis requires confidence checking to assure that it has
been assembled and applied correctly. For instance, in the active
filter example I gave, I tested component values that should have
produced maximum gain (opamp open loop response), specific DC gain
(resistor values) and one capacitor at a time (sit on the john RC time
constant check) before I got into any serious design trials. I think
I found a couple errors in the derivation of the LaPlace transforms
this way, before I got it to work reasonably. But I don't see how not
having the tool is better than having the tool. You just have to
settle for examples that are simple enough to wade through without the
tool. I hated all the laborious math during my school days, but now I
actually look forward to seeing it all unfold and grind along at my
slightest whim. I ain't goin' back.

--
John Popelish

4213. FS:Cushcraft 5 ele 6 meter beam

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 16:37:04 UTC
From: NØKO <n0sah@prodigy.net>
Message-ID: <Qc7g8.19774$y7.2861339746@newssvr15.news.prodigy.com>
Source record: 147551

Cushcraft 5 element 6 meter beam in very good condition with copy of manual
and original box. Is missing two of the black element end caps.

$90 shipped in the CONUS

Thanks,
de Nï¿½KO
Randy

4214. FS:Yaesu YS-60 watt/ swr meter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 16:37:35 UTC
From: NØKO <n0sah@prodigy.net>
Message-ID: <jd7g8.19775$6j.2862067820@newssvr15.news.prodigy.com>
Source record: 147552

FS: Yaesu YS-60 2KW Wattmeter/SWR meter in excellent condition. Measures
1.6 through
60 Mhz.
$70 shipped in the CONUS.

Thanks,
de Nï¿½KO
Randy

4215. FS:B & W model 375 antenna switch

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 16:38:08 UTC
From: NØKO <n0sah@prodigy.net>
Message-ID: <Qd7g8.19776$Mm.2862306470@newssvr15.news.prodigy.com>
Source record: 147553

FS:B & W / "PROTAX" coaxial selector switch model 375 in excellent
condition. This is a
6 position circular antenna switch housed in a stainless steel "can"
approximately 4 inches
by 4 inches. Very heavy duty.

$35 shipped in CONUS.
Thanks
de Nï¿½KO
Randy

4216. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 16:45:59 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a5qvou$hh2$1@slb5.atl.mindspring.net>
Source record: 147554

Cecil:

[snip]
> Dipole implies equal poles, i.e. center-fed. If it is not center-fed,
> then an adjective like, "off-center-fed", is necessary.
> cheers, CAM http://www.qsl.net/w5dxp
[snip]

Now that's what I thought. "Dipole!"

To me, "dipole" is plain English. Two "poles", or two equal sized elements with the feed point where they meet.

Cecil you are a connoisseur of semantics, a fan of the IEEE Dictionary, and you seem to have bought a copy of that "celebrated" volume, what does IEEE's lexicon have to say about this?

Personally, I believe that anything other than two equal elements fed where they meet, or if you wish, one element fed *exactly* in the center, is a dipole, anything else needs another name...

BTW... What does the dictionary say about "doublet"?

--Peter K1PO

4217. Re: My appologies to old wives

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 16:53:23 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a5r024$tm3$1@slb3.atl.mindspring.net>
Source record: 147555

Reg:

Wire diameter and "end effects", relative to the wavelength in use, have an effect on the feedpoint impedance. Big loops at the insulator points, etc... affect the value. I have found that, in practice, somewhere between 2,000 Ohms and 10,000 Ohms is a useful range to assume. 6,000 Ohms is the arithmetic mean of those two "thumb sucks", and 4,500 Ohms is the geometric mean.

When you ran Dipole2, what "number" wire did you use, and how were the ends of the wires assumed to be dressed?

--Peter K1PO

"In theory, theory and practice are the same, but in practice they are different." --Yogi Berra

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:a5qf3p$9asih$1@ID-124126.news.dfncis.de...
> In my mental haste to jump in I forgot to multiply by two.
>
> Using program Dipole2 I find that at 14 MHz, a 1-wavelength resonant
> centre-fed dipole, at a height of 33 feet, has a feedpoint impedance of
> 6365+j0 ohms.
>
> Very sorry folks.
> ---
> Reg G4FGQ
>
>

4218. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 17:27:52 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a5r22rpkj1@slb1.atl.mindspring.net>
Source record: 147556
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Thread:

FWIW... here's my thoughts...

In "design" I propose that there are really only *two* scenarios, each depending upon the initial condition of the sheet of paper on which the design is developed.

1.) Blank Sheet Design:

This is "conceptual design". You start with nothing and have no choice but to "create". In the patent world a design of this type would be referred to as a *concept patent*. Lot's of big picture creativity required, but little detail. Here, Hendrik W. Bode's wonderfully simple asymptotic graphing methods reign supreme! Computers are useless in this type of design!

2.) Non-blank Sheet Design:

This is "improvement design". In the patent world this type of design would be referred to as an improvement patent. The designer starts with some already given "concept design" and improves on it somehow. This can range all the way from simply "tweaking" element values to adding extra elements and perhaps deleting some already present. Not much *big* picture creativity required here, but lots of detail. Here the modern computer aided methods reign supreme. Bode does not provide much help here.

I have on my bookshelf above my desk a few "classics" to which I refer, often daily. The pertinent one here is:

Hendrik W. Bode, "Network Analysi and Feedback Amplifier Design", Third Printing, p. 551, D. Van Nostrand Company, 1945.

On the frontpiece it reads, "by Hendrik W. Bode, Ph.D., Research Mathematician, Bell Telephone Laboratories, Inc.

Somehow I doubt that the "title" Mathematician was appropriate for Bode, for IMHO... Bode was an *Engineer* of the highest calling.

Quoting from the preface, written by Bode himself,

"This book was originally written as an informal mimeographed text for one of the so-called "Out-of-Hour" courses at Bell Telephone Laboratories. The bulk of the material was prepared in 1938 and 1939 and was given in course form to my colleagues there in the winters of 1939-40 and 1940-41. During the war, however, the text has also been supplied as a reference work to a considerable number of other laboratories engaged in war research. The demand for the text on this basis was unexpectedly heavy and quickly

exhausted the original supply of mimeographed copies. It has consequently
been decided to make the text more widely available through regular channels
of publication."

H. W. Bode was a South African immigre to the USA. He passed away at a very
young age. A major contributor to the science and technology of modern
Electrical Engineering. If one were to make a list of the top 10 Electrical
Engineers of all time, Bode would be on it!

Oh... what I would give to have been able to sit in on those "Out-of-Hours"
classes in the winter of 39-40 or 40-41!

--Peter K1PO

"Kevin Aylward" <kevin@anasoft.co.uk> wrote in message
news:7S%f8.25987$R16.3619491@news11-gui.server.ntli.net...
> "John Popelish" <jpopelish@rica.net> wrote in message
> news:3C803826.BDB648F8@rica.net...
> > Win Hill wrote:
> > >
> > > Mark Hall wrote:
> > > >
> > > > Bode plots are kind of obsolete these days with all the analysis
programs
> > > > out there. EE's today have it rather easy compared to when I
graduated!
> > >
> > > This, I think is wrong. It's quicker and more productive to play
with
> > > Bode plots and casually inspect them in a thoughtful frame of mind
than
> > > it is to mindlessly run a spiffy analysis program. In my experience
> > > these programs tend to stiffle the creative thought process. I find
it
> > > especially useful to quickly sketch a few families of Bode plots and
to
> > > make small scribbled notes on the same piece of paper, then
contemplate
> > > the result, thinking of alternate circuit configurations. Most
programs
> > > don't lend themselves to this process. My computer is usually turned
on
> > > and dominating the desk in front of me as I do this but its serious
role
> > > comes later on, in confirming, refining and documenting the design.
> > >
> > > Note, one can be anywhere, sitting on the john or whatever, when
playing
> > > with Bode plots, that's a totally cool aspect. Having memorized the
> > > phase shift of a few frequency ratios away from a pole location, one
can

> > > use these to quickly sketch useful phase curves for the Bode plots.
> >
> > I am afraid I have to vote in favor of having a good live Bode
> > plotting tool, like Mathcad when doing basic design work. My latest
> > application involved design of a multi pole and zero active high pass
> > filter that had a gain of 100 in the pass band.
> > I developed the configuration by hunch and extrapolation of published
> > designs by using Mathcad to help me create a LaPlace transform of the
> > configuration under consideration and then give me a live Bode plot
> > (amplitude and phase) as I twiddled the component values, to explore
> > the performance and value sensitivities, trying quite a few
> > possibilities in a very short time. Then, with the lessons learned
> > (and hunches gained) with that configuration, select a new
> > configuration that (hopefully) minimized the weaknesses of the last
> > one, and repeat the process. In a day or two of work, I came up with
> > a configuration that had low sensitivities and made goo use of the
> > opamps capabilities. This method allows me to brainstorm a concept
> > and get real predictive results almost as fast as I can think, and
> > produces a publication quality printout of the work for me to put away
> > till I need to remember what I was doing. This is as close as
> > engineering gets to sculpting in clay.
> >
> > Solving LaPlace transforms that take the real world properties of the
> > opamp as well as an arbitrary array of passive parts is just not
> > practical with a calculator and graph paper once you get above a
> > couple poles and zeros. One of the solutions I produced was a LaPlace
> > transform 23 pages wide. Mathcad produced a new Bode plot of 100
> > frequency points in less than a second each time I altered a component
> > value in the network. As a final step, If I define a definition of
> > the figure of merit for the filter, Mathcad will select the component
> > values that maximize that figure of merit.
> >
>
> Apart from your reference to an ordinary gain verses frequency plot as a
Bode
> plot (nails down blackboard sound....), I have to agree with you John.
>
> Designs are just too complicated for pen and paper. I agree that you need
to
> have the background understanding of what's going on, but design by pure
> simulation is very, very effective when used correctly. Its just a matter
of
> moving on with the times.
>
> As an additional point, even the plotting of AC gain can be dubious in
designing
> a feedback amp. It is not uncommon to have designs that show good small
signal
> ac stability, but in fact are unstable due to various non-linear effects.
I

> generally just use the ac response as a general guide, but do all the
stability
> work using transient analysis.
>
> Kevin Aylward , Warden of the Kings Ale
> kevin@anasoft.co.uk
> http://www.anasoft.co.uk
> SuperSpice, a very affordable Mixed-Mode
> Windows Simulator with Schematic Capture,
> Waveform Display, FFT's and Filter Design.
>
>

4219. Re: My appologies to old wives

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 17:29:26 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C810C0A.DAB0A7CE@worldnet.att.net>
Source record: 147557

"Peter O. Brackett" wrote:PO

>
> "In theory, theory and practice are the same, but in practice they are
> different." --Yogi Berra

That has to be the truest of Yogi's "truisms".

4220. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 17:37:51 UTC
From: k1bqt@aol.com
Message-ID: <20020302123751.10967.00001540@mb-fj.aol.com>
Source record: 147558

I'm still not having much luck confirming Jim's notion that the FAA routinely uses circular polarization at their VHF Comm sites.

Here in the Northeast, all the VHF Comm antennas I can find on local airport towers and on the area FAA Center building in Nashua NH are (obviously) vertically polarized.

Going beyond that observation, from a technical standpoint, wouldn't it be true that, even at a 45-degree bank angle (defined in aviation as a "steep turn"), cross-pol attenuation should only amount to 3-dB or so? (I could be wrong)

Also, isn't it true that a circularly polarized array would impose a gain penalty on all aircraft using vertical polarization--including those aircraft operating in straight and level flight? (I could be wrong again)

Given these considerations, I can't help but wonder if those Lindy antennas weren't being installed on FAA towers for 136 MHz WX satellite reception rather than for VHF Comm duty? That makes a heap more sense to me.

Anybody know the real deal??

Rick K1BQT

4221. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:03:14 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <xt8g8.84062$JZ.11167735@news20.bellglobal.com>
Source record: 147559

"Rick Littlefield"
> Going beyond that observation, from a technical standpoint,
> wouldn't it be true that, even at a 45-degree bank angle
> (defined in aviation as a "steep turn"), cross-pol attenuation
> should only amount to 3-dB or so? (I could be wrong)

45 degrees = 0.707 = 70% = -1.5 dB (?)

4222. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:07:19 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8114D7.C3D7EBAB@IEEE.org>
Source record: 147560

"Peter O. Brackett" wrote:
> Personally, I believe that anything other than two equal elements fed where
> they meet, or if you wish, one element fed *exactly* in the center, is a
> dipole, anything else needs another name...

"dipole - See: dipole antenna, magnetic dipole, electrically short
dipole, folded dipole, half-wave dipole, Hertzian electric dipole,
Hertzian magnetic dipole, microstrip dipole."

"dipole antenna - Any one of a class of antennas having a radiation
pattern approximating that of an elementary electric dipole."

The IEEE dictionary goes even farther and says that common usage means
a current node at each end of a thin wire antenna. One wonders how a wire
ending in space could have anything but a current node.

It really gets hairy when one uses a 75m dipole on 10m. Is a 75m dipole
still a dipole when it is used on 10m? It has more electrical poles
than two and does not meet the definition of a "dipole antenna".

Here's one for you, Peter. If a dipole antenna is not being used,
is it still a dipole antenna?

> BTW... What does the dictionary say about "doublet"?

Synonym for dipole.
--
cheers, CAM http://www.qsl.net/w5dxp

4223. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:12:03 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8115F3.632A6860@IEEE.org>
Source record: 147561

Wes Stewart wrote:
> Come on, Cecil. You keep saying this but there are three hams with the last
> name Sturba. None are "Kurt" and none are Advanced licensees. The Noble thing
> to do would be admit your mistake.

Wes, attend a Worldradio field day event and look for 80ish year old hams
with original W6 calls working on antennas. You will narrow the field
considerably.
--
cheers, CAM http://www.qsl.net/w5dxp

4224. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:20:12 UTC
From: Ratch <watch@mediaone.net>
Message-ID: <wJ8g8.10723$Or3.1191669@typhoon.mn.ipsvc.net>
Source record: 147562
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:a5r22rpkj1@slb1.atl.mindspring.net...
> Thread:
>
> > I have on my bookshelf above my desk a few "classics" to which I refer,
> often daily. The pertinent one here is:
>
> Hendrik W. Bode, "Network Analysi and Feedback Amplifier Design", Third
> Printing, p. 551, D. Van Nostrand Company, 1945.
>
> On the frontpiece it reads, "by Hendrik W. Bode, Ph.D., Research
> Mathematician, Bell Telephone Laboratories, Inc.
>
> Somehow I doubt that the "title" Mathematician was appropriate for Bode,
for
> IMHO... Bode was an *Engineer* of the highest calling.
>
> Quoting from the preface, written by Bode himself,
>
> "This book was originally written as an informal mimeographed text for one
> of the so-called "Out-of-Hour" courses at Bell Telephone Laboratories.
The
> bulk of the material was prepared in 1938 and 1939 and was given in course
> form to my colleagues there in the winters of 1939-40 and 1940-41. During
> the war, however, the text has also been supplied as a reference work to a
> considerable number of other laboratories engaged in war research. The
> demand for the text on this basis was unexpectedly heavy and quickly
> exhausted the original supply of mimeographed copies. It has consequently
> been decided to make the text more widely available through regular
channels
> of publication."
>
> H. W. Bode was a South African immigre to the USA. He passed away at a
very
> young age. A major contributor to the science and technology of modern
> Electrical Engineering. If one were to make a list of the top 10
Electrical
> Engineers of all time, Bode would be on it!
>
> Oh... what I would give to have been able to sit in on those
"Out-of-Hours"
> classes in the winter of 39-40 or 40-41!
>

> --Peter K1PO
>
Do you or anyone else know how to pronounce his last name, i.e., Bo-dee
or Bo-dah? Ratch

4225. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:27:34 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <sJ8g8.118213$2v1.3146722@e3500-atl1.usenetserver.com>
Source record: 147563

'Doc <w5lz@icok.net> wrote in message news:3C808666.F9F17D6A@icok.net...
>
>
> Jerry,
> I don't 'see' how a 'shorting lead' and the unused
> coil turns of a 'Bug Catcher' antenna are any different,
> other than mechanical, than the unused coil turns inside
> the tube of a screw driver antenna. The length of the
> shorting lead does have some affect on things just as the
> 'finger-stock' (or whatever other method of shorting the
> 'SD' coils) does on the screw driver antenna. They're
> both 'factored' into the tuning process on each antenna.
> I don't think that there is any significant affect of
> the unused coil turns of either antenna, especially at
> HF. Even if there is, it's still 'handled' when you tune
> the antenna. Right?
> 'Doc

Well, Doc,

It may be just an opinion, but I do believe it does affect, at least, the
efficiency of the antenna
as opposed to the coil turns down inside the mast of a SD. Those turns that
are down inside
the mast are decoupled at the fingerstock and become, in effect, a part of
the lower mast. I
believe, from some admittedly very unscientific experiments I have done,
that those turns that
are by-passed still have *some* RF on them, but, because of the jumper,
can't "do" anything
resulting in wasted power--kinda like back pressure in a car muffler. That,
I think, is why the
SD's work so well--much more RF is sent thru the system and out into the
ether instead of
muddliing around amongst jumpered turns. The experiment(s) I
mentioned--well, one of them--
was with some old Master Mobile coils I have laying around. I tuned one on
3920 (MFJ 259)
so that I had ONLY coil with no jumper, and another one (identical) with a
jumper. There *seemed* to be a little more efficiency with the unjumpered
coil, tho not by much, and the impedance value was different at the
feedpoint indicating (to me) that the coil with the jumper
was exhibiting more resistance (?????) than the one without. I then set
them up on higher freq-
uencies (40, 20, 15, etc) and got the same result.

Now, having said that, I know antennas WILL tune with wander leads, and also that I am not
a "master" at antenna theory. But I AM learning! LOL! I do not vouch for my very unscienti-
fic experiments; rather, I drew some conclusions from it that *seem* to make sense--to me
anyway. LOL!

This is where I get the most fun from ham radio--experimenting, trying out things, correcting,
and BEING corrected. That is how I learn and become better in the hobby. That, Doc, is
why I read your posts and the posts of other hams whose knowledge and opinions I respect.

73

Jerry
K4KWH

4226. Re: Load Resistors

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:34:51 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3C811B4B.6A1BC0E0@one.net>
Source record: 147565

Perhaps you've found them by now. I'm way behind with e-mail and
newsgroups. But if not:

I just bought a 51-Ohm thick-film resistor in a TO-220-style package
from Mouser to try it out. I'm pretty sure Digikey carries them too.
The catalog claims that it's "low inductance". It's rated at 35 Watts
when properly heat sinked.

My digital VOM says it's 50 Ohms, and the MFJ-259B says R=49 and X=2 at
146 MHz. I haven't fed it any power yet, but it looks promising.

If I remember correctly, they're available with ratings up to several
hundred watts.

... Rich

avatar wrote:
>
> I recall there were several postings awhile back about sources for
> non-inductive power resistors. I tried a few search engines, but none list
> this news group.
>
> If anyone kept a file of this info, please email a copy to me or post it
> here.
>
> Thanks,
>
> Dave
> Wï¿½MAY

4227. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:34:58 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C811B3E.D52DE588@icok.net>
Source record: 147564

Cecil,
Sure, it applies to dipoles, folded or un-folded, drooping,
inverted, vertical, horizontal, diagonal, even laying on the
ground. Especially if you're using coax for a feed line. The
same for if you're using ladder-line, it just doesn't matter as
much...
'Doc

4228. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:38:17 UTC
From: Ed <edward.hopkins@dartmouth.edu>
Message-ID: <a5r5kc$s2k$1@merrimack.Dartmouth.EDU>
Source record: 147572
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Plug your circuit into PSpice and run an AC sweep. There's a free downloadable student version if you are on a low budget. Then find the DB Magnitude option.

Alternatively, use Matlab's Bode command with your transfer function. That's what we are doing in my college electronics engineering courses.

You can also plot it out by hand by plugging in certain frequencies and calculating 20*log10(Vout/Vin).

You don't even need a transfer function to do that - just simple phasor analysis with Zc = 1/jwC and Zl = jwL.

Ed

Ed

4229. New Domain - k7on.com

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:39:08 UTC
From: Brian Short <k7on@earthlink.net>
Message-ID: <MPG.16eb29648820ad1a9896e7@news.earthlink.net>
Source record: 147566
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I have registered a new domain k7on.com and my web page
will be re-located on managed servers with high-bandwidth
connections.

Please replace any bookmarks or links with:
http://www.k7on.com/

For the time being, while DNS caches update, I will
keep the qsl.net/k7on web page online, but expect no
updates.

Thanks, Brian

--
People who think they know it all are annoying
to those of us who do.
--
See my web page: http://www.k7on.com/
--

4230. Re: Homebound

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:39:26 UTC
From: AC6V <ac6v@amsat.org>
Message-ID: <3C811C67.AC02B8EB@amsat.org>
Source record: 147567
Body handling: Binary attachment payload not displayed: Blank Bkgrd.gif

Hi Ron -- maybe peruse "Stealth Antennas" at URL:
http://www.ac6v.com/antprojects.htm#STANT

Good Luck

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
==========
"R." wrote:

> I am homebound AND live in a location that prohibits outside
> antennas. Any thoughts on what I can use to get out? I have
> capability on 80 thru 10 meters and on 2 meters. My preferences are
> CW on the lower bands. Thanks, Ron

[One or more binary attachments are retained only in the source text.]

4231. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:42:23 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <i9728uks78hrfmm301ti0p7u3sshvvn091@4ax.com>
Source record: 147568

On Sat, 2 Mar 2002 13:03:14 -0500, "J. Harvey"
<JM001.Harvey@sympatico.ca> wrote:

>"Rick Littlefield"
>> Going beyond that observation, from a technical standpoint,
>> wouldn't it be true that, even at a 45-degree bank angle
>> (defined in aviation as a "steep turn"), cross-pol attenuation
>> should only amount to 3-dB or so? (I could be wrong)
>
>45 degrees = 0.707 = 70% = -1.5 dB (?)
>
>
0.7071 of WHAT? (should account for missing 1.5dB)

4232. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:42:50 UTC
From: Bob Penoyer <rpenoyer@NOSPAMieee.org>
Message-ID: <nq628ucdd84julirevg1mqcv6p4vcbf89p@4ax.com>
Source record: 147569
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On 28 Feb 2002 19:22:33 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>NOTE: This is NOT a homework assignment. (I graduated from college
>nearly 6 years ago, so there is no grade at stake.) Yes, I am truly
>interested in understanding how filters work.
>
>Can anyone help me with the Bode Plot for the following bandpass
>filter circuit? Have I stumbled across limitations of Bode Plots?
>
>vin---R---------vout
> | |
> | |
> C L
> | |
> | |
> ground
>
>As usual, the input voltage is on the left and the output voltage is
>on the right.
>
>The transfer function is H(s)=vout/vin=sL/(s^2*CLR+sL+R).
>
>If R=100 ohms, C=100 microF, and L=100 mH, then the transfer function
>is:
>H(s)=.1s/(.001s^2 + .1s + 100) = 100/(s^2+100s+100,000)
>
>The dB of the transfer function is:
>HdB(w)= 10 log [(.01 w^2)/(.01 w^2 + 10^4 (10^-5 w^2 -1)^2)]
>
>The phase of the transfer function is:
>Hangle(w) = -arctan[100 (10^-5 w^2 -1)/(.1 w)]
>
>The poles of the transfer function are s=-50+-j312.2498999
>
>This means that the cutoff frequency is 321.2498999 radians (around
>49.7 Hz). But why isn't this cutoff frequency 316.227766 radians? I
>realize there isn't a very big difference between these two
>frequencies, but the second one is the resonant one.
>
>And why is the dB slope per decade irregular? The cutoff frequency is
>49.7 Hz, and the gain is near 0 dB here. At 497 Hz, the gain is -29.8
>Hz. At 4970 Hz, the gain is -49.9 dB. The gain is -30.0 dB at 4.97

>Hz and -50.1 dB at .497 Hz.
>
>Can someone tell me how you would draw the Bode Plot for this circuit?

Okay, here's the deal: For a second-order band-pass filter, the form
of the transfer function is

```
w0
-- s
Q
----------------
2 w0 2
s + -- s + w0
Q
```

From s^2 + 100 s + 100,000

w0 = 316 so that Q = 3.16

When you estimate a second-order band-pass filter's characteristics
using a Bode plot, each skirt will roll off at a first-order roll-off
rate: -20 dB per decade. But the Q of your system is greater than 1 so
that some "peaking" will occur near resonance. The effect of this
peaking is that the asymptotes of the skirts will be parallel to the
Bode estimates but _below_ where you might guess the estimates to be.
That is, at a distance far enough from the center frequency, each
skirt will roll off at -20 dB/decade but the asymptotes will be
somewhere below "first-guess" asymptotes that intersect the center
frequency at 0 dB.

There might be some rule to estimate how far below the first-guess
asymptotes the true asymptotes are, but I don't know what it is.

Regarding s = -50 +/- j312.2498999: Yes, that is correct. But look at
the form of the band-pass filter that I provided, above. Substitute jw
for each s term and notice that at w = w0 the denominator reduces to
(w0 / Q)s, which is the same as the numerator. Thus, at w = w0, the
gain of your filter is 1. At any other w, the magnitude of the
denominator is larger so that the amplitude of the filter is smaller.
So the peak of the band-pass filter occurs at w = w0, not at w =
321.2498999.

4233. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:43:20 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C811D34.CB4ED817@icok.net>
Source record: 147570

Roy,
Nope! Won't catch me on TV (the whitless protection service
won't let me do that), but watch your email. If you see one that
starts out, "If you read this whole post I will gaurantee that
you
will be making millions in just...". See, you've been deleting
them haven't you.
'Doc

4234. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 18:48:52 UTC
From: tdonaly@cs.com
Message-ID: <20020302134852.21755.00001360@mb-da.news.cs.com>
Source record: 147571

>
Cecil wrote,
>Tdonaly wrote:
>>
>> >
>> Cecil wrote,
>> >What is your estimate of the feedpoint impedance of a
>> >one wavelength dipole?
>>
>> It depends on where you feed it.
>
>Dipole implies equal poles, i.e. center-fed. If it is not center-fed,
>then an adjective like, "off-center-fed", is necessary.
>--
>cheers, CAM http://www.qsl.net/w5dxp
>
No, dipole just says there are two poles. It
doesn't say a thing about being equal, nor
does it say anything at all about feedpoint
or if it's fed at all. Moreover, in your original
post, you didn't even specify that your
dipole was an antenna. (I assumed it was.)
However, since you have no less an authority
than Peter Brackett agreeing with you I
suppose I should too. However, I won't.
Enlighten me Cecil; is an off-center-fed
dipole not a dipole? If it's not, then you have
a point.

Tom Donaly KA6RUH

4235. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 19:07:50 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a5r7u7$do9$1@slb6.atl.mindspring.net>
Source record: 147573

Cecil:

Zen and the art of antenna design!

[snip]
"> Here's one for you, Peter. If a dipole antenna is not being used,
> is it still a dipole antenna?
> cheers, CAM http://www.qsl.net/w5dxp
[snip]

Thanks for looking up those definitions Cecil.

--Peter K1PO

4236. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 19:15:57 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c812881_3@news1.prserv.net>
Source record: 147575

Hehehe. I just finally found out a few weeks ago who actually wrote
Scratchi. And, I worked with the guy for a couple of years in the 60s.
IPOIO was one of my favorites. Wish CQ would occasionally republish some of
the timeless ones.

Another thing, doesn't ol' Kurt spell it Sterba?
--
Crazy George
Remove NO and SPAM from return address
David J. Windisch <davidw@copper.net> wrote in message
news:Si4g8.47$bA2.89314@newsfeed.slurp.net...
> Anybody know, with Jack Belrose, LB Cebik, Kraus, and others well-id'ed
out
> there in antenna-land, why this disturbin' kert individual seems to be
> obsessed with anonymity?
>
> Is it because he's after the same effect as Larson E. Rapp WIOU and
> Hashafisti Scratchi's author?
>
> K3BHJ
>
>

4237. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 19:16:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a5r8f9$a32$1@slb3.atl.mindspring.net>
Source record: 147574
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Ratch:

[snip]
> Do you or anyone else know how to pronounce his last name, i.e., Bo-dee
> or Bo-dah? Ratch
[snip]

I don't know how Hendrik pronounced it himself, and I have never met anyone with that surname to ask them. H. W. Bode was an Afrikaner from South Africa who immigrated to the USA. So it is probably a Dutch-like name. I am sure that he must have spoken with an accent.

That said... in my personal experience, universally everyone that I have heard pronouncing his name, have pronounced it as "bow dee".

--Peter K1PO

4238. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 19:31:05 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a5r9i4mqo1@slb4.atl.mindspring.net>
Source record: 147576

Crazy:

I miss those Scratchi columns in CQ. They were popular back when Wayne Green was the editor of CQ. Scratchi was always the first thing I read when the issue arrived.

Today those columns would probably be considered not PC.

I forget now, did Hashafisti ever actually ever give any call letters?

--Peter K1PO

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message news:3c812881_3@news1.prserv.net...
> Hehehe. I just finally found out a few weeks ago who actually wrote
> Scratchi. And, I worked with the guy for a couple of years in the 60s.
> IPOIO was one of my favorites. Wish CQ would occasionally republish some of
> the timeless ones.

4239. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 19:32:05 UTC
From: w1rfi@aol.com
Message-ID: <20020302143205.26506.00001242@mb-fx.aol.com>
Source record: 147577

From: "Harold E. Johnson" W4ZCB@mchsi.com

>> Would it be possible for you to post the PDF version of this article on
>> alt.binaries.pictures.radio for others to read?
>> Scott M.

>Dunno, never have done that. However, if you'd express the interest to Dr.
>Shuch, I betcha he'd do it if he could. The League may have copyright on it
>and they get a little touchy about that from time to time.

ARRL protects its copyrights, but it usually gives any reasonable permission.

It will be moot on Monday morning. I will post the article on the ARRL web page
and let you all know the URL.

73,
Ed Hare, W1RFI
ARRL Lab

4240. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 19:46:22 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0203021146.1dc100c@posting.google.com>
Source record: 147578

fractenna@aol.com (Fractenna) wrote in message
news:<20020227084956.17471.00000735@mb-cr.aol.com>...
> You can look at the near field as the volume (not area) within which the
> intensity falls as 1/r (where r is distance from radiator) and the far field
> as the volume--extending out to infinity-- for which the intensity falls as
> 1/r^2. All in free space, of course.

Don't you mean that the intensity falls off as 1/r in the far field,
not the near field?
73,
Bill N3WK

4241. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 19:55:33 UTC
From: Ratch <watch@mediaone.net>
Message-ID: <V6ag8.10735$Or3.1195917@typhoon.mn.ipsvc.net>
Source record: 147579
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:a5r8f9$a32$1@slb3.atl.mindspring.net...
> Ratch:
>
> [snip]
> > Do you or anyone else know how to pronounce his last name, i.e., Bo-dee
> > or Bo-dah? Ratch
> [snip]
>
> I don't know how Hendrik pronounced it himself, and I have never met
anyone
> with that surname to ask them. H. W. Bode was an Afrikaner from South
> Africa who immigrated to the USA. So it is probably a Dutch-like name. I
> am sure that he must have spoken with an accent.
>
> That said... in my personal experience, universally everyone that I have
> heard pronouncing his name, have pronounced it as "bow dee".
>
> --Peter K1PO
>
Thanks for the info. I have heard it pronounced that way many times
too. For what it's worth. In Circuit Analysis , 1991, by Allan D. Kraus,
page 742 footnote, "Pronounced Bodah, not Boad or Bodie". Since Dutch is a
Germanic language, I would think that an "e" on the end of a word or name
would not be pronounced like a long 'e' as in Bodee. Ratch

4242. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 19:58:24 UTC
From: Bob Nielsen <nielsen@remove_this.oz.net>
Message-ID: <a5rat0$3c0$0@216.39.144.81>
Source record: 147580

I don't think so, but he was in Feenix, Arizona, so it must have been a
7 call (6 prior to WWII).

Bob, N7XY

On Sat, 2 Mar 2002 14:31:05 -0500, Peter O. Brackett wrote:
> Crazy:
>
> I miss those Scratchi columns in CQ. They were popular back when Wayne
> Green was the editor of CQ. Scratchi was always the first thing I read when
> the issue arrived.
>
> Today those columns would probably be considered not PC.
>
> I forget now, did Hashafisti ever actually ever give any call letters?
>
> --Peter K1PO
>
>
> "Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
> news:3c812881_3@news1.prserv.net...
>> Hehehe. I just finally found out a few weeks ago who actually wrote
>> Scratchi. And, I worked with the guy for a couple of years in the 60s.
>> IPOIO was one of my favorites. Wish CQ would occasionally republish some
> of
>> the timeless ones.
>
>
>

--
Bob Nielsen, N7XY nielsen@oz.net
Bainbridge Island, WA http://www.oz.net/~nielsen
IOTA NA-065, USI WA-028S

4243. Re: Homebound

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 20:07:53 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C813114.A1C5B5E1@tampabay.rr.com>
Source record: 147581
Body handling: Binary attachment payload not displayed: Blank Bkgrd.gif

hey ron
i can tell you from my own experiances that trying to find someone to help you with stuff is very tough
since you are housebound and deed restricted maybe its time for a new hobby or tine to move....grin
or if you are allowed a flagpole i would look into a multiband HF vertical and rig a PVC pipe flagpole over the top of it
good luck

"R." wrote:

> I am homebound AND live in a location that prohibits outside
> antennas. Any thoughts on what I can use to get out? I have
> capability on 80 thru 10 meters and on 2 meters. My preferences are
> CW on the lower bands. Thanks, Ron This account belongs to a resident
> of the State of Washington. As such, it is illegal to send certain
> unsolicited email to this account. See www.wa.gov/ago/junkemail for
> details. This e-mail has been checked by the Norton Anti-Virus program
> prior to being sent.

[One or more binary attachments are retained only in the source text.]

4244. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 20:54:56 UTC
From: richardharrison@webtv.net
Message-ID: <20373-3C813C20-373@storefull-111.iap.bryant.webtv.net>
Source record: 147583

Rick, K1BQT wrote:
"---cross-pol attenuation should only amount to 3 dB or so?"

Antenna polarization is the direction of the voiltage (E field) vector.
If an aircraft`s inclination reduces the voltage vector by
1/sq.rt.(2), (0.707), the resulting current is also reduced by 0.707x.
Thus the power is reduced by 0.707 squared, or 0.5. So, the db loss is
3.

Best regards, Richard Harrison, KB5WZI

4245. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 21:08:35 UTC
From: Bob Penoyer <rpenoyer@NOSPAMieee.org>
Message-ID: <jrd28uct75rrtedufcaj2a7143ho1ic66q@4ax.com>
Source record: 147582
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Sat, 02 Mar 2002 18:42:50 GMT, Bob Penoyer
<rpenoyer@NOSPAMieee.org> wrote:

>There might be some rule to estimate how far below the first-guess
>asymptotes the true asymptotes are, but I don't know what it is.

This statement was playing on my mind, so I decided to investigate.

A first-order low-pass filter with a corner at w0 will roll off at a
-20 dB/decade rate just like the upper skirt of the band-pass filter.
Since the question is "What is the rule for vertical offset of the
amplitudes?" I expressed a first order LPF as

```
w0
------
s + w0
```

This function can be nicely represented as a -20 dB roll-off in a Bode
plot. I took the ratio of the absolute value of the above expression,
divided it by the absolute value of the expression that I used in my
previous post, and then took 20 log of their ratio to get

```
|first-order expression|
20 log ------------------------
|second-order expression|
```

Then I substituted for s using s = jw and took the limit of the above
expression as w goes to +infinity. Using Derive 5 (a nifty program for
those who are lazy at algebra or calculus, available from Texas
Instruments Student Center) I evaluated the limit algebraically and
came up with this compact result:

```
20 ln |Q|
```

Yes, that's the natural log. So if Q = 3.16, the vertical offset of
the asymptotes is

```
20 ln 3.16 = 23 dB
```

4246. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 21:09:54 UTC
From: richardharrison@webtv.net
Message-ID: <20375-3C813FA2-68@storefull-111.iap.bryant.webtv.net>
Source record: 147584

Ed Hare, W1RFI wrote:
"I will post the article on the ARRL web page and let you all know the
URL."

Good to hear from Ed. Is the ARRL web page "members only"?

Best regards, Richard Harrison, KB5WZI

4247. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 21:46:09 UTC
From: Kevin Aylward <kevin@anasoft.co.uk>
Message-ID: <KKbg8.82347$Ah1.10908753@news2-win.server.ntlworld.com>
Source record: 147585
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:a5r8f9$a32$1@slb3.atl.mindspring.net...
> Ratch:
>
> [snip]
> > Do you or anyone else know how to pronounce his last name, i.e., Bo-dee
> > or Bo-dah? Ratch
> [snip]
>
> I don't know how Hendrik pronounced it himself, and I have never met anyone
> with that surname to ask them. H. W. Bode was an Afrikaner from South
> Africa who immigrated to the USA. So it is probably a Dutch-like name. I
> am sure that he must have spoken with an accent.
>
> That said... in my personal experience, universally everyone that I have
> heard pronouncing his name, have pronounced it as "bow dee".
>

Trust you bloody yanks to assume that your way is way it is. I never heard it as bow-dee until I went to the states. Its said "bode", with one syllable. It's universally known in the civilised world as bode. When the U.S. becomes civilised, I'll let you know, but don't hold your breath:-)

Kevin Aylward , Warden of the Kings Ale
kevin@anasoft.co.uk
http://www.anasoft.co.uk
SuperSpice, a very affordable Mixed-Mode
Windows Simulator with Schematic Capture,
Waveform Display, FFT's and Filter Design.

4248. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 21:53:32 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5ri16$9hqmg$1@ID-124126.news.dfncis.de>
Source record: 147587

There is only one field.

It is mathematically convenient for analysis to break it down into 2 or more fictional components. It's also useful as a source of something to argue about when there's nothing else better to do.

Come to think of it - the whole damn thing is just a mathematical fiction.
--
Reg

==========
> > You can look at the near field as the volume (not area) within which the
> > intensity falls as 1/r (where r is distance from radiator) and the far field
> > as the volume--extending out to infinity-- for which the intensity falls as
> > 1/r^2. All in free space, of course.
>
> Don't you mean that the intensity falls off as 1/r in the far field,
> not the near field?
> 73,
> Bill N3WK

4249. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 21:55:09 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u82ihtjb03vkee@corp.supernews.com>
Source record: 147586
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <zvPf8.22309$R16.3257454@news11-gui.server.ntli.net>,
kevin@anasoft.co.uk says...
>
>
>"John Woodgate" <jmw@jmwa.demon.co.uk> wrote in message
>news:gL4t0NBK15f8EwFY@jmwa.demon.co.uk...
>> I read in sci.electronics.design that Kevin Aylward
>> <kevin@anasoft.co.uk> wrote (in <DQLf8.21014$R16.3125470@news11-gui.serv
>> er.ntli.net>) about 'HELP needed in understanding Bode Plots', on Fri, 1
>> Mar 2002:
>> >There is no
>> >doubt, that a "Bode Plot" refers to the straight line asymptotic
>approximation
>> >to the real frequency plots. This was certainly the way I first learnt
to
>some
>> >24 years ago, probably 2nd year of my degree.
>>
>> I agree, except that '24' should be '45' (;-). The areas between the
>> real response and the straight line approximations are called 'Bode
>> fillets'.
>
>This show that you are indeed correct, about your age. I have not heard of
the
>term 'Bode fillets' before.

In fact, this is all patently obvious.

Anyone who has manually observed the amplitude output of (say) an RC Low Pass filter with respect to increasing frequency, must have noticed (unless they were unbelievably imperceptive) that attenuation begins gradually. It clearly does not instantly switch from no attenuation whatsoever, to a fixed attenuation slope at a particular frequency! From this it is blatently clear that a Bode plot is a straight line simplification of reality.

Bob.

4250. WANTED: how to modify AA battery holder for handheld to accept 9V batteries

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:07:50 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203021407.3d679671@posting.google.com>
Source record: 147588
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

There was a QST article a few years ago on how to modify a AA battery holder to accept 9V batteries. It involved cutting parts of the plastic out and rewiring the inside of the unit. Has anyone here done anything like this?

I have an old FBA-15 AA battery holder for my Yaesu FT-50R that I replaced. (It had some bad contacts, and while I could revive it by placing aluminum foil in the appropriate places or scrubbing the metal contacts with sandpaper, I wanted something more reliable.)

I still have the FBA-15. What tools do I need to rip out the plastic and metal "walls" inside so the holder will accomodate a 9V battery? How would I secure this 9V battery inside the holder?

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

4251. Re: 5BTV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:09:01 UTC
From: w9gb <gregory.beat@attbi.com>
Message-ID: <14cg8.32716$mG.132371@rwcrnsc54>
Source record: 147589

Unfortunately, New Tronics does not yet have these on their web site !

http://www.new-tronics.com/main/html/base_hf_5_band.html

"Mark Tetrault" <tetrault@mv.mv.com> wrote in message
news:l7kv7u4plsimpuhbdn1rmk701duf9k60kg@4ax.com...
> Does anyone have the assembly instructions for the Hustler 5BTV they
> can either scan and email attach or photocopy and mail to me?
>
> I'll pay the postage if needed.
>
> mark

4252. HF antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:14:07 UTC
From: C <cpierce@usit.net>
Message-ID: <cpierce-98B7C2.16135002032002@news.earthlink.net>
Source record: 147590

Looking at buying HF antenna analyzer .

What is good and what is junk.

C.

4253. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:20:11 UTC
From: Ratch <watch@mediaone.net>
Message-ID: <vecg8.10742$Or3.1203536@typhoon.mn.ipsvc.net>
Source record: 147593
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Kevin Aylward" <kevin@anasoft.co.uk> wrote in message
news:KKbg8.82347$Ah1.10908753@news2-win.server.ntlworld.com...
>
> "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
> news:a5r8f9$a32$1@slb3.atl.mindspring.net...
> > Ratch:
> >
> > [snip]
> > > Do you or anyone else know how to pronounce his last name, i.e.,
Bo-dee
> > > or Bo-dah? Ratch
> > [snip]
> >
> > I don't know how Hendrik pronounced it himself, and I have never met
anyone
> > with that surname to ask them. H. W. Bode was an Afrikaner from South
> > Africa who immigrated to the USA. So it is probably a Dutch-like name.
I
> > am sure that he must have spoken with an accent.
> >
> > That said... in my personal experience, universally everyone that I
have
> > heard pronouncing his name, have pronounced it as "bow dee".
> >
>
> Trust you bloody yanks to assume that your way is way it is. I never heard
it as
> bow-dee until I went to the states. Its said "bode", with one syllable.
It's
> universally known in the civilised world as bode. When the U.S. becomes
> civilised, I'll let you know, but don't hold your breath:-)

Bode pronounced boadie, is certainly the English way of pronouncing it.
As in "Ode to Joy" . But H. Bode was probably of Dutch extraction, so it is
probable that his name would be pronounced in a German like fashion as
Bo-dah. I am not saying that you are certainly wrong, but it is a good
possibility that you and the civilized world are not right. A name is
tricky, so only those acquainted with him or know someone that was can be
certain. Ratch

>
> Kevin Aylward , Warden of the Queen's Ale
> kevin@anasoft.co.uk
> http://www.anasoft.co.uk

> SuperSpice, a very affordable Mixed-Mode
> Windows Simulator with Schematic Capture,
> Waveform Display, FFT's and Filter Design.
>
>

4254. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:20:35 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a5rj7k$s7k$1@slb6.atl.mindspring.net>
Source record: 147591
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Kevin:

[snip]
> Trust you bloody yanks to assume that your way is way it is. I never heard
it as
> bow-dee until I went to the states. Its said "bode", with one syllable.
It's
> universally known in the civilised world as bode. When the U.S. becomes
> civilised, I'll let you know, but don't hold your breath:-)
> Kevin Aylward , Warden of the Kings Ale
[snip]

Heh, heh... as Bart Simpson would say... cool your jets man!

Actually, although I am a US citizen, by descent I am a "colonial boy", born and educated in Canada, educated in the ways of the British Empire, I learned to spell the British way, and to speak the American way. I find that MS Word's spell checker keeps my roots unoticed in my adopted land.

Even though I am a US citizen, I have always lived in the South. In particular: Florida, Georgia, Alabama, North Carolina, and I consider myself to be a Southerner not a "Yank". I resent being called a "Yank", since we Southerner's don't have no truck with "damm Yankees".

Since you are clearly closer to the "mother tongue" than I, I will certainly defer to your clearly superior command of English and recommended pronunciation of Bode. Of course as an imigre from South Africa to the USA, H. W. Bode's native tongue would most likely have been Afrikaans and not English, and so you will excuse me if I remain skeptical of your suggested pronunciation.

BTW... we "Yanks" are not the only ones that assume that our way is the only way... here's a little anecdote from my personal travels in Europe and the British Isles.

One fine foggy morning, as I was driving onto a ferry to re-cross the channel from Britain to France, in a left had drive rental car, which I had rented in Madrid Spain, I found myself directly behind a right hand drive British bus clearly heading for the Continent where no one is a native English speaker. On the rear of that bus was a sign, *only* in English that read, "Caution, right hand drive bus."

What??? Leave it to the British to assume that all others will understand English!

Y'all enjoy the rest of the day now, heah,

--Peter K1PO

4255. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:21:23 UTC
From: Jim Thompson <Jim-T@analog_innovations.com.invalid>
Message-ID: <osj28usnkv62ibq69j7buuap8rt32srcdl@4ax.com>
Source record: 147592
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Sat, 2 Mar 2002 21:46:09 -0000,
"Kevin Aylward" <kevin@anasoft.co.uk>,
In Newsgroup: sci.electronics.design,
Article: <KKbg8.82347$Ah1.10908753@news2-win.server.ntlworld.com>,
Entitled: "Re: HELP needed in understanding Bode Plots",
Wrote the following:

|
|"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
|news:a5r8f9$a32$1@slb3.atl.mindspring.net...
[snip]
|>
|> That said... in my personal experience, universally everyone that I have
|> heard pronouncing his name, have pronounced it as "bow dee".
|>
|
|Trust you bloody yanks to assume that your way is way it is. I never heard it as
|bow-dee until I went to the states. Its said "bode", with one syllable. It's
|universally known in the civilised world as bode. When the U.S. becomes
|civilised, I'll let you know, but don't hold your breath:-)
|
|Kevin Aylward , Warden of the Kings Ale

From my experiences "over there", my guess is it should be pronounced
" Bow' duh " (accent of first syllable).

And I certainly don't know what Kevin would know about civility ;-)

...Jim Thompson
--
(If replying by E-mail please observe obscure method of anti-spam.)

James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
Jim-T@analog_innovations.com Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

For proper E-mail replies SWAP "-" and "_", and remove the obvious.

"Things turn out best for those who make the best of how things turn out."

4256. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:30:13 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C815275.904D132E@IEEE.org>
Source record: 147595

Tdonaly wrote:
> No, dipole just says there are two poles. It
> doesn't say a thing about being equal, nor
> does it say anything at all about feedpoint
> or if it's fed at all. Moreover, in your original
> post, you didn't even specify that your
> dipole was an antenna. (I assumed it was.)
> However, since you have no less an authority
> than Peter Brackett agreeing with you I
> suppose I should too. However, I won't.
> Enlighten me Cecil; is an off-center-fed
> dipole not a dipole? If it's not, then you have
> a point.

According to the IEEE, when one says, "dipole antenna", with no additional qualifiers, one is understood to be referring to a center-fed one half wavelength resonant thin wire dipole antenna. For any other kind of dipole, a qualifier must be given. Thus, an off-center-fed dipole antenna is not the same thing as a "dipole antenna". I wasn't 100% correct myself.
--
cheers, CAM http://www.qsl.net/w5dxp

4257. SAVE YOUR TUBES.....

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:34:01 UTC
From: NI4L <ni4l@charter.net>
Message-ID: <3C815359.564BEA9E@charter.net>
Source record: 147594

SSB PULSER....
Works with all amps and Tube
type radios....Tune your gear up without fear anymore.
Easy to install in any mic
or radio.. Uses 9 volt power source.Hooks to audio hot and ground.
Tune your gear to full
output using this SSB pulser. Small enough to fit in the base of a
microphone.
This is NOT A CW PULSER
which key's and unkey's in the CW mode . This works in SSB MODE.
Key your mic push the
moumentary switch to activate the pulser and Tune Away.
Let me give you an
example.....
Tuning a Dentron Clipperton
L amp. with a Icom 751 A radio, Pulser installed in a Ten_tec 705 mic.
set radio to full output on
desired frequency SSB MODE into a resonate antenna of course.....or
dummy load
Set amp to proper band
settings
Key mic and push Pulser
button..... watch watt meter it will show aprox 100 to 200 watts out
when tuned to peak output
using Pulser....Remember don't key too long 10-15 seconds
Then check output using
voice.... It will be full Output 1200 watts
See How easy that was....
The amp loved it and now your ready to talk at Full output.
The same tuning is used to
tune a tube type rig also.
35.00 +2.00 shipping

--

NI4L CUSTOM RESONANT DIPOLE
LEGAL LIMIT ++ CUSTOM MADE CENTER FED DIPOLE
Made with the same components used by our military forces today
Custom made to YOUR FREQUENCY of operation
Let me take the hassle out of making a RESONANT DIPOLE for you.
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4258. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:40:57 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8154F9.B2FC5B04@IEEE.org>
Source record: 147596

'Doc wrote:
>
> Cecil,
> Sure, it applies to dipoles, folded or un-folded, drooping,
> inverted, vertical, horizontal, diagonal, even laying on the
> ground. Especially if you're using coax for a feed line. The
> same for if you're using ladder-line, it just doesn't matter as
> much...
> 'Doc

The point is that it doesn't matter at all with open-wire fed dipoles. The open-wire line, with its 600 ohm characteristic impedance cannot tell the difference between a 1/2 wavelength resonant dipole with a 60+j0 ohm feedpoint impedance and a one wavelength anti-resonant dipole with a 6000+j0 ohm feedpoint impedance. The SWR on the open-wire line is identical in those two cases. That's the point that I am continuing to try to make.

For a 60 ohm antenna the SWR will be 600/60 = 10:1
For a 6000 ohm antenna the SWR will be 6000/600 = 10:1

One cannot tell those two antennas apart at the transmitter end if one cannot see the antenna and doesn't know the length of the feedline. If one cannot tell the difference then it is an old wives' tale that a one wavelength dipole is a problem. With open-wire as the feedline, there is absolutely no reason to worry about avoiding a one wavelength dipole.
--
cheers, CAM http://www.qsl.net/w5dxp

4259. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:42:36 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C81555C.1AAB80AD@IEEE.org>
Source record: 147598

Crazy George wrote:
> Hehehe. I just finally found out a few weeks ago who actually wrote
> Scratchi. And, I worked with the guy for a couple of years in the 60s.
> IPOIO was one of my favorites. Wish CQ would occasionally republish some of
> the timeless ones.

Nowadays, it would be extremely politically incorrect.
--
cheers, CAM http://www.qsl.net/w5dxp

4260. Re: WANTED: how to modify AA battery holder for handheld to accept 9V batteries

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:43:18 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <4Acg8.26397$tA.4402404@news20.bellglobal.com>
Source record: 147597
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"Jason Hsu"
> ...Yaesu FT-50R
> accomodate a 9V battery?

How fast can you talk ?

4261. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:48:28 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <VEcg8.26409$tA.4406188@news20.bellglobal.com>
Source record: 147599

"Richard Harrison"
> Antenna polarization is the direction of the voiltage (E field) vector.
> If an aircraft`s inclination reduces the voltage vector by
> 1/sq.rt.(2), (0.707), the resulting current is also reduced by 0.707x.
> Thus the power is reduced by 0.707 squared, or 0.5.
> So, the db loss is 3.

Damn you're good. It actually makes sense since (at 45 degrees) the other half of the power (the missing half) should be showing up on the horizontal plane. Symmetry and all that. Thanks for correcting me.

4262. Indoor antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 22:52:46 UTC
From: signots@aol.comnospam
Message-ID: <20020302175246.29925.00001108@mb-fa.aol.com>
Source record: 147600

I don't want an antenna on my roof and my attic trusses prevent me from putting it up there (and aiming it at Chicago) so I am left with a set top antenna. Could/would someone recommend something good? I have a RS set now that is great at 9 and up but is very weak on 2, 5 and 7. Any help would be appreciated?
Steve Ignots

4263. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-02 23:12:00 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C815BF3.22E2@earthlink.net>
Source record: 147601
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Ratch wrote:
...
> Bode pronounced boadie, is certainly the English way of pronouncing it.
> As in "Ode to Joy" . But H. Bode was probably of Dutch extraction, so it is

Odie to joy?

> probable that his name would be pronounced in a German like fashion as
> Bo-dah. I am not saying that you are certainly wrong, but it is a good
> possibility that you and the civilized world are not right. A name is
> tricky, so only those acquainted with him or know someone that was can be
> certain. Ratch
>
In the '60s there was an artist, Vaughn Bode (RIP), who drew underground
comics, very popular amongst the stoners. But nobody knew how to
pronounce
his name either, and when he signed his art, he put a little accent mark
over the e. And none of the websites dedicated to him seem to have any
indication of how it's supposed to be pronounced. I'm a iggorunt
Murrican, but I can go with "rhymes with abode, code, lode, mode, node,
rode" etc.
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4264. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 00:02:45 UTC
From: Ratch <watch@mediaone.net>
Message-ID: <FKdg8.10749$Or3.1208168@typhoon.mn.ipsvc.net>
Source record: 147602
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Rich Grise" <richgrise@earthlink.net> wrote in message
news:3C815BF3.22E2@earthlink.net...
> Ratch wrote:
> ...
> > Bode pronounced boadie, is certainly the English way of pronouncing
it.
> > As in "Ode to Joy" . But H. Bode was probably of Dutch extraction, so
it is
>
> Odie to joy?
>
> > probable that his name would be pronounced in a German like fashion as
> > Bo-dah. I am not saying that you are certainly wrong, but it is a good
> > possibility that you and the civilized world are not right. A name is
> > tricky, so only those acquainted with him or know someone that was can
be
> > certain. Ratch
> >
> In the '60s there was an artist, Vaughn Bode (RIP), who drew underground
> comics, very popular amongst the stoners. But nobody knew how to
> pronounce
> his name either, and when he signed his art, he put a little accent mark
> over the e. And none of the websites dedicated to him seem to have any
> indication of how it's supposed to be pronounced. I'm a iggorunt
> Murrican, but I can go with "rhymes with abode, code, lode, mode, node,
> rode" etc.

Cool! But what jives with you may not be its correct pronounciation.
Ratch

> --
> Cheers!
> Rich
>
> "We have met the enemy, and he is us!"
> - Pogo Possum, ca. 1950's

4265. Re: 5BTV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 00:29:16 UTC
From: Mark Tetrault <tetrault@mv.mv.com>
Message-ID: <uhr28u0nqj02v7ev5u29alfv12v530h5so@4ax.com>
Source record: 147603

"w9gb" <gregory.beat@attbi.com> wrote:

>Unfortunately, New Tronics does not yet have these on their web site !
>
>http://www.new-tronics.com/main/html/base_hf_5_band.html
>
>
I know, that's why I posted here.
Still looking......

Mark
>"Mark Tetrault" <tetrault@mv.mv.com> wrote in message
>news:l7kv7u4plsimpuhbdn1rmk701duf9k60kg@4ax.com...
>> Does anyone have the assembly instructions for the Hustler 5BTV they
>> can either scan and email attach or photocopy and mail to me?
>>
>> I'll pay the postage if needed.
>>
>> mark
>

4266. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 00:48:45 UTC
From: k1bqt@aol.com
Message-ID: <20020302194845.07143.00001431@mb-mc.aol.com>
Source record: 147604

>. So, the db loss is 3.<

Phew...thanks Richard...I was worried for a minute!

73

Rick K1BQT

4267. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 00:52:04 UTC
From: "Sir Charles W. Shults III" <aichip@cfl.rr.com>
Message-ID: <Useg8.27062$TV4.3758136@typhoon.tampabay.rr.com>
Source record: 147605
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

It's exactly the same case as Bob Moog of synthesizer fame- people constantly mispronounce his name as if it starts with a "cow noise" - MOOO! But that is wrong, it is pronounced "moag" with a long O. And my name is constantly spelled incorrectly, even as I am spelling it out letter for letter to someone who is writing it down. They must have some sort of genetic program where the hand darts out and inserts "c" and "z" here and there.
A sure way to earn a black mark with a man is to constantly wreck his name.

Cheers!

Chip Shults
My robotics, space and CGI web page - http://home.cfl.rr.com/aichip

4268. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 01:13:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C8178B4.17CC9A51@eznec.com>
Source record: 147606

Yep.

On my first day of college electromagnetics class, I asked the professor (Carl T.A. Johnk) what an electromagnetic field was, that being a question I'd never gotten a satisfactory answer to during my military technical school training. He said that it's a mathematical construct we use to deal with certain phenomena that we can measure. And I see that in the second paragraph of his book _Engineering Electromagnetic Fields and Waves_, he says "A field is taken to mean a mathematical function of space and time."

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> There is only one field.
>
> It is mathematically convenient for analysis to break it down into 2 or more
> fictional components. It's also useful as a source of something to argue
> about when there's nothing else better to do.
>
> Come to think of it - the whole damn thing is just a mathematical fiction.
> --
> Reg

4269. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 01:30:52 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C817C82.B05@earthlink.net>
Source record: 147607
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Sir Charles W. Shults III wrote:
>
> It's exactly the same case as Bob Moog of synthesizer fame- people
> constantly mispronounce his name as if it starts with a "cow noise" - MOOO!
> But that is wrong, it is pronounced "moag" with a long O. And my name is
> constantly spelled incorrectly, even as I am spelling it out letter for
> letter to someone who is writing it down. They must have some sort of
> genetic program where the hand darts out and inserts "c" and "z" here and
> there.
> A sure way to earn a black mark with a man is to constantly wreck his
> name.
>
> Cheers!
>
> Chip Shults
> My robotics, space and CGI web page - http://home.cfl.rr.com/aichip

That's because if you pronounce it aloud, it probably sounds like "Sgt.
Schultz" from Hogan's Heroes. Care to share the etymology? Mine is
pronounced "Gryce," and is probably derived from the German "Greis"
or "Greiss." My Dad (RIP) used to say, "Grise, rhymes with nice."
Of course, on an international NG, that doesn't work, because of Nice,
France. Maybe I should say, "Rhymes with "Gneiss." :-)
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4270. Re: HF antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 01:50:20 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <a5rvjj$9pv6j$1@ID-105647.news.dfncis.de>
Source record: 147608

Probably the most popular is the MFJ259 from MFJ Enterprises (www.mfjenterprises.com). It covers HF and 2 meters. I use the heck out of mine. It is a bit of a battery hog, so I keep my 12v wall wart handy and use it when I can.

They have a new one, called the MFJ 269, it adds 440 MHz to the unit. Well worth the few extra bucks, even if you only wind up using it once.

I picked up mine used, you can probably find one at a hamfest for a decent price.

73's,

Robert / N4IXT

"C" <cpierce@usit.net> wrote in message news:cpierce-98B7C2.16135002032002@news.earthlink.net...
> Looking at buying HF antenna analyzer .
>
> What is good and what is junk.
>
> C.

4271. Re: Thanks

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 01:58:18 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <a5s075$9q4om$1@ID-105647.news.dfncis.de>
Source record: 147609

BlankHi Ron,

Just as a follow up, can you get to your attic? I've known folks who've gotten very good results putting a simple dipole up in the attic.

Another possibility, even though you are in a "no outside antenna" area, you might consider putting a dipole just under your roof eave. You can use something like electric fence stand off insulators, and u-nail the coax to the eave and down the wall. Place it in the back where no one is likely to see it. I seriously doubt anyone would ever notice (especially in the back of the house) and if they did, you can claim it's for hanging Christmas lights on. (Get some wire same color as the house, makes it even less likely to be seen).

ARRL sells a book on "stealth" operating, that I'm told is quite good. I had the earlier version when I lived in an apartment, but now that I'm out in the country I've been growing my own antenna farm.

73's

Robert / N4IXT

"R." <Figboot@attbi.com> wrote in message
news:xgbg8.3904$e07.914@sccrnsc01...
>Thank you. Found several acceptable possibilities. Will try one of them as soon as I can. Who knows, maybe W7QU will be back up and running this spring/summer.

--

Ron

This account belongs to a resident of the State of Washington. As such, it is illegal to send certain unsolicited email to this account. See www.wa.gov/ago/junkemail for details.

This e-mail has been checked by the Norton Anti-Virus program prior to being sent.

4272. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 02:20:00 UTC
From: Bob Penoyer <rpenoyer@NOSPAMieee.org>
Message-ID: <bc138ug2htmohbb0nvlnknrbn3ru07iq2h@4ax.com>
Source record: 147610
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Sat, 2 Mar 2002 21:46:09 -0000, "Kevin Aylward"
<kevin@anasoft.co.uk> wrote:

>Trust you bloody yanks to assume that your way is way it is. I never heard it as
>bow-dee until I went to the states. Its said "bode", with one syllable. It's
>universally known in the civilised world as bode. When the U.S. becomes
>civilised, I'll let you know, but don't hold your breath:-)

Ahem! Speaking as a resident of the backwoods of Southern California,
some years ago we were contracting with another company to build an
air-to-ground communication system. The UHF signal could possibly be
blocked/attenuated by the wings, etc. of the aircraft as the aircraft
varied its attitude. A Brit from the other company (who, by way of
sound judgment, was applying to become an American citizen) talked of
how "the signal might be wooded." This drew a lot of stares from
around the table. We explained that "the signal might be shaded" might
be a better choice of words. In a display of further sound judgment,
he agreed.

4273. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 02:22:24 UTC
From: richardharrison@webtv.net
Message-ID: <9742-3C8188E0-462@storefull-118.iap.bryant.webtv.net>
Source record: 147612

Bill, N3WK wrote:
"Don`t you mean that intensity falls of as 1/r in the far field, not the near field?"

Chip was using power, not volts per meter. Volts per meter decline as 1/r in the far field, but power declines as 1/r^2. That is expressed in the famous "inverse square law". Double the distance from the source in the far field, and the signal drops by 6db, not 3db. Chip got it right.

Arnold B. Bailey has a graph of "Free-space received power showing near and far fields" on page 211 of "TV and Other Receiving Antennas".

The slope of the decline in received power is increasing as the reactive fields play out, from 0.1 wavelength out to 3 wavelengths. From 3 wavelengths out to 10,000 wavelengths where the graph ends, double the distance gives a 6db increase in signal loss on the graph.

Point is, loss per unit distance falls less rapidly in the near zone than in the far zone, as Chip says, because the total field is being supported in the near zone by the reactive field.

Bailey says the radiation field which survives into the far field decays as the square of the distance. The reactive fields are strong in the near zone within a few wavelengths of the source. These are soon gone for practical purposes.

Best regards, Richard Harrison, KB5WZI

4274. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 02:35:19 UTC
From: "Sir Charles W. Shults III" <aichip@cfl.rr.com>
Message-ID: <HZfg8.13659$j93.4025891@typhoon.tampabay.rr.com>
Source record: 147611
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Sure, my grandfather got a land grant long ago but they mis-spelled his
name on it. It was originally Schultz, but the grant had "Shults" on it.
It was far less trouble to change the spelling of his name than it was to
change the name on the land grant. And so it goes.

Cheers!

Chip Shults
My robotics, space and CGI web page - http://home.cfl.rr.com/aichip

4275. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 03:15:42 UTC
From: richardharrison@webtv.net
Message-ID: <9742-3C81955E-478@storefull-118.iap.bryant.webtv.net>
Source record: 147613

J. Harvey wrote:
"It actually makes sense (at 45 degrees) the other half of the power (the missing half) should be showing up on the horizontal plane."

Old Pythagoras, 569 bc - 475 bc, figured out that the square on the hypotenuse of a right angled triangle is equal to the sum of the squares on the other two legs.

A hypotenuse on an angle of 45 degrees with the other two sides (legs) of a right angled triangle has a ratio of 1.414, the square root of two, with the other sides, valued 1 and 1.

This relation could also be expressed as a hypotenuese value of 1 with horizontal and vertical components (legs) of 0.707 and 0.707. This is accomplished by simple scaling (multiplying all sides by 0.707) and setting the attitude of the triangle.

That`s how we figure we get 0.707 volts when we rotate an antenna by 45 degrees to the polarization existing in a field of 1-volt.

Best regards, Richard Harrison, KB5WZI

4276. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 03:48:09 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C819CB2.71BC@earthlink.net>
Source record: 147614
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Fractured Fairy Tales: The story of Sir Galahad. (done by the folks that
did "Rocky and Bullwinkle")

Mr. and Mrs. Galahad had a son, and went to register him with the
county clerk, or whatever. The clerk asked, "Have you selected a
name?" and Daddy Galahad said, "Yes, SIR!" Thus spake Ponsonby
Britt. ;-)

Sir Charles W. Shults III wrote:
>
> Sure, my grandfather got a land grant long ago but they mis-spelled his
> name on it. It was originally Schultz, but the grant had "Shults" on it.
> It was far less trouble to change the spelling of his name than it was to
> change the name on the land grant. And so it goes.
>
> Cheers!
>
> Chip Shults
> My robotics, space and CGI web page - http://home.cfl.rr.com/aichip

--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4277. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 03:56:41 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C819EB2.5077@earthlink.net>
Source record: 147615
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Bob Penoyer wrote:
>
> On Sat, 2 Mar 2002 21:46:09 -0000, "Kevin Aylward"
> <kevin@anasoft.co.uk> wrote:
>
> >Trust you bloody yanks to assume that your way is way it is. I never heard it as
> >bow-dee until I went to the states. Its said "bode", with one syllable. It's
> >universally known in the civilised world as bode. When the U.S. becomes
> >civilised, I'll let you know, but don't hold your breath:-)
>
> Ahem! Speaking as a resident of the backwoods of Southern California,
> some years ago we were contracting with another company to build an
> air-to-ground communication system. The UHF signal could possibly be
> blocked/attenuated by the wings, etc. of the aircraft as the aircraft
> varied its attitude. A Brit from the other company (who, by way of
> sound judgment, was applying to become an American citizen) talked of
> how "the signal might be wooded." This drew a lot of stares from
> around the table. We explained that "the signal might be shaded" might
> be a better choice of words. In a display of further sound judgment,
> he agreed.

Is it urban legend time? A group of American reporters, back in the
days of the communist Soviet Union, was visiting a factory. The soviets,
of course, were singing the praises of the communist system, while
showing
off the great productivity of the factory workers. From each according
to his ability to each according to his needs, and all that. One
reporter
asked, "Well, what would happen if some guy just decided to stop
working and loaf, while collecting his benefits?" Through the
interpreter,
the answer was, "Then he would be shot." There was such shock and
consternation amongst the Americans, that some discussion ensued.
Finally,
the interpreter said, "Oh, he would be fired."
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4278. Re: Indoor antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 04:06:36 UTC
From: richardharrison@webtv.net
Message-ID: <22811-3C81A14C-75@storefull-112.iap.bryant.webtv.net>
Source record: 147617

Signots wrote:
"I have a RS set now that is great at 9 and up but is very weak on 2, 5, and 7."

Assuming an outside antenna would receive low-frequency channels well, and that the TV set is OK, there may be two problems with Signots` low channel reception.

Channels 7 and 9 are in the range of 1,7 to 1.5 meters in wavelength. Signots` dividing line between good and bad reception falls between these channels.

The signal must penetrate Signots` structure to reach his antenna. That is probably the first problem. The structure is a sieve that lets in the shorter wavelength signals but blocks the lower channels.

The second problem may be an indoor antenna which favors the higher channels.

The first thing to try is placement of his antenna tn a window which faces Chicago.

Best regards, Richard Harrison, KB5WZI

4279. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 04:14:06 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c81a7c6_4@news1.prserv.net>
Source record: 147618

First of all, Scratchi was published for many years under Cowan before Wayne Green became editor of CQ.

Second, while I remember a number of plays on racism, there were a number of technical faux pas described which were funny without race reference. The IPOIO was one of them, and the resistance hook-up wire in the home built receiver was another. So was the time he turned out to be resonant on a harmonic which caused TVI and they wrapped him in wire and bypassed him to ground. What's politically incorrect about that? Maybe he could be a red neck w4 instead of Scratchi, if you're really that sensitive? Or better yet an Iraqi spy or a space alien? As far as I know, those last two are still fair targets.

--
Crazy George
Remove NO and SPAM from return address
CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C81555C.1AAB80AD@IEEE.org...
> Crazy George wrote:
> > Hehehe. I just finally found out a few weeks ago who actually wrote
> > Scratchi. And, I worked with the guy for a couple of years in the 60s.
> > IPOIO was one of my favorites. Wish CQ would occasionally republish
some of
> > the timeless ones.
>
> Nowadays, it would be extremely politically incorrect.
> --
> cheers, CAM http://www.qsl.net/w5dxp

4280. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 04:14:49 UTC
From: Don Kelly <dhky@peeshaw.ca>
Message-ID: <Zqhg8.196086$A44.11813355@news2.calgary.shaw.ca>
Source record: 147616
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I always heard Bo-deh but I am Canadian, eh?

--
Don Kelly
dhky@peeshaw.ca
remove the urine to answer
"Ratch" <watch@mediaone.net> wrote in message
news:wJ8g8.10723$Or3.1191669@typhoon.mn.ipsvc.net...
>
> "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
> news:a5r22rpkj1@slb1.atl.mindspring.net...
> > Thread:
> >
> > > I have on my bookshelf above my desk a few "classics" to which I
refer,
> > often daily. The pertinent one here is:
> >
> > Hendrik W. Bode, "Network Analysi and Feedback Amplifier Design", Third
> > Printing, p. 551, D. Van Nostrand Company, 1945.
> >
> > On the frontpiece it reads, "by Hendrik W. Bode, Ph.D., Research
> > Mathematician, Bell Telephone Laboratories, Inc.
> >
> > Somehow I doubt that the "title" Mathematician was appropriate for Bode,
> for
> > IMHO... Bode was an *Engineer* of the highest calling.
> >
> > Quoting from the preface, written by Bode himself,
> >
> > "This book was originally written as an informal mimeographed text for
one
> > of the so-called "Out-of-Hour" courses at Bell Telephone Laboratories.
> The
> > bulk of the material was prepared in 1938 and 1939 and was given in
course
> > form to my colleagues there in the winters of 1939-40 and 1940-41.
During
> > the war, however, the text has also been supplied as a reference work to
a
> > considerable number of other laboratories engaged in war research. The
> > demand for the text on this basis was unexpectedly heavy and quickly
> > exhausted the original supply of mimeographed copies. It has
consequently

> > been decided to make the text more widely available through regular
> channels
> > of publication."
> >
> > H. W. Bode was a South African immigre to the USA. He passed away at a
> very
> > young age. A major contributor to the science and technology of modern
> > Electrical Engineering. If one were to make a list of the top 10
> Electrical
> > Engineers of all time, Bode would be on it!
> >
> > Oh... what I would give to have been able to sit in on those
> "Out-of-Hours"
> > classes in the winter of 39-40 or 40-41!
> >
> > --Peter K1PO
> >
> Do you or anyone else know how to pronounce his last name, i.e.,
Bo-dee
> or Bo-dah? Ratch
>
>

4281. Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 04:23:30 UTC
From: me <inspector3985@yahoo.com>
Message-ID: <ar838u4kvgpkl5d8rthbullkc8k6avqkv2@4ax.com>
Source record: 147469

This may be of interest to people setting up antennas using a compass. Magnetic North and True North are not always the same. If you were calibrating a beam heading using magnetic north as a reference on your readout you could be in error. The declinatin or correction factor can be significant. A case in point is my location in Nova Scotia. True North and Magnetic North are different by 20 degrees! If you wish to know the declination for your particular part of the world a good place to visit is http://www.geolab.nrcan.gc.ca/geomag/e_cgrf.html
Hope this is of interest to antenna buffs. Thanks for reading.
Scott VE1AFN.>

4282. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 04:24:57 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <pAhg8.30085$q47.4518622@news20.bellglobal.com>
Source record: 147470

"Richard Harrison"
> Old Pythagoras, 569 bc - 475 bc, figured out that...
> <snipped 2400-odd years>
> ...we get 0.707 volts when we rotate an antenna by 45
> degrees to the polarization existing in a field of 1 volt.

I know that you can get extra points for 'showing your work', but that sure
is the long way round ! Of course, you got the right answer and I didn't.
:-)

4283. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 04:25:56 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C81A5D4.8180A258@IEEE.org>
Source record: 147471

Crazy George wrote:
> Maybe he could be a red
> neck w4 instead of Scratchi, if you're really that sensitive? Or better yet
> an Iraqi spy or a space alien? As far as I know, those last two are still
> fair targets.

It's not me who is sensitive. Make him a Texas Aggie. They are still
fair game.
--
cheers, CAM http://www.qsl.net/w5dxp

4284. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 04:42:24 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <ku938usq7j6n3roe5u338gnja1ioq5ml6f@4ax.com>
Source record: 147472

On Tue, 26 Feb 2002 20:47:24 -0500, "VE3TMT" <ve3tmt@rac.ca> wrote:

>
>> At this QTH - 7 acres, fields, woods, tower, no CC&Rs, no neighbors,
>> no XYL, no problems.
>>
>> Rick K2XT
>
>I we could all be so lucky..
>
>At this QTH - 1 backyard, two kids, 1 XYL. a cat and one hidden HF antenna!!

...But who says that to have a good experience in ham radio you must
have a large beam antenna for HF on a tall tower with slopers in
various directions?

The hobby is full of other things you can do, from participating in
club station efforts, to home brewing, to portable or mobile
operation, training other hams, and so forth.

CC&Rs are serious impediments, but they're not the end of this hobby.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

4285. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 04:46:48 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C81AA9D.9489481A@icok.net>
Source record: 147473

If all your worried about is SWR, your right. But,
that isn't the only reason that the second harmonic of
an antenna doesn't 'work' too well.
'Doc

4286. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 04:50:07 UTC
From: richardharrison@webtv.net
Message-ID: <22809-3C81AB7F-542@storefull-112.iap.bryant.webtv.net>
Source record: 147474

Reg wrote:
"---the whole damn thing is just a mathematical fiction."

Well, real force is exerted between the rotor and stator of a motor in doing real work. There is no electrical conduction involved between the motor parts. The magnetic force field is the link between these motor parts.

You are probably reading from a CRT. The light on the screen is produced by electrons striking the screen with sufficient force. That electron acceleration is produced by another invisible linkage, the electrostatic force field within the CRT.

Likewise, lightning produces real amps of electricity flowing through the atmosphere, but kilowatts of real electrical power can flow through the atmosphere with no volts or amps traveling in the atmosphere at all. It is only the fields produced by those volts and amps which link the sender and the receiver.

Best regards, Richard Harrison, KB5WZI

4287. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 05:50:34 UTC
From: n7ws@yahoo.com
Message-ID: <3c81b7d0.136684786@news.triconet.org>
Source record: 147475

On Sat, 02 Mar 2002 12:12:03 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

|Wes Stewart wrote:
|> Come on, Cecil. You keep saying this but there are three hams with the last
|> name Sturba. None are "Kurt" and none are Advanced licensees. The Noble thing
|> to do would be admit your mistake.
|
|Wes, attend a Worldradio field day event and look for 80ish year old hams
|with original W6 calls working on antennas. You will narrow the field
|considerably.

Not having been nor intending to go to a Worldradio anything, I can't use that tool. The only W6 that I know that might fit the bill is W6UYH. I lost track of him at Hughes a long time ago and QRZ.COM reports him in San Manuel, AZ. But I doubt it is he as his writing was accurate and insightful.

As to "real" Sterbas:

http://www.qrz.com/callsign?callsign=NAME&search=sterba

Take a look and tell me which of these folks fit the bill. I think we can eliminate (figuratively speaking) the woman right away.

And it you want to spell it "Sturba" then LU6EEV must leap to mind.

Regardless of who "Kurt" really is, let's hope the unwary don't take anything he writes seriously.

4288. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 06:53:38 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C81C871.9869A8E8@att.net>
Source record: 147476

Scratchi was published in "Radio" magazine back in the mid-30's . . .

And IPOIO - the "Innate Perversity Of Inanimate Objects!"

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Crazy George wrote:
>
> First of all, Scratchi was published for many years under Cowan before Wayne
> Green became editor of CQ.
>
> Second, while I remember a number of plays on racism, there were a number of
> technical faux pas described which were funny without race reference. The
> IPOIO was one of them, and the resistance hook-up wire in the home built
> receiver was another. So was the time he turned out to be resonant on a
> harmonic which caused TVI and they wrapped him in wire and bypassed him to
> ground. What's politically incorrect about that? Maybe he could be a red
> neck w4 instead of Scratchi, if you're really that sensitive? Or better yet
> an Iraqi spy or a space alien? As far as I know, those last two are still
> fair targets.

4289. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 06:59:35 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <A05E63CD363B0E89.4582B81C93CEC198.888CE11D75E20A8B@lp.airnews.net>
Source record: 147477
Cross-posted to: rec.radio.amateur.antenna,rec.ham-radio,alt.ham-radio

On Wed, 27 Feb 2002 01:35:47 GMT, ricknj10@hotmail.com (Rick) wrote:

>And the best part - while you are out in your field working on your
>antennas, and you have to take a leak, you don't have to go all the
>way back to the house.

Rick, the tower if for antennas, not for peeing-for-distance contests.
:)

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

4290. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 07:31:02 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <CvYl9BA2Edg8EwaI@jmwa.demon.co.uk>
Source record: 147478
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Rich Grise
<richgrise@earthlink.net> wrote (in <3C815BF3.22E2@earthlink.net>) about
'HELP needed in understanding Bode Plots', on Sat, 2 Mar 2002:
>I'm a iggorunt
>Murrican, but I can go with "rhymes with abode, code, lode, mode, node,
>rode" etc.

Adobe? (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4291. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 07:34:57 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <PfNmhEAhIdg8EwY9@jmwa.demon.co.uk>
Source record: 147479
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Rich Grise
<richgrise@earthlink.net> wrote (in <3C817C82.B05@earthlink.net>) about
'HELP needed in understanding Bode Plots', on Sun, 3 Mar 2002:
>Maybe I should say, "Rhymes with "Gneiss." :-)

In some languages, the 'G' is pronounced. Close, but no cigar. (;-)

Try 'rice'?
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4292. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 10:37:27 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a5sud7$h6v$1@nntp9.atl.mindspring.net>
Source record: 147480

George et al:

Hey! You guys are much older than I... heh, heh... My recollection of Scratchi only goes back to the Wayne Green era of CQ.

Thanks for reminding me of the meaning of IPOIO.

Ahhh... to experience the "innate perversity of inanimate objects", how well I remember the ecstasy of that first experience myself.

IMHO, except for experiencing the innate perversity of a wife "IPOAW", there is nothing better for the growth of character and of the soul. With apologies to my dear Mary of course!

I believe that, the then Poet Laureate of Great Britain", Rudyard Kipling first coined that eloquent phrase around the turn of the last century, when he wisely specified that experience as one of the mandatory requirements for qualification as an Engineer in his famous oath "The Calling of an Engineer".

As to the current status of political correctness, well I was almost lost in the wilderness of looking for buts for humor, since our "liberal" consort had almost run us out of grist for that mill, but now, thanks to the evil stupidity of bin Laden and his ilk, we have Al Quaeda and Taliban to make fun of.

--Peter K1PO

"George, W5YR" <w5yr@att.net> wrote in message
news:3C81C871.9869A8E8@att.net...
> Scratchi was published in "Radio" magazine back in the mid-30's . . .
>
> And IPOIO - the "Innate Perversity Of Inanimate Objects!"
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> 72/73/oo, George W5YR - the Yellow Rose of Texas
> Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
> Amateur Radio W5YR, in the 56th year and it just keeps getting better!
> QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
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> Crazy George wrote:
> >
> > First of all, Scratchi was published for many years under Cowan before
Wayne
> > Green became editor of CQ.

> >
> > Second, while I remember a number of plays on racism, there were a
number of
> > technical faux pas described which were funny without race reference.
The
> > IPOIO was one of them, and the resistance hook-up wire in the home built
> > receiver was another. So was the time he turned out to be resonant on a
> > harmonic which caused TVI and they wrapped him in wire and bypassed him
to
> > ground. What's politically incorrect about that? Maybe he could be a
red
> > neck w4 instead of Scratchi, if you're really that sensitive? Or better
yet
> > an Iraqi spy or a space alien? As far as I know, those last two are
still
> > fair targets.

4293. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 11:35:49 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5t3jl$a0u4b$1@ID-124126.news.dfncis.de>
Source record: 147482
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

What's the matter with just "Bode" ?

4294. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 11:54:26 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <3C820E57.46083EDE@austininstruments.com>
Source record: 147481
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

John Woodgate wrote:
>
> I read in sci.electronics.design that Rich Grise
> <richgrise@earthlink.net> wrote (in <3C815BF3.22E2@earthlink.net>) about
> 'HELP needed in understanding Bode Plots', on Sat, 2 Mar 2002:
> >I'm a iggorunt
> >Murrican, but I can go with "rhymes with abode, code, lode, mode, node,
> >rode" etc.
>
> Adobe? (;-)

Adobe the opposite of a buck.

John Fields
Professional circuit designer

4295. Re: how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 12:28:56 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C8215C8.82A2F7E9@bellatlantic.net>
Source record: 147483

Dang! That's a great idea.. I'll have to pick up on at a yard sale..

'73 KI4Z

Uncle Peter wrote:

> Rick Littlefield had suggested using a lawn edger -- a cheap gizmo
> made by Black and Decker for edging between lawn and sidewalks,
> etc.
>
> Pete
>
> "Carl R. Stevenson" <wa6vse-shack@fast.net> wrote in message
> news:3c80eedb_1@news7.fast.net...
> > Another means, IF you have good, soft topsoil, is to use a flat
> > (straight-bladed) spade to cut a "slit" in the sod, then push the
> > wires down into the slits with a suitably-sized piece of wood.
> > (This method won't work for me, as there is a CONSIDERABLE
> > amount of stone in the soil at my QTH.)
> >

4296. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 12:52:59 UTC
From: MW0CDO <gw7IhiJUNK@ntlworld.com>
Message-ID: <a5t6bb$9i6qs$2@ID-117699.news.dfncis.de>
Source record: 147484

"Jerry" <jerryaa@prodigy.net> wrote in message
news:VYc48.22725$im4.1986553961@newssvr17.news.prodigy.com...
> I have had ongoing problems with swr on my HF6 and now seem to have fixed
> those by proper grounding. I get anywhere from 1.6:1 on 40 and 10 meters
and
> 1.9:1 on 15 meters. 80 meters I get a 1.9:1 on a very narrow frequency
when
> measured at the antenna.
>
> I am using 35 feet of RG8x as transmission line. measured from the
feedline
> point my swr is 1 point higher. I have tried an RG8 AU with the same
> readings.
> The HF6 directions say to use a 11'2" length of 75 ohm transmission line
> connected to any 50 ohm coax. Friends of mine say that shouldn't make
much
> difference in efficiency.
>
> What are my likely problems here? I don t want to use a tuner if I don t
> have to use one. Is that 75 ohm line going to make that much difference?
> Instructions say that line is for matching in the 10 meter band.
>

Jerry, I use an HF6vx here, and it works fine for me.

The 75 ohm co-ax section is there to transform the 100 odd ohm impedance @
20m to approx 50 ohms.

Mine has excellent match on 10, 15, 20, 30, 40 & 80m. on 12m it's approx
5-6:1 and on 17m approx 6-7:1 but I just tune into the feeder with an ATU.
In fact, I use an FT-102 radio with tube PA which is quite happy to load
into the antenna on 12 & 17.

I suggest that you check your electrical connections at the feedpoint, as
the only time I've had high SWR problems the cause was a poor connection.
Also check that there's good connectivity between the tube sections and
coils etc.. bad connections here will definitely cause problems.

As an aside, when I first installed the antenna, I had no radials at all and
the antenna worked fine on all bands except 80m, where I couldn't get the
SWR to less than 2.5:1 or so.
I added 4 40ft buried radials which completely solved the problem, SWR on
80m now 1.2:1 with bandwidth of approx 75KHz at 2:1 points.
The radials all run out in the SW,W & NW compass headings, due to the
topology of my back yard, it's not possible to provide radials in the
direction of Africa/Europe/Scandanavia but I have no problem working those

areas.

But I do have good wet ground here, and live within 500 meters of the sea shore here in South Wales. The mounting pole always has water in it, even in summer.. it goes down about 2m depth.
The antenna is located approx 5ft from a metal clad building, which is approx 20ft x 15ft and approx 7ft from a 25ft pole which hosts a 6m 5ele monobander and rotator.

I'm very pleased with the performance of the antenna, it even cracks pileups sometimes with 100-150w that the FT-102 provides. Many operators are surprised when I tell them what the antenna is.. a ground mounted vertical.

As an aside, does anyone here have the mechanical details of the 12 and 17m resonators? I'd like to make them myself, as they cost a lot of money here for a bit of aluminium tubing! Ideally, I'd like the diameter of the coil, number of turns and dimensions of the capacity strips.

Hope this helps!

Paul MW0CDO

--
Paul MW0CDO

Remove the JUNK in my address before sending!

4297. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 12:55:23 UTC
From: MW0CDO <gw7lhiJUNK@ntlworld.com>
Message-ID: <a5t6fr$9rnbn$1@ID-117699.news.dfncis.de>
Source record: 147485

"Jerry" <jerryaa@prodigy.net> wrote in message
news:VYc48.22725$im4.1986553961@newssvr17.news.prodigy.com...
> I have had ongoing problems with swr on my HF6 and now seem to have fixed
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> Instructions say that line is for matching in the 10 meter band.
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As an aside, does anyone here have the mechanical details of the 12 and 17m resonators? I'd like to make them myself, as they cost a lot of money here for a bit of aluminium tubing! Ideally, I'd like the diameter of the coil, number of turns and dimensions of the capacity strips.

Hope this helps!

Paul MW0CDO

--
Paul MW0CDO

Remove the JUNK in my address before sending!

4298. 9:1 Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 13:42:28 UTC
From: Paul Freeman <pfreeman@otw.com>
Message-ID: <u849rnimk2t873@corp.supernews.com>
Source record: 147486

Need schematic and/or web site address for 9:1 Balun construction for
running 450 ohm ladder line to 52 ohm coax. 100 watt rating OK.

Thanks,
Paul

4299. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 14:48:37 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0203030648.5b5b90f4@posting.google.com>
Source record: 147487

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<9742-3C8188E0-462@storefull-118.iap.bryant.webtv.net>...
> Bill, N3WK wrote:
> "Don`t you mean that intensity falls of as 1/r in the far field, not the
> near field?"
>
> Chip was using power, not volts per meter. Volts per meter decline as
> 1/r in the far field, but power declines as 1/r^2. That is expressed in
> the famous "inverse square law". Double the distance from the source in
> the far field, and the signal drops by 6db, not 3db. Chip got it right.

Here's what he said:
"You can look at the near field as the volume (not area) within which
the
intensity falls as 1/r (where r is distance from radiator) and the
far field
as the volume--extending out to infinity-- for which the intensity
falls as
1/r^2. All in free space, of course."

My question was with his "1/r" variation of "intensity" in the near
field.

Usually, "intensity" implies field intensity, as in field strength.
Second, he's obviously talking about radiation, not received power,
since he breaks infinite space into 2 volumes according to distance
from the radiator. But why don't we let him respond rather than
guessing what he meant?

Then, neither power density or field intensity fall off at 1/r in the
near field. Power density for an aperture oscillates in the near field
but the envelope is relatively constant. The field strength for a
short dipole consists of two quantities, one in 1/r, 1/r^2, & 1/r^3;
the other in 1/r and 1/r^2. Neither of these fall off at 1/r. Power
density for a short dipole varies according to the cross product of
these two quantities. No way this product is going to be 1/r. He got
the near-field part wrong either way.

> From 3
> wavelengths out to 10,000 wavelengths where the graph ends, double the
> distance gives a 6db increase in signal loss on the graph.

No argument.

73,
Bill N3WK

4300. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 14:55:27 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0203030655.b20f4af@posting.google.com>
Source record: 147488

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<a5ri16$9hqmg$1@ID-124126.news.dfncis.de>...
> There is only one field.
>
> It is mathematically convenient for analysis to break it down into 2 or more
> fictional components. It's also useful as a source of something to argue
> about when there's nothing else better to do.
>
> Come to think of it - the whole damn thing is just a mathematical fiction.

But aren't near-field effects measurable? Or are the numbers on the
measuring devices also fictional?

73,
Bill N3WK

4301. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 14:58:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C823A1B.27CBEC62@IEEE.org>
Source record: 147489

'Doc wrote:
> If all your worried about is SWR, your right. But,
> that isn't the only reason that the second harmonic of
> an antenna doesn't 'work' too well.

SWR is associated with the amount of power an antenna will
accept. What are the other reasons that a 6000 ohm one
wavelength dipole won't work as well as a 60 ohm one half
wavelength dipole?
--
cheers, CAM http://www.qsl.net/w5dxp

4302. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 14:59:57 UTC
From: dan <danlx@execpc.com>
Message-ID: <3c823d3c$0$35566$272ea4a1@news.execpc.com>
Source record: 147490

On Sat, 02 Mar 2002 23:42:24 -0500, Jake Brodsky <frussle@erols.com>
wrote:

>On Tue, 26 Feb 2002 20:47:24 -0500, "VE3TMT" <ve3tmt@rac.ca> wrote:
>
>>
>>> At this QTH - 7 acres, fields, woods, tower, no CC&Rs, no neighbors,
>>> no XYL, no problems.
>>>
>>> Rick K2XT
>>
>>I we could all be so lucky..
>>
>>At this QTH - 1 backyard, two kids, 1 XYL. a cat and one hidden HF antenna!!
>
>...But who says that to have a good experience in ham radio you must
>have a large beam antenna for HF on a tall tower with slopers in
>various directions?
>
>The hobby is full of other things you can do, from participating in
>club station efforts, to home brewing, to portable or mobile
>operation, training other hams, and so forth.
>
>CC&Rs are serious impediments, but they're not the end of this hobby.
>
>73,
>
>
>Jake Brodsky, AB3A mailto:frussle@erols.com
>"Beware of the massive impossible!"
Hi all,
I agree with the above post, there are a lot of things that can bring
enjoyment from the hobby other than large antenna arrays. My fellow
GMDXA member, N9XX, does just great with a very short vertical and
attic antenna. So, that said, yes, it's great to have a big array.
My question is, why move into an area that has restrictions? Is the
area a status thing? Is it a wife driven thing? Is there positively
no other option?
When I was looking for a newer home, I took the time to sit down with
my wife and make a list of "must have items". We each had our list
and discussed the combinations that would satisfy us both.
Her list,
Ranch style
Dining room

Family room
Fireplace
First floor utility room
Close to freeways access/park and ride lot

My list,
Everything on her list
Underground utilities
1/2 acre or more with trees to string wire thru
Enough room to put a tower up
Preferably on top of a hill for line of sight work
NO CCR's or ANY OTHER RADIO RELATED RESTRICTIONS

Now we had our criteria for a house and locations to search (I used a topo map). I told my lawyer (never use a real estate agent) what I wanted in terms of bid/buy offers and he wrote them up. They always included a paragraph on CCR's and restrictions. If they were enforceable in any way after the offer was accepted the offer was null and void. This was in case I missed something in my research. Oh yes, research, I did plenty of that, from asking the mailman and random people in the area how they liked living there to driving/walking the area looking for good and bad things. Next was researching schools, local government, past and any pending assessment issues and operating out of the car near the prospective site. At the closing, my lawyer instructed me to cross out any CCR's and restrictions in the document and initial them as not applicable. He instructed me it is better not to buy if these changes are not accepted. Now this was an older subdivision and I have never had a problem with any of the crossed off parts of the contract.
Now that I have said alllll of that, whew! It appears to me that if you want to pursue amateur radio with big arrays, then you need to complete your research before you buy, not after. Maybe there are areas that span 100's of miles where CCR's are the norm, I don't know personally of any, but what the heck do I know anyway.
Yes it was a lot of work to do all that for multiple sites, but it was worth every minute of my on air time during the past 19 years here!
Thanks for taking the time to read this and of course it is all only MHO.
Dan

I've rambled enough, back to the rocking chair. ZZZZZZZZZ

Remove left x for a direct reply.

4303. Re: 9:1 Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 15:04:04 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C823B64.EFAC9DA9@IEEE.org>
Source record: 147491

Paul Freeman wrote:
> Need schematic and/or web site address for 9:1 Balun construction for
> running 450 ohm ladder line to 52 ohm coax. 100 watt rating OK.

What kind of antenna or load are you using the 9:1 balun with?
If your 450 ohm ladder-line is carrying an SWR around 9:1, you
don't need a 9:1 balun. In fact, if the 450 ohm SWR is not 1:1,
you will never see 450 ohms.
--
cheers, CAM http://www.qsl.net/w5dxp

4304. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 15:44:41 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Dxrg8.616$7Y4.120383@news20.bellglobal.com>
Source record: 147492

"Richard Harrison" wrote eloquently about fields:
> Reg wrote:
> "---the whole damn thing is just a mathematical fiction."
> <snipped only for brevity - refer to original if required>

Reg is correct. You saw my posting about Richard Feynman's Nobel Prize ?

"...there is no field..."

However, electromagnetic fields are a very useful 'mathematical fiction' (at least in the far field). But, the part about the near field and its 'Intensity' being proportional to '1/radius' (I=1/r in the near field) seems problematic.

First, let's review the far field I=1/r^2 rule of thumb: The surface area of a sphere goes up as the square of the radius. That means that in the far field, where I=1/r^2, there is a constant energy at any radius (not per unit area, but summed over the entire surface area of the sphere). Obviously, the energy has to get from A to B by way of spheres (being spheres since c is constant). Therefore, the I=1/r^2 rule of thumb adheres to common sense conservation of energy. Therefore, the I=1/r^2 far field rule of thumb is okay.

Now the near field: According to the I=1/r rule of thumb (in the near field), the energy contained in the various imaginary spheres is not constant. As we approach r=0, the energy in each sphere is dropping towards zero. This is because the surface area of the sphere is dropping towards zero much faster (SA=1/r^2) than the intensity (I=1/r) as we approach r=0.

Perhaps the energy is hidden in "excess" E or H fields and not "registering" on the combined EM intensity ? This makes measurements in the near field very problematic ! Does your probe respond to E, or H, or both, or some mix depending on orientation, or "only EM" ?

And nobody has yet explained the transition from the far field (I=1/r^2) to the near field (I=1/r). It obviously doesn't "shift gears" instantaneously.

And the I=1/r rule of thumb doesn't hold water when r approaches zero since the intensity at r=0 is infinite (this also applies to I=1/r^2 unfortunately).

This whole 'near field' I=1/r thing is a mess. I=1/r is obviously wrong on many counts. It might be true at some particular radius, but that is useless as a rule of thumb.

No wonder even the experts can't seem to agree.

And the fact (the Nobel Prize winning fact!) that it is all a mathematical fiction anyway...

Sigh...

:-)

4305. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 16:32:58 UTC
From: Roger Johansson <no.email@home.se>
Message-ID: <a5u71a$9tcs7$2@ID-86336.news.dfncis.de>
Source record: 147422
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"John Woodgate" <jmw@jmwa.demon.co.uk> wrote:

> If you insist on accuracy, try 'Bailly' (astronomer) and
'Erdo"s'
> (mathematician), where 'o"' is the best I can do in ASCII for
an 'o'
> with a Hungarian umlaut.

Erd��s is spelled with ".
In the common windows western character table " is an o with two
dots over it.

" is pronounced like the first wovel in these english words:
first, sir, purly, colonel, heard, girl, curling..

English can be a very confusing language to other nationalities
because the same sound can be spelled in many different ways,
and the same letter can be pronounced in many different ways in
different words.

If Bailly is a french name, and it looks like that, it should
probably be pronounced Bay-ee, with the tension on the ee and
also with a raised tone on the ee.

Roger

4306. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 16:39:37 UTC
From: fractenna@aol.com
Message-ID: <20020303113937.17576.00001369@mb-mf.aol.com>
Source record: 147493

>richardharrison@webtv.net (Richard Harrison) wrote in message
>news:<9742-3C8188E0-462@storefull-118.iap.bryant.webtv.net>...
>> Bill, N3WK wrote:
>> "Don`t you mean that intensity falls of as 1/r in the far field, not the
>> near field?"
>>
>> Chip was using power, not volts per meter. Volts per meter decline as
>> 1/r in the far field, but power declines as 1/r^2. That is expressed in
>> the famous "inverse square law". Double the distance from the source in
>> the far field, and the signal drops by 6db, not 3db. Chip got it right.
>
>Here's what he said:
>"You can look at the near field as the volume (not area) within which
>the
>intensity falls as 1/r (where r is distance from radiator) and the
>far field
>as the volume--extending out to infinity-- for which the intensity
>falls as
>1/r^2. All in free space, of course."
>
>My question was with his "1/r" variation of "intensity" in the near
>field.
>
>Usually, "intensity" implies field intensity, as in field strength.
>Second, he's obviously talking about radiation, not received power,
>since he breaks infinite space into 2 volumes according to distance
>from the radiator. But why don't we let him respond rather than
>guessing what he meant?
>
>Then, neither power density or field intensity fall off at 1/r in the
>near field. Power density for an aperture oscillates in the near field
>but the envelope is relatively constant. The field strength for a
>short dipole consists of two quantities, one in 1/r, 1/r^2, & 1/r^3;
>the other in 1/r and 1/r^2. Neither of these fall off at 1/r. Power
>density for a short dipole varies according to the cross product of
>these two quantities. No way this product is going to be 1/r. He got
>the near-field part wrong either way.
>
>> From 3
>> wavelengths out to 10,000 wavelengths where the graph ends, double the
>> distance gives a 6db increase in signal loss on the graph.
>
>No argument.
>

>73,
>Bill N3WK
>

Hello,

My answer is accurate and complete in the context it was presented.The words I used, and what I said was, and is, well-known, accurate, and so on. You may debate it if you wish; I didn't invent/define Fraunhofer and Fresnel regions:-) Why pose it as my issue?

If you wish to discuss higher order content, then that's fine. Boundary conditions are always interesting, although I don't seem to recall the question, as originally posed, being made in that context.

(Here's an interesting boundary condition problem: let's say you could drill a hollow sphere at the center of the Earth. Describe what force(s) you would feel, if you are reasonably point-like. Now use this info to see how a hollow shell of matter would affect time dilation. This is known as the Mother-Baby Paradox, posed in the mid-70's by Thomas Gold.)

It may be a useful to check to see if our original poster feels he has enough information though, as these issues of minutiae seem, to me, far beyond the nature of the question posed and the type of infoirmation desired.

73 and Enjoy,
Chip N1IR

4307. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 16:45:42 UTC
From: G&R <"stop the spam"@limbo.hell>
Message-ID: <hssg8.86568$JZ.11771771@news20.bellglobal.com>
Source record: 147494

An antenna which closely meets this idea is that of our Baby Boomer Quad (Multi-Banded). Basically the antenna is about half the size of a normal quad with slightly less performance.

This allows for some interesting design features to be added to the antenna.

1. Multi-banded (10-15-20m)
2. Heavy Duty
3. Portable (Easy assembly and disassembly). Can be assembled in one hour.
4. Great Performance, slightly less than a full size quad.
5. Small package.

The best place to go and start searching antenna information is that of W4RNL site at www.cebik.com/radio.html

Our site is www.degendesigns.com home of the Baby Boomer Quad.

If you wish to contact me info@degendesigns.com

73

Guenther

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message news:3C802890.FE3E6508@bellatlantic.net...
> Just wondering if a Quad with 2 or more turn elements would be worth
> experimenting with? Seems to work on those small loop antennas. Any
> ideas?
>
> '73 KI4Z
>

4308. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 16:57:03 UTC
From: richardharrison@webtv.net
Message-ID: <26103-3C8255DF-230@storefull-116.iap.bryant.webtv.net>
Source record: 147496

Bill, N3WK wrote:
"Why don`t we let Chip respond rather than guessing at what he meant?"

Excellent idea"

Best regards, Richard Harrison, KB5WZI

4309. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 17:01:56 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u84lneh4j800e@corp.supernews.com>
Source record: 147495

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20020302123751.10967.00001540@mb-fj.aol.com...

> I'm still not having much luck confirming Jim's notion that the FAA routinely
> uses circular polarization at their VHF Comm sites.

And Jim is basing his comments on the advice of two FAA avionics inspectors, one in San Diego, and one in Reno, who separately and independently told me that the FAA standard was for some sort of circular polarization. I freely admit to never designing or installing any FAA facility ground antennas. All the ground antennas I've ever designed and/or installed were good old ground plane or J antennas on small airport unicom and FBO radios. My bag is the airborne antenna, not the ground antenna.

> Going beyond that observation, from a technical standpoint, wouldn't it be true
> that, even at a 45-degree bank angle (defined in aviation as a "steep turn"),
> cross-pol attenuation should only amount to 3-dB or so? (I could be wrong)

45° is only "steep" in the private pilot test. In commercial and above, 60°
is the standard steep turn. And I agree with the other posters that at 45°
you are crosspolarized by 3 dB.

>
> Also, isn't it true that a circularly polarized array would impose a gain
> penalty on all aircraft using vertical polarization--including those aircraft
> operating in straight and level flight? (I could be wrong again)

Yes, but the gain penalty is constant at any flight attitude, which was what the designers were trying to achieve (according to the aforementioned inspectors).

Jim

4310. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 17:21:23 UTC
From: tdonaly@cs.com
Message-ID: <20020303122123.21789.00001192@mb-cc.news.cs.com>
Source record: 147497

>
J. Harvey wrote;
>"Richard Harrison" wrote eloquently about fields:
>> Reg wrote:
>> "---the whole damn thing is just a mathematical fiction."
>> <snipped only for brevity - refer to original if required>
>
>Reg is correct. You saw my posting about Richard Feynman's Nobel Prize ?
>
>"...there is no field..."
>
>However, electromagnetic fields are a very useful 'mathematical fiction' (at
>least in the far field). But, the part about the near field and its
>'Intensity' being proportional to '1/radius' (I=1/r in the near field) seems
>problematic.
>
>First, let's review the far field I=1/r^2 rule of thumb: The surface area
>of a sphere goes up as the square of the radius. That means that in the far
>field, where I=1/r^2, there is a constant energy at any radius (not per unit
>area, but summed over the entire surface area of the sphere). Obviously,
>the energy has to get from A to B by way of spheres (being spheres since c
>is constant). Therefore, the I=1/r^2 rule of thumb adheres to common sense
>conservation of energy. Therefore, the I=1/r^2 far field rule of thumb is
>okay.
>
>Now the near field: According to the I=1/r rule of thumb (in the near
>field), the energy contained in the various imaginary spheres is not
>constant. As we approach r=0, the energy in each sphere is dropping towards
>zero. This is because the surface area of the sphere is dropping towards
>zero much faster (SA=1/r^2) than the intensity (I=1/r) as we approach r=0.
>
>Perhaps the energy is hidden in "excess" E or H fields and not "registering"
>on the combined EM intensity ? This makes measurements in the near field
>very problematic ! Does your probe respond to E, or H, or both, or some mix
>depending on orientation, or "only EM" ?
>
>And nobody has yet explained the transition from the far field (I=1/r^2) to
>the near field (I=1/r). It obviously doesn't "shift gears" instantaneously.
>
>And the I=1/r rule of thumb doesn't hold water when r approaches zero since
>the intensity at r=0 is infinite (this also applies to I=1/r^2
>unfortunately).
>
>This whole 'near field' I=1/r thing is a mess. I=1/r is obviously wrong on

>many counts. It might be true at some particular radius, but that is
>useless as a rule of thumb.
>
>No wonder even the experts can't seem to agree.
>
>And the fact (the Nobel Prize winning fact!) that it is all a mathematical
>fiction anyway...
>
>Sigh...
>
>:-)
>
Whenever Reg makes one of his provocative postings, I can't
help thinking of George Bernard Shaw's statement: "If you do not say anything
in an irritating way, you may just as well not say it at all, since nobody will
trouble
themselves about anything that does not trouble them."
Does anyone have a reliable idea of what constitutes a "mathematical
fiction?"
Was Michael Faraday perpetrating a fraud when he proposed using
the concept of a field to think about electromagnetic phenomena? And what
about
Maxwell? Was he aiding and abetting a criminal conspiracy when he clarified
and
expanded Faraday's ideas? Why is the study of electromagnetics still taught?
Perhaps
Reg will enlighten me.

Tom Donaly KA6RUH

4311. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 17:39:08 UTC
From: fractenna@aol.com
Message-ID: <20020303123908.17463.00001441@mb-cr.aol.com>
Source record: 147498

>
>Bill, N3WK wrote:
>"Why don`t we let Chip respond rather than guessing at what he meant?"
>
>Excellent idea"
>
>Best regards, Richard Harrison, KB5WZI
>
>

Hmmm..

I seem to recall posting a short bit ago.

IMHO we've exhausted the useful info on this question.

If anyone would like me to suggest some Fraunhofer/Fresnel zone references I would be most happy to do so via e-mail. It is an ancient and well- explored subject at this point.

Frankly, there seem to be a couple of flamers here, and that's outside of my interest.

With Best Regards,
Chip N1IR

4312. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 17:41:39 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <gftg8.397$802.241219@news20.bellglobal.com>
Source record: 147499

"Tdonaly" rhetorically asked:
> Was Michael Faraday perpetrating a fraud when
> he proposed using the concept of a field to think
> about electromagnetic phenomena? <etc.>

The various widely-accepted field theories work fine as long as you stay
away from those pesky and annoying boundary conditions...

...of course, science is often progressed by a close examination of those
exact sort of pesky and annoying boundary conditions ('...riding on a light
beam...' and all that sort of thing).

PS: I keep thinking that 'Tdonaly' must be some sort of Japanese name... :-)

4313. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 18:31:22 UTC
From: richardharrison@webtv.net
Message-ID: <2146-3C826BFA-505@storefull-113.iap.bryant.webtv.net>
Source record: 147502

J. Harvey wrote:
"First let`s review the far field I=1/r^2 rule of thumb:"

That is a problem because intensity is sometimes taken as volts per meter and is sometimes taken as watts per square meter. The definition being used needs to be stated. Also, I=1/r^2 is true, with a suitable constant to define units and if I is intensity in watts per square meter, not current in amperes.

J. Harvey wrote:
"Now the near field: ---As we approach r=0, the energy in each sphere is dropping towards zero."

The 1/r or the 1/r^2 are rates of energy decline. As we approach r (the distance from a radiator) =zero, the energy in each sphere is NOT dropping towards zero.

I got an ear burnt black from contact with such an r-f energized wire.

Attenuation of a radio wave primarily depends on its distance from the radiator.

There is a definite relationship between the input power to a given antenna and the electromagnetic field it produces.

We have a reactive field which collapses back into the antenna on each alternation of the r-f. This field fades in a very short distance and is nearly proportional to the inverse square of the distance.

We also have a radiated field which does not return to the antenna and goes on and on into space if not blocked. This field fades as most everyone knows, in terms of volts per meter, inversely with the distance.

Best regards, Richard Harrison, KB5WZI

4314. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 18:36:39 UTC
From: vswrref@hotmail.com
Message-ID: <3c826cfd.669435@national-news.stargate.net>
Source record: 147501

I've been hearing alot obout the HF6V and I do have one question about
it. How long is the 75 ohm matching stub?

Jeff Y.

On Sun, 3 Mar 2002 12:55:23 -0000, "MW0CDO" <gw7lhiJUNK@ntlworld.com>
wrote:

>"Jerry" <jerryaa@prodigy.net> wrote in message
>news:VYc48.22725$im4.1986553961@newssvr17.news.prodigy.com...
>> I have had ongoing problems with swr on my HF6 and now seem to have fixed
>> those by proper grounding. I get anywhere from 1.6:1 on 40 and 10 meters
>and
>> 1.9:1 on 15 meters. 80 meters I get a 1.9:1 on a very narrow frequency
>when
>> measured at the antenna.
>>
>> I am using 35 feet of RG8x as transmission line. measured from the
>feedline
>> point my swr is 1 point higher. I have tried an RG8 AU with the same
>> readings.
>> The HF6 directions say to use a 11'2" length of 75 ohm transmission line
>> connected to any 50 ohm coax. Friends of mine say that shouldn't make
>much
>> difference in efficiency.
>>
>> What are my likely problems here? I don t want to use a tuner if I don t
>> have to use one. Is that 75 ohm line going to make that much difference?
>> Instructions say that line is for matching in the 10 meter band.
>>
>
>Jerry, I use an HF6vx here, and it works fine for me.
>
>The 75 ohm co-ax section is there to transform the 100 odd ohm impedance @
>20m to approx 50 ohms.
>
>Mine has excellent match on 10, 15, 20, 30, 40 & 80m. on 12m it's approx
>5-6:1 and on 17m approx 6-7:1 but I just tune into the feeder with an ATU.
>In fact, I use an FT-102 radio with tube PA which is quite happy to load
>into the antenna on 12 & 17.
>
>I suggest that you check your electrical connections at the feedpoint, as
>the only time I've had high SWR problems the cause was a poor connection.
>Also check that there's good connectivity between the tube sections and
>coils etc.. bad connections here will definitely cause problems.

>
>As an aside, when I first installed the antenna, I had no radials at all and
>the antenna worked fine on all bands except 80m, where I couldn't get the
>SWR to less than 2.5:1 or so.
>I added 4 40ft buried radials which completely solved the problem, SWR on
>80m now 1.2:1 with bandwidth of approx 75KHz at 2:1 points.
>The radials all run out in the SW,W & NW compass headings, due to the
>topology of my back yard, it's not possible to provide radials in the
>direction of Africa/Europe/Scandanavia but I have no problem working those
>areas.
>
>But I do have good wet ground here, and live within 500 meters of the sea
>shore here in South Wales. The mounting pole always has water in it, even in
>summer.. it goes down about 2m depth.
>The antenna is located approx 5ft from a metal clad building, which is
>approx 20ft x 15ft and approx 7ft from a 25ft pole which hosts a 6m 5ele
>monobander and rotator.
>
>I'm very pleased with the performance of the antenna, it even cracks pileups
>sometimes with 100-150w that the FT-102 provides. Many operators are
>surprised when I tell them what the antenna is.. a ground mounted vertical.
>
>As an aside, does anyone here have the mechanical details of the 12 and 17m
>resonators? I'd like to make them myself, as they cost a lot of money here
>for a bit of aluminium tubing! Ideally, I'd like the diameter of the coil,
>number of turns and dimensions of the capacity strips.
>
>Hope this helps!
>
>Paul MW0CDO
>
>
>--
>Paul MW0CDO
>
>Remove the JUNK in my address before sending!
>
>
>
>
>
>
>
>
>

4315. Coaxial choke and G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 18:38:05 UTC
From: kg4pss@arrl.net
Message-ID: <a3866922.0203031038.544a2347@posting.google.com>
Source record: 147500

On a previous post regarding G5RV's, a suggestion was made to make a choke out of coaxial line (along with few other suggestions ;-).

I have found that I have a small surplus of RG-6, and I was wondering if it were possible to use this (75 ohm)as a choke between the 50 ohm coax and 450 ohm window line? If so, what would the correct dimensions be? Primary use will be 100w on 75/80/40/20.

Thanks in advance for your insight.

Allen

4316. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 18:48:27 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C826FFB.6780801E@IEEE.org>
Source record: 147503

Tdonaly wrote:
> Does anyone have a reliable idea of what constitutes a "mathematical
> fiction?"

If we define things that exist only because Homo sapiens exist,
then every concept is a "fiction" (assuming that only man is
capable of concepts).

For instance, there is a growing awareness that time has no
independent existence, is truly relative to change, and is
merely a mathematical model invented by man to keep track
of change.
--
cheers, CAM http://www.qsl.net/w5dxp

4317. Re: Coaxial choke and G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 18:52:39 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8270F7.1F79B9E3@IEEE.org>
Source record: 147504

kg4pss wrote:
> I have found that I have a small surplus of RG-6, and I was wondering
> if it were possible to use this (75 ohm)as a choke between the 50 ohm
> coax and 450 ohm window line? If so, what would the correct dimensions
> be? Primary use will be 100w on 75/80/40/20.

For 75m, take a 2 liter pop bottle and wind about 20 turns on it.
That will probably work all the way to 20m.
--
cheers, CAM http://www.qsl.net/w5dxp

4318. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 19:15:28 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <hXSCPIKVJNUnI1hyUGbTPvHQD3tx@4ax.com>
Source record: 147505

richardharrison@webtv.net (Richard Harrison) wrote:

>Ed Hare, W1RFI wrote:
>"I will post the article on the ARRL web page and let you all know the
>URL."
>
>Good to hear from Ed. Is the ARRL web page "members only"?

The article is already there, on a "members only" page.

Bob
k5qwg

>
>Best regards, Richard Harrison, KB5WZI

4319. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 19:16:50 UTC
From: Roger Johansson <no.email@home.se>
Message-ID: <a5ugjp$aa09f$1@ID-86336.news.dfncis.de>
Source record: 147436
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Jim Thompson" wrote:

> Try "Canyon de Chelly" in northern Arizona ;-)

I think you know more about that canyon than I will ever do, so
I'll pass on that one.

But to get back to the subject, Bode is pronounced Bo-de in
dutch, german, swedish, and most european languages.
It rhymes with modem if you cut away the last m.

I have never even thought of the pronounciation of Bode as
rhyming with "load" before this discussion reminded me that it
is the most likely one in english.

Roger

4320. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 19:24:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C827865.91CADE34@eznec.com>
Source record: 147506

I'm afraid that wording might mislead some people. The impedance of an antenna or the SWR on its feedline have nothing to do with how much power the antenna will "accept". It does, however, affect how much power can be delivered to it by a fixed-impedance source.

I can get just about any antenna to accept virtually all the power from my rig. All I need is an impedance matching network to enable the rig to deliver the power to it.

Roy Lewallen, W7EL

CAM wrote:
>
> SWR is associated with the amount of power an antenna will
> accept. What are the other reasons that a 6000 ohm one
> wavelength dipole won't work as well as a 60 ohm one half
> wavelength dipole?
> --
> cheers, CAM http://www.qsl.net/w5dxp

4321. Re: Coaxial choke and G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 19:26:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C8278ED.4E75C8D7@eznec.com>
Source record: 147507

You'll find some recommended dimensions in the _ARRL Handbook_.

Roy Lewallen, W7EL

kg4pss wrote:
>
> On a previous post regarding G5RV's, a suggestion was made to make a
> choke out of coaxial line (along with few other suggestions ;-).
>
> I have found that I have a small surplus of RG-6, and I was wondering
> if it were possible to use this (75 ohm)as a choke between the 50 ohm
> coax and 450 ohm window line? If so, what would the correct dimensions
> be? Primary use will be 100w on 75/80/40/20.
>
> Thanks in advance for your insight.
>
> Allen

4322. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 19:29:40 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8279A4.DE8B6BCB@IEEE.org>
Source record: 147508

Roy Lewallen wrote:
> I'm afraid that wording might mislead some people. The impedance of an
> antenna or the SWR on its feedline have nothing to do with how much
> power the antenna will "accept". It does, however, affect how much power
> can be delivered to it by a fixed-impedance source.

Guess I should have said, "SWR is associated with the percentage of
forward power an antenna will accept". But my question still stands.
Why won't a one wavelength dipole work as well as a 1/2 wavelength
dipole if the SWR is the same?
--
cheers, CAM http://www.qsl.net/w5dxp

4323. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 19:41:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C827C4E.24A418D4@eznec.com>
Source record: 147509

"J. Harvey" wrote:
>
> . . .
> Now the near field: According to the I=1/r rule of thumb (in the near
> field), the energy contained in the various imaginary spheres is not
> constant. As we approach r=0, the energy in each sphere is dropping towards
> zero. This is because the surface area of the sphere is dropping towards
> zero much faster (SA=1/r^2) than the intensity (I=1/r) as we approach r=0.
>
> Perhaps the energy is hidden in "excess" E or H fields and not "registering"
> on the combined EM intensity ? This makes measurements in the near field
> very problematic ! Does your probe respond to E, or H, or both, or some mix
> depending on orientation, or "only EM" ?

There's no problem with conservation of energy. In the far field, the E and H fields are in phase and a fixed ratio, so that you can infer the power or energy from either the E or H field strength. In the near field, the E and H fields aren't necessarily in phase, nor do they have a fixed ratio. So either field can vary in virtually any manner without involving any "hidden" energy. It's true that near field measurements are harder to make, because you do have to measure both the E and H fields, and their relative phases, to find the power at any given point. In the far field, all you need is the magnitude of one of the fields, and you know the rest.

>
> And nobody has yet explained the transition from the far field (I=1/r^2) to
> the near field (I=1/r). It obviously doesn't "shift gears" instantaneously.
> . . .

I'm not sure what "explanation" is needed. There's one total field. When you get far away from the source, it has certain simple characteristics (fixed E/H ratio, 1/r decrease in field strength, planar wave characteristics) that make it easier to analyze, and which we call the far field. Where this "begins" depends entirely on how accurate you need your simplifying approximation to be. It's just the same as observing that the square root of (1 + x) is about equal to 1 + x/2 for small x, and asking at what value of x the "transistion" occurs.

Roy Lewallen, W7EL

4324. WTB: 1991 or 1990 ARRL Handbook

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 19:54:10 UTC
From: Bill <newhall@vt.edu>
Message-ID: <a5tuubnbo1@solaris.cc.vt.edu>
Source record: 147510
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'm doing some research and need an ARRL Handbook from 1991 or 1990.

If you have one sitting on your shelf, make me a deal, (and of course I'll cover shipping on top of that).

If you have both years, make me a deal on both.

Drop me an email at newhall@vt.edu

This is your chance to make room for the 2002 edition!

Bill
newhall@vt.edu

4325. Antenna L & C Loading Components

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 20:01:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5u0no$9rcjm$6@ID-124126.news.dfncis.de>
Source record: 147511

NEWLY AVAILABLE Program "ADDALOAD.exe"
======================================
A random length antenna wire may be made resonant at a particular frequency
by inserting either a coil or capacitor at any position along its length.
For overall wire length, wire diameter and location of the loading
component, the program computes either C picofarads or L microhenrys
depending on sign of the required loading reactance.

Greatest wire length accepted is 1 wavelength at the resonant frequency.
Results apply either to a vertical antenna wire or to both halves of a
centre-fed dipole.

The program has an educational facilty to slide the loading component along
the wire while observing how it changes value and type.

Download from website below program ADDALOAD in a few seconds and run
immediately.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

4326. Re: Coaxial choke and G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 20:08:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5u0np$9rcjm$7@ID-124126.news.dfncis.de>
Source record: 147512

Get a 1.75" or 2" diameter ferrite ring, HF grade, and wind on 8 or 10 turns
of figure-of-eight, stranded, 18 AWG speaker wire. And the jobs done.

Reg, G4FGQ
--
==========

kg4pss <kg4pss@arrl.net> wrote in message
news:a3866922.0203031038.544a2347@posting.google.com...
> On a previous post regarding G5RV's, a suggestion was made to make a
> choke out of coaxial line (along with few other suggestions ;-).
>
> I have found that I have a small surplus of RG-6, and I was wondering
> if it were possible to use this (75 ohm)as a choke between the 50 ohm
> coax and 450 ohm window line? If so, what would the correct dimensions
> be? Primary use will be 100w on 75/80/40/20.
>
> Thanks in advance for your insight.
>
> Allen

4327. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 20:08:42 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <Ban1AyAKLog8Ewo6@jmwa.demon.co.uk>
Source record: 147517
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that John Fields <jfields@austininstrum
ents.com> wrote (in <3C820E57.46083EDE@austininstruments.com>) about
'HELP needed in understanding Bode Plots', on Sun, 3 Mar 2002:
>John Woodgate wrote:
>>
>> I read in sci.electronics.design that Rich Grise
>> <richgrise@earthlink.net> wrote (in <3C815BF3.22E2@earthlink.net>) about
>> 'HELP needed in understanding Bode Plots', on Sat, 2 Mar 2002:
>> >I'm a iggorunt
>> >Murrican, but I can go with "rhymes with abode, code, lode, mode, node,
>> >rode" etc.
>>
>> Adobe? (;-)
>
>---
>Adobe the opposite of a buck.
>---
A rallod?

AFAIK, in UK we pronounce the name to rhyme with 'bowed', but I suppose
a bowed plot should have curvilinear axes.

I really don't think there is a serious problem with the pronunciation
of names, unless you are addressing the person him/herself, when it is
courteous to be correct. It is also possible to over-egg the pudding;
the classic example is 'Don Ki-hoe-tay'. The Don lived well before the
lisping king of Spain whose impediment created modern Castilian
pronunciation. He probably called himself 'Don Keyshot', as reflected in
the modern French version of his name.

Often, the only way to know how to pronounce a name is to ask the
person or a close friend. Neville Thiele, he of the eponymous
loudspeaker parameters, pronounces his name differently from both
English and German conventions - he says 'teal'.

If you insist on accuracy, try 'Bailly' (astronomer) and 'Erdo"s'
(mathematician), where 'o"' is the best I can do in ASCII for an 'o'
with a Hungarian umlaut.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4328. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 20:12:44 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <G6a0Y5A8Oog8EwLS@jmwa.demon.co.uk>
Source record: 147516
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Reg Edwards
<g4fgq.regp@btinternet.com> wrote (in <a5t3jl$a0u4b$1@ID-
124126.news.dfncis.de>) about 'HELP needed in understanding Bode Plots',
on Sun, 3 Mar 2002:
>What's the matter with just "Bode" ?
>
>
Only that we don't know from that how you pronounce it. A Russian might
look at that and conclude that you favoured 'Voe-dee' as in 'Voe-de-o-
doe'. A Dane might infer 'Po-er'.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4329. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 20:47:09 UTC
From: ik7565@erols.com
Message-ID: <3C828BCD.94E21552@erols.com>
Source record: 147513

Notice Kurt's initials and try
http://www.qrz.com/database?callsign=k5KNS

73 de Ian
N8IK

"David J. Windisch" wrote:
>
> Anybody know, with Jack Belrose, LB Cebik, Kraus, and others well-id'ed out
> there in antenna-land, why this disturbin' kert individual seems to be
> obsessed with anonymity?
>
> Is it because he's after the same effect as Larson E. Rapp WIOU and
> Hashafisti Scratchi's author?
>
> K3BHJ

4330. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 20:48:15 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <c_vg8.1410$7Y4.322590@news20.bellglobal.com>
Source record: 147514

"Richard Harrison"
> J. Harvey wrote:
> "First let`s review the far field I=1/r^2 rule of thumb:"
>
> That is a problem because intensity is sometimes taken
> as volts per meter and is sometimes taken as watts per
> square meter. The definition being used needs to be stated.
> Also, I=1/r^2 is true, with a suitable constant to define units
> and if I is intensity in watts per square meter, not current in
> amperes.

I was reading it ('I' that is) to mean 'watts per square meter'.

> J. Harvey wrote:
> "Now the near field: ---As we approach r=0, the energy in each
> sphere is dropping towards zero."
>
> ...the energy in each sphere is NOT dropping towards zero.

Of course it isn't !! It is just that the I=1/r rule of thumb implies that it does as per the simple relationship between 1/r and 1/r^2. This is my Main Point - it was a strawman argument to show that the I=1/r rule of thumb is obviously flawed. I wouldn't trust it. Seems to fall apart at every seam. Obviously, there is a lot more going on in the near field than simple I=1/r relationships.

4331. What do you recommend for HF DX

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 20:58:57 UTC
From: Dick <hoogerwaard@wanadoo.nl>
Message-ID: <l8wg8.181$2h5.1126@castor.casema.net>
Source record: 147515

I made a lot of antenna's 1/4 wave verticals for 40, 30 , 20, 17 meters
etc. and have a lot of isolated chickenwire and other wires under it. Also
the ground is polder land and wet.
It works fine but changing freq. I have to put down the antenna and make
another 1/4 wave.

I also made a lot of deltaloops/loops,dipoles, edz etc. with ladderlines in
the past but the verticals worked best for DX.

As I am tired of changing the ant. what would be (nearly) as good or better?

Pls advice:

1. Butternut (HF6V or HF2V)... Hustler (6 or 5BTV.) Sigma 5 vertical or
other vert.
a. Ground mounted or b. Roof mounted (40 feet high)
2. Auto tuners SGC or LDG ?
3. Balun MTFT etc 1:10
4. Should I keep what I have as everything else is compromise?.
5. Others...

73 Dick

4332. Re: What do you recommend for HF DX

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 21:17:56 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C829304.F11F7C0E@IEEE.org>
Source record: 147419

Dick wrote:
> As I am tired of changing the ant. what would be (nearly) as good or better?

Check out my solution on my web page. I has been my experience that a
horizontal dipole very often out-performs a vertical monopole.
--
cheers, CAM http://www.qsl.net/w5dxp

4333. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 21:19:22 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <orwg8.1980$7Y4.346120@news20.bellglobal.com>
Source record: 147518

"Roy Lewallen" helpfully explained:
> "J. Harvey" wrote:
> > . . .
> > Perhaps the energy is hidden in "excess" E or H fields and
> > not "registering" on the combined EM intensity ? This makes
> > measurements in the near field very problematic ! Does your
> > probe respond to E, or H, or both, or some mix depending
> > on orientation, or "only EM" ?
>
> There's no problem with conservation of energy.

I would hazard a guess that EVERYONE is in agreement that there's no problem with conservation of energy !!!!! Good grief...

PLEASE NOTE that when I put up a strawman argument to demonstrate the fly in the soup, it doesn't mean that I agree with having the flies in the soup !

Of course energy is conserved - but how does that jive with 1/r ? The I=1/r rule of thumb (taken as written) **does** imply that energy is being hidden (or at least misplaced), most certainly as per your rational explanation below. Therefore, this I=1/r rule of thumb for the near field is obviously incorrect, incomplete and perhaps dangerous. People might start to believe it...

> In the far field, the E and H fields are in phase and a fixed ratio,
> so that you can infer the power or energy from either the E or H field
> strength. In the near field, the E and H fields aren't necessarily in
phase,
> nor do they have a fixed ratio. So either field can vary in virtually any
> manner without involving any "hidden" energy. It's true that near field
> measurements are harder to make, because you do have to measure
> both the E and H fields, and their relative phases, to find the power at
> any given point. In the far field, all you need is the magnitude of one
> of the fields, and you know the rest.

If you read what you just wrote (just above) and what I wrote above (near top), you will find that we are in complete agreement. My points were framed as rhetorical questions, yours are excellent answers to those rhetorical questions.

The near field sure is a whole lot more complicated than I=1/r - isn't it !

> > And nobody has yet explained the transition from the
> > far field (I=1/r^2) to the near field (I=1/r). It obviously
> > doesn't "shift gears" instantaneously.
> > . . .

>
> I'm not sure what "explanation" is needed.

My point is that if someone is going to claim that the Intensity (taken as watts per unit area) in the near field was proportional to 1/r, then *they* have a lot of explaining to do.

4334. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 21:23:55 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Evwg8.2014$7Y4.349889@news20.bellglobal.com>
Source record: 147420
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Ref: HELP needed in understanding how to pronounce Bode.

One of my co-workers recently learned from his grandfather that his name was pronounced differently than he had been thinking his entire life. He was almost 40 when it was clarified.

Verbeke (2 or 3 syllables).

4335. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 21:26:27 UTC
From: Robert Haviland <bobh@iag.net>
Message-ID: <7ywg8.31853$ZC3.2600957@newsread2.prod.itd.earthlink.net>
Source record: 147421

Roy, not quite. The radiation resistance of small loops increases as square of the number of turns in the loop. The resistance increases directly as the number of turns, assuming the same wire size. The overall efficiency can increase as the number of turns as a limit. See Kraus, 2nd ed, page 250 ff. The full increase is seldom realized because of such effects as change in loop area, change in current distribution on th wire, etc. It's one reason Litz wire was used in the old loops. In large loops the radiation resistance doesn't change but the drive resistance does, so the efficiency is essentially
the same.

bob w4mb

4336. Re: Coaxial choke and G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 22:16:32 UTC
From: kg4pss@arrl.net
Message-ID: <a3866922.0203031416.1da1b743@posting.google.com>
Source record: 147423

I just wasn't sure if the 75 ohm impedence caused any problems, or affected the number of turns, diameter, etc.

Many thanks,

Allen

4337. Adjusting a CB antenna for Low VHF?.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 22:31:16 UTC
From: Paul Logan <Paul.Logan4@btinternet.com>
Message-ID: <a5u87kgke1@knossos.btinternet.com>
Source record: 147371

Hi all,

I was wondering could someone provide me some information about modifying a 5/8th wave CB antenna to have a centre frequency of say 42.5 mhz. I am interested in Low VHF reception and have been having fun in recent times hearing the California Highway patrol in the evenings around these frequencies.

I understand that the length of a 5/8th wave at 42.5 will be 14.47 feet or 4.34 metres. Now I hav'nt opened the butt of the antenna yet but I imagine there is a loading coil in there- how do I adjust this for the new frequency?. How many turns and where do I tap it?.

At present I have the antenna length at 20.5 feet resonant at 30 mhz and it works well from 25- up across 10 metres. It also seems to do quite well between 39 and 43 mhz. Is there any way I can improve bandwidth with such an antenna or should I think of something like a half wave?.

Any ideas or information on this subject would be most welcome- thanks.

regards,

--
Paul Logan,
Lisnaskea, N. Ireland

Located 54 15 N 7 27 W in IO64GF.
Interests: FM and TV-DX, SWL, Scanning.

Low VHF Skip and Scanning page: http://www.geocities.com/yogi540

4338. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 22:33:03 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <GISUULBfSqg8EwoV@jmwa.demon.co.uk>
Source record: 147464
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Roger Johansson <no.email@home.se>
wrote (in <a5u71a$9tcs7$2@ID-86336.news.dfncis.de>) about 'HELP needed
in understanding Bode Plots', on Sun, 3 Mar 2002:

>Erdï¿½ï¿½s is spelled with ï¿½.

>In the common windows western character table ï¿½ is an o with two
>dots over it.

No. The o has a *Hungarian* umlaut , which is not the same as 'ï¿½'....
>
>ï¿½ is pronounced like the first wovel

Pardon?

> in these english words:
>first, sir, purly, colonel, heard, girl, curling..

... and isn't pronounced like it. The 'o"' has a Unicode number, of
course, but I don't know how to find it.
>
>English can be a very confusing language to other nationalities
>because the same sound can be spelled in many different ways,
>and the same letter can be pronounced in many different ways in
>different words.
>
>If Bailly is a french name, and it looks like that, it should
>probably be pronounced Bay-ee, with the tension on the ee and
>also with a raised tone on the ee.

Yes. Actually 'buy-ee' (or even 'Bye-ee') is a bit nearer.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4339. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 22:42:17 UTC
From: Michael Ardai <n1ist@arrl.net>
Message-ID: <3C82A780.7A3ED53B@arrl.net>
Source record: 147424

ik7565@erols.com wrote:
>
> Notice Kurt's initials and try
> http://www.qrz.com/database?callsign=k5KNS

And I always thought it was a play on the "Sterba Curtain" antenna...

/mike

4340. goniometer [power line noise cancel] device

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 22:45:41 UTC
From: John Dooley <lastword@ntlworld.com>
Message-ID: <ZaJg8.91624$Ah1.12643369@news2-win.server.ntlworld.com>
Source record: 147379

Hello everyone reading this, hopefully most of you are either knowledgeable of the goniometer or actually have some input on power line noise removal. I found a great website, dedicated to LF, which I knew might have power line information as them sort of frequencies have much more problems with power line noise than the ones I actually work with. Anyway, the website with information on the device is located here :-
http://lwca.org/library/articles/kh6sr/artndb5.htm

What I want to know is how the phasing works, why does it work etc. I am mathematically minded so plz use equations if you can. I'm currently using LCR ccts in a lab so maybe anologies with such things may help me understand this device better [I study physics]. This goniometer is used in Physics for crystal diffraction techniques I believe, but it has had its Ham Radio uses as well...

'originally developed about 1905 by Bellini and Tosi, that is still in wide use for marine and aero
AD[irection]F[inding] applications.'

For those of you who never knew what a goniometer was, I hope i've brought something of fascination to you, maybe it will have use for you too! It can cancel electrical noises, electrically, rather than moving a large antenna, which is great!

J.Dooley [swl]
member of : g3gbu
www.theatom.net

4341. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 22:46:13 UTC
From: tdonaly@cs.com
Message-ID: <20020303174613.26621.00001595@mb-fm.news.cs.com>
Source record: 147425

J. Harvey, in the condescending manner typical of those
who erroneously think they understand the physical universe,
wrote,
>
>"Tdonaly" rhetorically asked:
>> Was Michael Faraday perpetrating a fraud when
>> he proposed using the concept of a field to think
>> about electromagnetic phenomena? <etc.>
>
>The various widely-accepted field theories work fine as long as you stay
>away from those pesky and annoying boundary conditions...
>
>...of course, science is often progressed by a close examination of those
>exact sort of pesky and annoying boundary conditions ('...riding on a light
>beam...' and all that sort of thing).
>
>
>
>PS: I keep thinking that 'Tdonaly' must be some sort of Japanese name... :-)
>

'Tdonaly' is not a Japanese name. My great grandfather changed his name from
Donnelley
to Donaly in order to disguise the fact that he was one of the Black Donnelleys
of Canadian
fame. It was an act motivated solely by a sense of modesty, and the desire to
avoid the rope-
toting autograph hounds of the day.

Tom Donaly KA6RUH

4342. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 22:59:43 UTC
From: Jim Thompson <Jim-T@analog_innovations.com.invalid>
Message-ID: <ila58ukbg58s1hv0umtbu2hjjsobmlmg54@4ax.com>
Source record: 147426
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Sun, 3 Mar 2002 17:32:58 +0100,
"Roger Johansson" <no.email@home.se>,
In Newsgroup: sci.electronics.design,
Article: <a5u71a$9tcs7$2@ID-86336.news.dfncis.de>,
Entitled: "Re: HELP needed in understanding Bode Plots",
Wrote the following:

|"John Woodgate" <jmw@jmwa.demon.co.uk> wrote:
|
|> If you insist on accuracy, try 'Bailly' (astronomer) and
|'Erdo"s'
|> (mathematician), where 'o"' is the best I can do in ASCII for
|an 'o'
|> with a Hungarian umlaut.
|
|Erdï¿½ï¿½s is spelled with ï¿½.
|In the common windows western character table ï¿½ is an o with two
|dots over it.
|
|ï¿½ is pronounced like the first wovel in these english words:
|first, sir, purly, colonel, heard, girl, curling..
|
|English can be a very confusing language to other nationalities
|because the same sound can be spelled in many different ways,
|and the same letter can be pronounced in many different ways in
|different words.
|
|If Bailly is a french name, and it looks like that, it should
|probably be pronounced Bay-ee, with the tension on the ee and
|also with a raised tone on the ee.
|
|Roger
|
|
|

Try "Canyon de Chelly" in northern Arizona ;-)

...Jim Thompson
--
(If replying by E-mail please observe obscure method of anti-spam.)

| James E.Thompson, P.E. | mens |
| Analog Innovations, Inc. | et |

Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
Jim-T@analog_innovations.com Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

For proper E-mail replies SWAP "-" and "_", and remove the obvious.

"Things turn out best for those who make the best of how things turn out."

4343. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 23:18:09 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <Layg8.90502$JZ.11996524@news20.bellglobal.com>
Source record: 147427

"Tdonaly" took it the wrong way:
> J. Harvey, in the condescending manner typical of those
> who erroneously think they understand the physical universe,
> <snip>

"physical universe", as in Physics ? Ahem...

I didn't mean to 'sound' condescending. I was just pointing out that theories often work well until someone checks the boundary conditions. And, to be explicit: No, I'm not saying that this silly 'near field' thread is sufficient to render Michael Faraday's field theory invalid (obviously).

The 'theory' in question is the one about 'I=1/r' in the near field (*). The boundary conditions I have previously explained in sufficient detail. That 'theory' seems to fall apart at the seams.

Can anyone step forward to defend this I=1/r in the near field ? Or shall we pronounce it a dead end and move on ?

(*)Assumptions:
-integrated over a complete cycle to avoid the storage red herring
-where I is power per unit area, just like the I=1/r^2 in the far field

4344. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 23:20:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5ubfn$a5ml0$1@ID-124126.news.dfncis.de>
Source record: 147428
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

John Woodgate said -

> Only that we don't know from that how you pronounce it.
==========

The whole lot of you are a set of time-wasting nut-cases, floundering about up to your chins in plots.

It's perfectly obvious how I pronounce "Bode". It is the same as "Boad". I am an Englishman. And these newsgroups are conducted in the English language. The possibilty has never occurred to me there might be any other pronunciation !

I have been designing filters and things, on and off, for nigh on 50 years. I have NEVER used "Bode" in conversation with any other person. No-one has EVER spoken "Bode" to me in the whole of my life. On occasions I have come across "Bode" in text books. When I have read to myself a line of text which has contained "Bode", in order to grasp a point I might have said to myself "Bode", pronounced in my head as "Bode". I never had the slightest of problems on that silly account.

Actually, I never thought very much of him. He's all so obvious. Never used "Bode Plots". Managed very well without him in that respect. But whilst on that line of thought it can safely be said I have NEVER used a "Smith Chart" either.

Now cease squandering hard to come by bandwidth - pleeeeese !

How do you pronounce "Smith" ? "Smythe" ?

Reggie (with hard "G"'s)

4345. Re: What do you recommend for HF DX

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 23:39:41 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u85d1tcppmml0e@corp.supernews.com>
Source record: 147429

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C829304.F11F7C0E@IEEE.org...
> Dick wrote:
> > As I am tired of changing the ant. what would be (nearly) as good or
better?
>
> Check out my solution on my web page. I has been my experience that a
> horizontal dipole very often out-performs a vertical monopole.
> --
> cheers, CAM http://www.qsl.net/w5dxp

While it's a great antenna, I would not be able to put up such an antenna.
I live in a fair sized Mobile home, but the lot is not that long.
I am putting up an end fed long wire on top of the home, but not that high
above the roof.
But, for the time being, it will be for listening only, as it will be a
while before I go for a general license (I am waiting for my tech call sign
right now).
Actually, with a tuner, it is possible to load a random length end fed,
which I did back in the 70's when I had a Novice license.
My biggest problem is that mine will be best for north and south, due to
the direction the lots are laid out here.
Maybe later I can fix up a loaded dipole, but it will have to be under
65'...
A loaded vertical would be easier here.
I'll have to start going to some of the swap meets and see what I can dig
up.
Have to start over with most stuff, being as I moved from W2 land to W6
land...

Wayne K?6??? (waiting is agony)

4346. DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 23:51:16 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <UFyg8.13177$106.955502@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147393

If the center of a dipole is 72-75 ohms why can't a 6:1 balun (and coax) be used in place of 450 ohm ladder line in conjunction with a "tuner" in the shack?

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

4347. DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-03 23:58:47 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <XMyg8.13187$106.952215@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147394

If the center of a dipole is 72-75 ohms why can't a 6:1 balun (and coax) be used in place of 450 ohm ladder line in conjunction with a "tuner" in the shack?

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

4348. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 00:02:49 UTC
From: richardharrison@webtv.net
Message-ID: <20374-3C82B9A9-205@storefull-111.iap.bryant.webtv.net>
Source record: 147431

David, KB5YLG wrote:
"Is there anything more specific...like how many wavelengths?"

There is no rule which says where the near field ends, that I know of, but with the r-f exposure question now front and foremost there probably will be.

The nearest official designation is the collection of "Ground Wave Propagation Curves", which are a part of the FCC rules.. These prescribe field strength measurements starting at 1 mile.

One mile is about 9 wavelengths at the high-frequency end of the AM broadcast band and about 3 wavwelengths at the low-frequency end of the broadcast band.

At the lowest ham frequency, 1 mile is 9.64 wavelengths.

So it`s not surprising that the ARRL Antenna Book would say, "an area bounded by several wavelengths of the antenna".

The far field becomes more devoid of reactive energy the farther from the antenna you are. How much purity do you demand? The FCC only requires about 3 wavelengths.

Having spent years in very intense radio fields and having survived to an old age and knowing others with a similar experience, I think the panic over r-f exposure is unnecessary.

Best regards, Richard Harrison, KB5WZI

4349. DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 00:06:25 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <5Uyg8.13196$106.956411@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147392

If the center of a dipole is 72-75 ohms why can't a 6:1 balun be used (with coax) in place of 450 ohm ladder line? a tuner would also be used in the shack.

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

4350. DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 00:10:32 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <YXyg8.12209$gK2.898456@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147430

If the center of a dipole is 72-75 ohms why can't a 6:1 balun be used (with coax) in place of 450 ohm ladder line? a tuner would also be used in the shack.

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

4351. Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 00:20:08 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a5uevu$abiac$1@ID-124126.news.dfncis.de>
Source record: 147432

> Outgoing mail is certified Virus Free.
> Checked by *** anti-virus system (http://www.*******).

==

I've a feeling some people have a vested interest in the worsening
proliferation of these bugs.

4352. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 00:28:28 UTC
From: stefano <sgalast@tin.it>
Message-ID: <Mczg8.34917$Ns4.1437835@news2.tin.it>
Source record: 147434

Hi Piero,
Piero, Piero..... I told you personnally a lot of things....please try to build one with my help...than you will reach those saying it perform very well....when well build and well tuned the eh antenna meet all claims we did.
ALL.
steve Ik5IIR

--
Voglia gradire i nostri pi cordiali e distinti saluti

Stefano Galastri
direzione tecnica

IMPORTANTE!!!: La mia mail sgalast@tin.it stata sostituita da:
stefano@eheuroantenna.com vi prego di aggiornare il mio indirizzo.

****
ARNO ELETTRONICA
Concessionari per l'Europa EH ANTENNA SYSTEM
Tel ++39 0587 606122 Fax ++39 0587 608634
Punto vendita-Uffici: Via Volterrana, 208/1
I-56033 Capannoli (Pisa) Italy

Web: www.eheuroantenna.com
E-mail: info@eheuroantenna.com
****

"Pie IK2VTJ" <picarusoNONVOGLIOSPAM@writeme.com> ha scritto nel messaggio
news:a5q4l0$9b27r$1@ID-83989.news.dfncis.de...
>
>
> "VA3ATD" <a.duffy@sympatico.ca> ha scritto nel messaggio
> news:3C802787.8010400@sympatico.ca...
> > has anyone ever tried building one other then the people that make the
> > claims on it's great performance?
> >
> Yes, I know people in Italy that made the 40 mt, 20 mt and trying the
160mt
> versions.
> Some say that it performs well, other say so and so and other are in
> trouble!
> The only sure fact is that the specifications are not sure, but if you are
> lucky you could have a medium performer short antenna, most for DX than
for

> local qso.
> --
> 73 de IK2VTJ, Piero.
>
> http://www.qsl.net/ik2vtj
> http://www.ardf.it
>
> Togli / Remove
> NONVOGLIOSPAM
> dall'indirizzo / from address
>
>
>

4353. Re: DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 00:30:06 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <iezg8.12237$gK2.901958@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147433

forgot to mention that the frequencies are 80-10
mtrs.<raghead@worldnet.att.net> wrote in message
news:YXyg8.12209$gK2.898456@bgtnsc04-news.ops.worldnet.att.net...
> If the center of a dipole is 72-75 ohms why can't a 6:1 balun be used
(with
> coax) in place of 450 ohm ladder line? a tuner would also be used in the
> shack.
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

4354. Re: DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 00:33:32 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <k3g58uoftcjbbtf38hdqud69kdbdihcpfn@4ax.com>
Source record: 147435

Depends on the height of the dipole.
And if you are using open ladder transmission line why would you want
a balun at the antenna feed point?

Danny, K6MHE

On Mon, 04 Mar 2002 00:10:32 GMT, "marvin rosen"
<raghead@worldnet.att.net> wrote:

>If the center of a dipole is 72-75 ohms why can't a 6:1 balun be used (with
>coax) in place of 450 ohm ladder line? a tuner would also be used in the
>shack.
>
>
>---
>Outgoing mail is certified Virus Free.
>Checked by AVG anti-virus system (http://www.grisoft.com).
>Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02
>

4355. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 01:28:51 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C82CDD1.5A63A5D1@att.net>
Source record: 147395

Reg, I have a vested interest in doing all I can to ensure that *you* among others on this newsgroup never receive a posting from me that contains a virus, worm or other unknown/unwanted visitor.

I paid money for my programs and take extra time with each posting to allow the program to do its thing.

Should I do less? No . . .

Do I wish that everyone did the same? Yes . . .

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Reg Edwards wrote:
>
> > Outgoing mail is certified Virus Free.
> > Checked by *** anti-virus system (http://www.*******).
>
> ==
>
> I've a feeling some people have a vested interest in the worsening
> proliferation of these bugs.

4356. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 01:31:19 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a5uipe$jb7$1@slb1.atl.mindspring.net>
Source record: 147437
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Reg:

Bode plots have perpetuated his name, Bode plot techniques are a devilishly simple set of rules for plotting frequency responses developed in the age before computers, but that certainly was not Bode's major contribution to modern electronics Engineering.

There's a whole lot more to Bode than Bode plots...

If you can beg or borrow a copy of H. W. Bode's famous treatise "Network Analysis and Feedback Amplifier Design", Van Nostrand, New York, 1945, I am sure that you would appreciate his elucidation of network analysis, synthesis, and feedback amplifier theory. That book is just chock full of insights into the analysis, synthesis and operation of electrical networks and active impedances. Bode was among the first to point out the nature and details of the relationships between parts of network functions, and how the introduction of gain and feedback affects them. And so his work led to the idea of active filters, operational amplifiers and such. Between them Hendrik W. Bode and Harold S. Black "wrote the book" on feedback amplifier design.

Unfortunately, or perhaps fortunately, Bode was a very skillful mathematician. Because of this many of his presentations demand quite a high level of mathematical sophistication on the part of readers. Many say that his book is "too hard". That mathematical sophistication is probably the reason why he is not so widely read as others. However if you read his stuff, and note the dates, you will see that he was "a leader" and most others just followed him later.

Sort of like James Clerk Maxwell, Claude E. Shannon, Norbert Weiner, Oliver Heaviside and others of that ilk. i.e. prescient and somewhat before their time.

--Peter K1PO

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a5ubfn$a5ml0$1@ID-124126.news.dfncis.de...
> John Woodgate said -
>
> > Only that we don't know from that how you pronounce it.
> ==========
>
> The whole lot of you are a set of time-wasting nut-cases, floundering
about
> up to your chins in plots.

>
> It's perfectly obvious how I pronounce "Bode". It is the same as "Boad".
I
> am an Englishman. And these newsgroups are conducted in the English
> language. The possibilty has never occurred to me there might be any other
> pronunciation !
>
> I have been designing filters and things, on and off, for nigh on 50
years.
> I have NEVER used "Bode" in conversation with any other person. No-one
has
> EVER spoken "Bode" to me in the whole of my life. On occasions I have
come
> across "Bode" in text books. When I have read to myself a line of text
which
> has contained "Bode", in order to grasp a point I might have said to
myself
> "Bode", pronounced in my head as "Bode". I never had the slightest of
> problems on that silly account.
>
> Actually, I never thought very much of him. He's all so obvious. Never
used
> "Bode Plots". Managed very well without him in that respect. But whilst on
> that line of thought it can safely be said I have NEVER used a "Smith
Chart"
> either.
>
> Now cease squandering hard to come by bandwidth - pleeeeese !
>
> How do you pronounce "Smith" ? "Smythe" ?
> ----
> Reggie (with hard "G"'s)
>
>
>
>
>

4357. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 01:40:06 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C82D074.D2EA2CC1@att.net>
Source record: 147396

Here's one for everyone:

How does one "turn off" an antenna?

I think I know, but it will be interesting to compare answers . . .

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

CAM wrote:

> Here's one for you, Peter. If a dipole antenna is not being used,
> is it still a dipole antenna?
>
> > BTW... What does the dictionary say about "doublet"?
>
> Synonym for dipole.
>

4358. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:05:57 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <3C82D684.80B25FAC@adelphia.net>
Source record: 147438

You got it man! If a business person wants me to buy their products, I have th see what they are selling.

A large part of the problem is that business people often don't know much about the web, and cyber-geek designers tell them if they want to have a proper web presence, they have to have Flash animations, and browser specific crap that in reality has nothing to do with what they are selling.

When Flash was just starting, I went to a web page looking for skates. The page wouldn't load. Told me I had to download Flash. I did. I had to disconnect from the web, install, and reboot. Then it froze my computer. I rebooted and went back to the page. By this time I had decided that I wasn't going to be a customer, but I wanted to see what was so all fired important that Had to be presented in a Flash animation.

It was a short clip of a goalie sliding in front of a net. Of no real content whatsoever.

If I can't see it, I can't buy it.

Oops, sorry for the rant. 8^)

- Mike -

Wes Stewart wrote:

> "I too use an older version of Netscape and I'm damned tired of cybergeek web
> page designers that assume everyone has the latest software, a 1 GHz processor
> with 1 Gbyte RAM, a 35" monitor, a dedicated T1 line and wants to look at their
> product via streaming video.
>
> If these folks want me as a consumer, they are making a big mistake.

4359. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:20:38 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <3C82D9F6.38EDA814@adelphia.net>
Source record: 147439

Bill Nelson wrote:
>
> J. Harvey <JM001.Harvey@sympatico.ca> wrote:
>
> > Unlike the "1 GHz processor with 1 Gbyte RAM, a 35" monitor, a dedicated T1
> > line..."
> > ...IE 6.0 is a free download. I suspect that Nutscape updates are free too.
>
> But why should we be required to go through the sometimes several hours
> required to do the download on a slow modem?

Because, man - if you aren't on at *least* a DSL, you are just not worth
it! - Just Kidding!!

But I think some people really think this way.

Aside from what some people think, I wonder what the person who owns the
business thinks about the sizable number of people who won't buy from
them because they can't see their website?

- Mike -

> > Excuse me for putting it so simply: Old software sucks. New software
> > sometimes sucks too, but old software sucks more.
>
> > At work: Windows 95, etc. Pure hell. Constant crashes. Garbage.
> > At home: Windows XP, etc. Easy. Stable.
>
> Windows XP is full of security holes - as well as having many other
> problems.
>
> As far as browsers - Internet Explorer 4.x is more troublefree than
> the new IE 6.x software - which also is loaded with security holes.
>
> --
> Bill Nelson (billn@peak.org)

4360. Re: older browers (was W9INN Antennas web page is now ONLINE)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:22:56 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <3C82DA80.B6FB34BD@adelphia.net>
Source record: 147440

paul friedman wrote:
>
> Wes:
>
> I am not trying to talk you in to upgrading your software or your processor.
> You might find this interesting, however. I asked a company which is a
> fairly major vendor of out-sourced web design why they ignored older
> browsers. The answer was that folks with older browsers tend to NOT be
> on-line buyers <snip>

That is one very self-fulfilling prophecy. No see-no buy!

- Mike

4361. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:26:30 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C82DB56.7090603@sympatico.ca>
Source record: 147441

Hi Piero,

I was thinking more about the group of experimenters and gurus on this
side of the pond myself......

I built a simple one from tin foil and a cardboard mailing tube, but
without a dipole antenna to compare it with.................

But then again, if I could put up a proper dipole I wouldn't need a
compact antenna, right?

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

Pieï¿½ï¿½ IK2VTJ wrote:

> "VA3ATD" <a.duffy@sympatico.ca> ha scritto nel messaggio
> news:3C802787.8010400@sympatico.ca...
>
>>has anyone ever tried building one other then the people that make the
>>claims on it's great performance?
>>
>>
> Yes, I know people in Italy that made the 40 mt, 20 mt and trying the 160mt
> versions.
> Some say that it performs well, other say so and so and other are in
> trouble!
> The only sure fact is that the specifications are not sure, but if you are
> lucky you could have a medium performer short antenna, most for DX than for
> local qso.
> --
> 73 de IK2VTJ, Piero.
>
> http://www.qsl.net/ik2vtj
> http://www.ardf.it
>
> Togli / Remove
> NONVOGLIOSPAM
> dall'indirizzo / from address
>
>
>
>

4362. Re: W9INN Antennas web page is now ONLINE

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:32:08 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <D0Bg8.3289$7Y4.541707@news20.bellglobal.com>
Source record: 147443

"Mike Coslo" reported:
> Told me I had to download Flash. I did.

I have a 4-year old son. He likes to surf the kid's sites (www.Disney.com, etc.). Flash, Shockwave, QuickTime, you name it... ...all are 'must haves' around here. Have you seen some of those kid's sites !?!? Absolutely amazing. Makes our adult sites look pretty boring in comparison.

4363. Re: older browers (was W9INN Antennas web page is now ONLINE)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:33:46 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <3C82DD09.404A92E4@adelphia.net>
Source record: 147442

I wonder what the logic is that would prompt a business to purposely exclude so many customers.

With the dot.com world so shaken up it is surprising they would do this.

Kind of like gas stations refusing to sell premium gas. I mean really, there aren't that many people who use unleaded right?

- Mike -

Bill Nelson wrote:

> Well, they are wrong about some of us. I spent over $40,000 online last
> year. A close friend spent over $15000. Both of us use old browsers, and
> are not about to upgrade.
>
> None of my friends have IE 6x, nor do they plan on getting it.
>
> It is only the people who just MUST have the latest and greatest that
> upgrade or buy new machines. The vast majority of consumer PCs are old
> Pentiums with minimal RAM and the same software that came with it.

4364. Re: Coaxial choke and G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:39:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C82DE79.DF2E6952@eznec.com>
Source record: 147444

The characteristics of the balun -- or choke -- are determined entirely by the outside of the shield, not what's inside the coax. So the characteristic impedance of the cable has nothing to do with how the choke works.

Roy Lewallen, W7EL

kg4pss wrote:
>
> I just wasn't sure if the 75 ohm impedence caused any problems, or
> affected the number of turns, diameter, etc.
>
> Many thanks,
>
> Allen

4365. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:39:58 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C82DE2B.5EE@earthlink.net>
Source record: 147445
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

John Woodgate wrote:
>
> I read in sci.electronics.design that Rich Grise
> <richgrise@earthlink.net> wrote (in <3C815BF3.22E2@earthlink.net>) about
> 'HELP needed in understanding Bode Plots', on Sat, 2 Mar 2002:
> >I'm a iggorunt
> >Murrican, but I can go with "rhymes with abode, code, lode, mode, node,
> >rode" etc.
>
> Adobe? (;-)
> --
> Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk

Nah, that's not a real rhyme, (even though I at first pronounced
it "bow-dee," which I haven't heard anyone else report), because
the consonant in the final syllable is different. ;-)
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4366. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:45:48 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C82DF89.4BCE@earthlink.net>
Source record: 147446
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

John Woodgate wrote:
>
> A rallod?

Groan! Finally got it!

> AFAIK, in UK we pronounce the name to rhyme with 'bowed', but I suppose
> a bowed plot should have curvilinear axes.
>
> I really don't think there is a serious problem with the pronunciation
> of names, unless you are addressing the person him/herself, when it is
> courteous to be correct. It is also possible to over-egg the pudding;
> the classic example is 'Don Ki-hoe-tay'. The Don lived well before the
> lisping king of Spain whose impediment created modern Castilian
> pronunciation. He probably called himself 'Don Keyshot', as reflected in
> the modern French version of his name.
>
> Often, the only way to know how to pronounce a name is to ask the
> person or a close friend. Neville Thiele, he of the eponymous
> loudspeaker parameters, pronounces his name differently from both
> English and German conventions - he says 'teal'.

I knew a guy once whose name was Ken Thies, and he pronounced it
"Teeze."

Do you know that I was lurking in this group for about three months
before I realized that "Popelish" didn't have an "f" in the middle?

> If you insist on accuracy, try 'Bailly' (astronomer) and 'Erdo"s'
> (mathematician), where 'o"' is the best I can do in ASCII for an 'o'
> with a Hungarian umlaut.
> --
> Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk

--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4367. Re: DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:48:51 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C82E075.7D3AB4E4@icok.net>
Source record: 147447

marvin,
If the coax is 50 ohms, and the antenna input impedance
is about 75 ohms, you only have an SWR of about 1.5:1. No
big deal at all. So if you just have to use a balun, why
not use a 1:1 balun?
'Doc

4368. Stacking Dipoles?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 02:55:39 UTC
From: Screaming Skull <KG4IVT@hot.mail.spicedmeat.sucks.leave.me.alone.com>
Message-ID: <LmBg8.19593$3O2.6764652@typhoon.southeast.rr.com>
Source record: 147451

I have two identical pre-made dipoles for 10m. Would it be possible to "stack" (use both of them) off of the same coax? Would I need to use some sort of phasing harness and if so, how do I make it? What should the spacing be as well?

Any suggestions welcome, thanks!

4369. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 03:03:23 UTC
From: Roger Johansson <no.email@home.se>
Message-ID: <a5vfgr$adgur$1@ID-86336.news.dfncis.de>
Source record: 147373
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

> >Erd��s is spelled with �.
>
> >In the common windows western character table ö is an o with
two
> >dots over it.
>
> No. The o has a *Hungarian* umlaut , which is not the same as
'ö'....

In most book I have read, in several languages, is has been
written as ö, but you are maybe right in that it in hungarian is
written differently.
The hungarian letters are probably not commonly available in
typesetting of books in other languages. But I have seen it
written with a more strange umlaut too, that was probably the
letter you are talking about.

I think it is pronounced like ö anyway.

> >ö is pronounced like the first wovel
>
> Pardon?

Pardon what?
Never mind, you can probably understand that sentence from the
context if you think again. (There is an awful lot of newsgroups
involved here, I will not reply again unless really necessary)

> > in these english words:
> >first, sir, purly, colonel, heard, girl, curling..

and "herd"

so the sound ö can be spelled with i, u, o, ea, e.. in english.

Roger

4370. Re: What do you recommend for HF DX

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 03:03:23 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C82E3E2.C98F1782@icok.net>
Source record: 147448

Dick,
Since you already have what sounds like a fairly
good 'ground', pick a vertical antenna that you like
the looks of, and have at it. There really isn't
~that~ much difference between most of the commercial
verticals (except price). Putting it on your roof
will get you a few mile miles to the horizon, but also
will mean putting up some counterpoise(s), take your
pick.
Cecil won't like it, but if you have a good tuner,
it would probably 'smooth' things out if you can't get
everything tuned exactly as you want it. As far as the
balun goes, a vertical isn't a 'balanced' antenna, why
bother?
'Doc

4371. Re: Coaxial choke and G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 03:31:09 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C82EA7D.29BB5142@dialpoint.net>
Source record: 147449

You may want to rethink that statement. The choke affects the current flowing on the outside of the coil. It does nothing for the current inside the coax. That means that you add the equivilent of however many feet of 75 ohm coax you use for the choke to the transmission line. It will have the same effect as adding a stright piece of 75 ohm line and then putting some ferrite beads on the outside of the 75 ohm line.

de KU4PT

Roy Lewallen wrote:
>
> The characteristics of the balun -- or choke -- are determined entirely
> by the outside of the shield, not what's inside the coax. So the
> characteristic impedance of the cable has nothing to do with how the
> choke works.
>
> Roy Lewallen, W7EL
>
> kg4pss wrote:
> >
> > I just wasn't sure if the 75 ohm impedence caused any problems, or
> > affected the number of turns, diameter, etc.
> >
> > Many thanks,
> >
> > Allen

4372. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 03:48:12 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0203031948.bc4c1da@posting.google.com>
Source record: 147450

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:<Dxrg8.616$7Y4.120383@news20.bellglobal.com>...
...
> However, electromagnetic fields are a very useful 'mathematical fiction' (at
> least in the far field). But, the part about the near field and its
> 'Intensity' being proportional to '1/radius' (I=1/r in the near field) seems
> problematic.
>
> First, let's review the far field I=1/r^2 rule of thumb: The surface area
> of a sphere goes up as the square of the radius. That means that in the far
> field, where I=1/r^2, there is a constant energy at any radius (not per unit
> area, but summed over the entire surface area of the sphere). Obviously,
> the energy has to get from A to B by way of spheres (being spheres since c
> is constant). Therefore, the I=1/r^2 rule of thumb adheres to common sense
> conservation of energy. Therefore, the I=1/r^2 far field rule of thumb is
> okay.
>
> Now the near field: According to the I=1/r rule of thumb (in the near
> field), the energy contained in the various imaginary spheres is not
> constant. As we approach r=0, the energy in each sphere is dropping towards
> zero. This is because the surface area of the sphere is dropping towards
> zero much faster (SA=1/r^2) than the intensity (I=1/r) as we approach r=0.
>
> Perhaps the energy is hidden in "excess" E or H fields and not "registering"
> on the combined EM intensity ? This makes measurements in the near field
> very problematic ! Does your probe respond to E, or H, or both, or some mix
> depending on orientation, or "only EM" ?
>
> And nobody has yet explained the transition from the far field (I=1/r^2) to
> the near field (I=1/r). It obviously doesn't "shift gears" instantaneously.

> And the I=1/r rule of thumb doesn't hold water when r approaches zero since
> the intensity at r=0 is infinite (this also applies to I=1/r^2
> unfortunately).
>
> This whole 'near field' I=1/r thing is a mess. I=1/r is obviously wrong on
> many counts. It might be true at some particular radius, but that is
> useless as a rule of thumb.

Hi J,
Good observations about the energy on the surface of a sphere.

As far as I remember, no one yet has explained where the 1/r fall-off
in the near field has come from, but it keeps getting repeated like
it's fact. Maybe someone should post a reference so we can all read up

on it.

Let me try to expand on an answer to another post. Suppose that the power density is measured in the far-field region of an aperture antenna. As distance from the antenna decreases, but still in the far-field, the power density increases according to 1/r^2. I think everybody agrees on this. At some point, the PD does not increase as 1/r^2, but at a slightly smaller value. This makes sense since the PD can't continue to increase because it would become infinite.

There are 2 basic descriptions of what happens in the near field of an aperture, depending on the aperture shape. The basis for this is (as I recall) an IEEE paper by Hansen. I'll see if I can dig up a reference tomorrow in case people would like to track it down. From here on out, I'm going on memory, so bear with me.

For a rectangular aperture (with uniform distribution?), the near-field PD oscillates as the distance decreases. However, the envelope of the oscillations remains relatively constant with distance. A conservative answer is to use the envelope value to get the near-field PD. If more accuracy is needed, an effective near-field gain is obtained from the far-field gain by applying near-field correction factors. So for most of the near-field region, the (envelope) PD is constant, not 1/r. What happens when the distance from the aperture is extremely small is something I've never had to be concerned about, so I don't know what the variation is. There's probably a reactive field that has some other variation.

For a circular aperture (also with uniform distribution?), the PD also oscillates as the distance decreases, but the PD peaks at a certain distance from the aperture. The envelope PD decreases as the distance decreases (not increases as 1/r). I don't recall what the falloff rate would be.

The transition from near-field to far-field occurs because the beam is not fully formed in the near-field region. The oscillations are due to contributions from different parts of the aperture adding and then cancelling. This can be demonstrated using a simple flashlight.

I found the theory for the near-field from a short dipole in Kraus's Electromagnetics, p. 612 (2nd edition). The E-field is the sum of 3 terms, one in 1/r, one in 1/r^2, & one in 1/r^3; the H-field is the sum of 2 terms, one in 1/r and one in 1/r^2. Since E-field and H-field are both sums, neither of them fall off at 1/r. Power density would vary according to the cross product of these two quantities, but there's no way this product is going to be 1/r.

The transition for the dipole occurs when the E-field component in 1/r^2 equals the E-field component in 1/r. At larger distances, the component in 1/r^2 falls off much faster than the E-field component in 1/r and becomes negligible.

I agree - this whole I=1/r near-field thing is a mess. 73,
Bill N3WK

4373. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 04:06:28 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <t1s58ug9g6i02lq3q0ndo38qsooe2fmhh6@4ax.com>
Source record: 147452

On Sun, 03 Mar 2002 08:59:57 -0600, dan <danlx@execpc.com> wrote:

>Now that I have said allll of that, whew! It appears to me that if
>you want to pursue amateur radio with big arrays, then you need to
>complete your research before you buy, not after. Maybe there are
>areas that span 100's of miles where CCR's are the norm, I don't know
>personally of any, but what the heck do I know anyway.

The CC&R problem is bad. We're not just talking about ham radio here, but lots of things prohibited by these silly exercises in suburban conformance. The problem is that the folks making the Covenants and Restrictions often don't understand and don't care about the social consequences of what they're doing.

They're thinking that we should all live perfect lives in Duloc (as in the movie "Shrek") and by doing this they'll keep property values high. Only time will tell if they are successful. I have a stinking suspicion that some day urban blight will visit their neighborhoods too.

We can't all be big guns. One of the main features of this hobby is not to see how reliable we can be, but how little we can get away with.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

4374. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 04:23:36 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C82CE3E.75F2FDEF@att.net>
Source record: 147453

Reg, I have a vested interest in doing all I can to ensure that *you* among others on this newsgroup never receive a posting from me that contains a virus, worm or other unknown/unwanted visitor.

I paid money for my programs and take extra time with each posting to allow the program to do its thing.

Should I do less? No . . .

Do I wish that everyone did the same? Yes . . .

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Reg Edwards wrote:
>
> > Outgoing mail is certified Virus Free.
> > Checked by *** anti-virus system (http://www.*******).
>
> ==
>
> I've a feeling some people have a vested interest in the worsening
> proliferation of these bugs.

4375. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 04:23:39 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C82D086.6C29902F@att.net>
Source record: 147454

Here's one for everyone:

How does one "turn off" an antenna?

I think I know, but it will be interesting to compare answers . . .

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

CAM wrote:

> Here's one for you, Peter. If a dipole antenna is not being used,
> is it still a dipole antenna?
>
> > BTW... What does the dictionary say about "doublet"?
>
> Synonym for dipole.
>

4376. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 04:44:51 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C82FBC3.50B4ACB8@coqui.net>
Source record: 147455

"George, W5YR" wrote:
>
> Here's one for everyone:
>
> How does one "turn off" an antenna?
>
> I think I know, but it will be interesting to compare answers . . .

Hook it to a dummy load?
-Bill

4377. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 04:48:57 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u85v5p229e5j7f@corp.supernews.com>
Source record: 147456
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <Zqhg8.196086$A44.11813355@news2.calgary.shaw.ca>,
dhky@peeshaw.ca says...
>
>I always heard Bo-deh but I am Canadian, eh?

Bode's name is Germanic, and pronounced Bo-duh (with the "a" having very little emphasis, and sounding rather like the sound of the "u" at the start of "under").

This is the same as the proper way to pronounce "Porsche" (no, it does NOT rhyme with "porch", you infadels!! :)). German may be a pain to learn because of its complex grammar, but at least (unlike English) it obeys its own rules for pronounciation. The "e" on the end of any Germanic word is always sounded.

Bob.

4378. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 04:49:40 UTC
From: mcduffie@xactcom.net
Message-ID: <e6v58u892j6amep6o5m1lo06eq6c89if1i@4ax.com>
Source record: 147461

On Mon, 04 Mar 2002 04:23:39 GMT, "George, W5YR" <w5yr@att.net> wrote:

> How does one "turn off" an antenna?

Uh, moon it? It would work for me.

gm
--
There is no x in my ISPs domain name.

4379. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 04:50:16 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u85v887c2cha9b@corp.supernews.com>
Source record: 147457
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <a5t3jl$a0u4b$1@ID-124126.news.dfncis.de>,
g4fgq.regp@btinternet.com says...
>
>What's the matter with just "Bode" ?

The same thing that's wrong with pronouncing Porsche as "Porsh"; namely that
it's wrong.

Bob.

4380. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 04:51:29 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u85vah7go9ba@corp.supernews.com>
Source record: 147458
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <a5ubfn$a5ml0$1@ID-124126.news.dfncis.de>,
g4fgq.regp@btinternet.com says...
>
>John Woodgate said -
>
>> Only that we don't know from that how you pronounce it.
>==============================
>
>The whole lot of you are a set of time-wasting nut-cases, floundering about
>up to your chins in plots.
>
>It's perfectly obvious how I pronounce "Bode". It is the same as "Boad". I
>am an Englishman. And these newsgroups are conducted in the English
>language. The possibilty has never occurred to me there might be any other
>pronunciation !
>
>I have been designing filters and things, on and off, for nigh on 50 years.
>I have NEVER used "Bode" in conversation with any other person. No-one has
>EVER spoken "Bode" to me in the whole of my life. On occasions I have come
>across "Bode" in text books. When I have read to myself a line of text
which
>has contained "Bode", in order to grasp a point I might have said to myself
>"Bode", pronounced in my head as "Bode". I never had the slightest of
>problems on that silly account.
>
>Actually, I never thought very much of him. He's all so obvious. Never used
>"Bode Plots". Managed very well without him in that respect. But whilst on
>that line of thought it can safely be said I have NEVER used a "Smith
Chart"
>either.
>
>Now cease squandering hard to come by bandwidth - pleeeeese !
>
>How do you pronounce "Smith" ? "Smythe" ?
>----
>Reggie (with hard "G"'s)
>
>
>
>
>

4381. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 04:55:54 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u85viq1t3oev1d@corp.supernews.com>
Source record: 147459
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <a5ubfn$a5ml0$1@ID-124126.news.dfncis.de>,
g4fgq.regp@btinternet.com says...
>
>John Woodgate said -
>
>> Only that we don't know from that how you pronounce it.
>==============================
>
>The whole lot of you are a set of time-wasting nut-cases, floundering about
>up to your chins in plots.
>
>It's perfectly obvious how I pronounce "Bode". It is the same as "Boad". I
>am an Englishman. And these newsgroups are conducted in the English
>language. The possibilty has never occurred to me there might be any other
>pronunciation !

Just because you are an Englishman, doesn't mean that you have to go around mispronouncing people's names. Fact is that the english language (in spite of its vastly simplified grammar compared to other languages) is a bloody disaster when it comes to consistency of pronounciation. Show the guy some respect and don't use English language rules (as sloppy as they are) to pronounce names that are rooted in other languages.

Bob.

4382. Re: Stacking Dipoles?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 05:00:20 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C82FF2B.BC9511AD@tampabay.rr.com>
Source record: 147460

i think the easiest thing to do would be to go to your local CB shop and buy a CO-Phase harness it will give you the ablity to hook both dipoles to the same coax and space them a half wave or so apart

Screaming Skull wrote:

> I have two identical pre-made dipoles for 10m. Would it be possible to
> "stack" (use both of them) off of the same coax? Would I need to use some
> sort of phasing harness and if so, how do I make it? What should the
> spacing be as well?
>
> Any suggestions welcome, thanks!

4383. Re: Tesla coil transmitter/ antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 06:13:27 UTC
From: ab528@FreeNet.Carleton.CA
Message-ID: <a5v3a7$87k$1@freenet9.carleton.ca>
Source record: 147463

Mark Hall (vze2mhvc@bellatlantic.net) writes:
> As a science project in 8th grade I made a spark transmitter (a Model T spark
> coil with an LC network),

An ancient synapse fired while reading this post. At about the same age,
(and back in the days of B&W TV), I got bored with my electric train.
It had a transformer that took in 120 V and put out between 0 to 12 (?)
for the track. I also had a Morse code practice buzzer. Having read
some books on the history of radio, and a smattering of electrical stuff,
I wired the CPO buzzer to the low voltage side of the train transformer
and attached the 120V plug to the clothes line. I can't remember how
much of the AM band was smeared with noise, but the experiment ended
before any charges were laid.

Kids!

4384. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 06:19:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C8311F1.BBC72E57@eznec.com>
Source record: 147462

Many of the common "viruses" (technically, worms) being sent today -- including the one Reg's machine was recently infected with -- are being sent via paths that completely bypass programs like Norton Anti-Virus. NAV checks only the outgoing email that you intentionally send, and downloads from web sites. The common worms send email messages without using the browser, and without your knowledge -- and without NAV's knowledge. And your system can contract them from places other than the email and web sites that NAV monitors. If you don't have a firewall, a hacker could get into your system and implant a worm without you or your anti-virus program being the wiser. That worm can then send infected emails to others without using your browser, again without the anti-virus program knowing about it. There are a lot of firewalls available, and installing one will go a long way in preventing a worm or other pernicious software from being installed on your machine. Zone Alarm is one of the very few that will also spot outgoing messages being sent by a worm, should one ever get onto your machine. But Norton Anti-Virus doesn't prevent a worm from being planted by a hacker, or notify you when the worm sends infected email to others.

Roy Lewallen, W7EL

"George, W5YR" wrote:
>
> Reg, I have a vested interest in doing all I can to ensure that *you* among
> others on this newsgroup never receive a posting from me that contains a
> virus, worm or other unknown/unwanted visitor.
>
> I paid money for my programs and take extra time with each posting to allow
> the program to do its thing.
>
> Should I do less? No . . .
>
> Do I wish that everyone did the same? Yes . . .
>
> 72/73/oo, George W5YR - the Yellow Rose of Texas
> Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
> Amateur Radio W5YR, in the 56th year and it just keeps getting better!
> QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
> Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437
>
> All outgoing email virus-checked by Norton Anti-Virus 2002
>
> Reg Edwards wrote:
> >
> > > Outgoing mail is certified Virus Free.

> > > Checked by *** anti-virus system (http://www.*******).
> >
> > ==
> >
> > I've a feeling some people have a vested interest in the worsening
> > proliferation of these bugs.

4385. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 06:54:00 UTC
From: fake_dsz46@hotmail.com
Message-ID: <3c8319af.206037064@news.dtccom.net>
Source record: 147374
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

>>I can't restrain myself.
>>

Reminds me of those three blondes that froze to death at the drive-in
theater.

They went to see the movie "Closed For The Winter."

4386. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 07:08:25 UTC
From: Kevin Aylward <kevin@anasoft.co.uk>
Message-ID: <Q3Fg8.90432$Ah1.12371272@news2-win.server.ntlworld.com>
Source record: 147465
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"John Woodgate" <jmw@jmwa.demon.co.uk> wrote in message
news:GISUULBfSqg8EwoV@jmwa.demon.co.uk...

> >English can be a very confusing language to other nationalities
> >because the same sound can be spelled in many different ways,
> >and the same letter can be pronounced in many different ways in
> >different words.
> >
> >If Bailly is a french name, and it looks like that, it should
> >probably be pronounced Bay-ee, with the tension on the ee and
> >also with a raised tone on the ee.
>
> Yes. Actually 'buy-ee' (or even 'Bye-ee') is a bit nearer.

I assume that the pronunciation of my name is rather obvious:-)

Kevin Aylward , Warden of the Kings Ale
kevin@anasoft.co.uk
http://www.anasoft.co.uk
SuperSpice, a very affordable Mixed-Mode
Windows Simulator with Schematic Capture,
Waveform Display, FFT's and Filter Design.

4387. Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 07:31:27 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C832278.1F98@earthlink.net>
Source record: 147466
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Bob Wilson wrote:
>
> In article <Zqhg8.196086$A44.11813355@news2.calgary.shaw.ca>,
> dhky@peeshaw.ca says...
> >
> >I always heard Bo-deh but I am Canadian, eh?
>
> Bode's name is Germanic, and pronounced Bo-duh (with the "a" having
> very little emphasis, and sounding rather like the sound of the "u" at the
> start of "under").
>
> This is the same as the proper way to pronounce "Porsche" (no, it does NOT
> rhyme with "porch", you infadels!! :)). German may be a pain to learn
> because of its complex grammar, but at least (unlike English) it obeys its
> own rules for pronounciation. The "e" on the end of any Germanic word is
> always sounded.
>
> Bob.

I can't restrain myself.

Two semi-retired professors were sitting on the porch having a couple
of brewskis. (This could also be referred to as a "verandah" or "deck")
- it was a fairly sizeable porch, encompassing three sides of the house,
and as it happened, it was badly in need of a paint job. The two old
fellows were discussing what a pain in the neck it would be to paint
it themselves, and how expensive it would be to hire pros, when
suddenly a young blonde shows up. "Hi! I'm LuAnne, and I'm working
my way through college! Got any work for me?" Well, this is too good
to be true. The professor says, "I'll give you fifty bucks to paint
my porch." She says "Sounds great!" He says, "Well, all the paint
and brushes and stuff are over by the garage back there." This is
fantastic! He's just saved over a thousand dollars! And made a
young bimbo happy! But after about an hour or two, they notice
that she hasn't come around the corner painting the porch, so
they (the professor and his friend) start to get a little concerned.
While they're discussing this, LuAnne shows up, paint-stained,
with a little bead of sweat at her temple, saying, "All Done!
And I had so much paint left over I gave it two coats!" The two
old guys look at each other, wondering, "What the F?" And LuAnne
says, "But, you made a mistake. It's not a porch, it's a Ferrari."
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4388. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 07:35:42 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C832380.7A0@earthlink.net>
Source record: 147467
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Bob Wilson wrote:
>
> In article <a5t3jl$a0u4b$1@ID-124126.news.dfncis.de>,
> g4fgq.regp@btinternet.com says...
> >
> >What's the matter with just "Bode" ?
>
> The same thing that's wrong with pronouncing Porsche as "Porsh"; namely that
> it's wrong.
>
> Bob.

So, it'd be something like trying to pronounce "Boad," but getting
punched
in the stomach just as you're finishing? ;-)
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4389. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 07:38:07 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C832411.28C0@earthlink.net>
Source record: 147468
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Bob Wilson wrote:
...
> Just because you are an Englishman, doesn't mean that you have to go around
> mispronouncing people's names. Fact is that the english language (in spite
> of its vastly simplified grammar compared to other languages) is a bloody
> disaster when it comes to consistency of pronounciation. Show the guy some
> respect and don't use English language rules (as sloppy as they are) to
> pronounce names that are rooted in other languages.
>
> Bob.

But do you have any idea of the potential jokes that exude from the
pronunciation "Bow-duh?"
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4390. Re: DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 07:41:26 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8699932qhb7f0@corp.supernews.com>
Source record: 147369

Many dipoles do use a balun instead of a ladder line.
And, contrary to what some might tell you, it is possible to use 50 ohm coax direct to a dipole.
I did so in the past with an item called a trick stick, which was a half wave dipole usable for 10 meters, and even 6 IIRC.
It could be put up horizontal or vertical, and came up with a quite acceptable SWR reading using only some RG8 coax.

"marvin rosen" <raghead@worldnet.att.net> wrote in message news:YXyg8.12209$gK2.898456@bgtnsc04-news.ops.worldnet.att.net...
> If the center of a dipole is 72-75 ohms why can't a 6:1 balun be used (with
> coax) in place of 450 ohm ladder line? a tuner would also be used in the
> shack.
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02
>
>

4391. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 08:33:32 UTC
From: Don Pearce <donald@pearce.uk.com>
Message-ID: <l3c68u4n8lml7tnn7i0aoovqlbp337q913@4ax.com>
Source record: 147370
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Mon, 04 Mar 2002 07:31:27 GMT, Rich Grise <richgrise@earthlink.net>
wrote:

>Bob Wilson wrote:
>>
>> In article <Zqhg8.196086$A44.11813355@news2.calgary.shaw.ca>,
>> dhky@peeshaw.ca says...
>> >
>> >I always heard Bo-deh but I am Canadian, eh?
>>
>> Bode's name is Germanic, and pronounced Bo-duh (with the "a" having
>> very little emphasis, and sounding rather like the sound of the "u" at the
>> start of "under").
>>
>> This is the same as the proper way to pronounce "Porsche" (no, it does NOT
>> rhyme with "porch", you infadels!! :)). German may be a pain to learn
>> because of its complex grammar, but at least (unlike English) it obeys its
>> own rules for pronounciation. The "e" on the end of any Germanic word is
>> always sounded.
>>
>> Bob.
>
>I can't restrain myself.
>
>Two semi-retired professors were sitting on the porch having a couple
>of brewskis. (This could also be referred to as a "verandah" or "deck")
>- it was a fairly sizeable porch, encompassing three sides of the house,
>and as it happened, it was badly in need of a paint job. The two old
>fellows were discussing what a pain in the neck it would be to paint
>it themselves, and how expensive it would be to hire pros, when
>suddenly a young blonde shows up. "Hi! I'm LuAnne, and I'm working
>my way through college! Got any work for me?" Well, this is too good
>to be true. The professor says, "I'll give you fifty bucks to paint
>my porch." She says "Sounds great!" He says, "Well, all the paint
>and brushes and stuff are over by the garage back there." This is
>fantastic! He's just saved over a thousand dollars! And made a
>young bimbo happy! But after about an hour or two, they notice
>that she hasn't come around the corner painting the porch, so
>they (the professor and his friend) start to get a little concerned.
>While they're discussing this, LuAnne shows up, paint-stained,
>with a little bead of sweat at her temple, saying, "All Done!
>And I had so much paint left over I gave it two coats!" The two
>old guys look at each other, wondering, "What the F?" And LuAnne

>says, "But, you made a mistake. It's not a porch, it's a Ferrari."

Would they be related to the two Indian chaps on a bus in Bradford?
They were discussing spelling. One said "It is Woom, spelled W O O M".
"No, no", said the other. It is "Woomp - W O O M P".
At this point the Englishman in the seat behind leaned forward and
said, "Excuse me for interrupting, but it is actually Womb, spelled "W
O M B".
One of the Indians turned round to him and said, "Sir, I doubt whether
you have even seen an elephant, let alone heard one fart".

d

_____
Telecommunications consultant
http://www.pearce.uk.com

4392. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 09:32:49 UTC
From: Roger Johansson <no.email@home.se>
Message-ID: <a6031d$al3jf$1@ID-86336.news.dfncis.de>
Source record: 147404
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"John Woodgate" <jmw@jmwa.demon.co.uk> wrote:

> >I think it is pronounced like ö anyway.
>
> So did I, but it isn't. According to 'The Man Who Loved Only Numbers', a
> biographical sketch by Paul Hoffmann, ISBN 1-85702-829-5, Paul Erdo"s
> pronounced his name 'Air-dish'.

Such a vowel as ö when in a non-tensioned position loose a lot of its special character and the name Erdös might well be heard and written by an american as Air-dish if you do not stress the i-sound (ee) in dish either. So I understand how this confusion has come up.
It could just as well be written phonetically as Air-dsh, but that would confuse some people when there is no vowel at all there.

I am pretty sure though that when stressed the ö in hungarian is very much like the ö sound in other languages, otherwise it would not be translated with ö.

Roger

4393. Re: Stacking Dipoles?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 09:39:22 UTC
From: Michel de Ruiter <pd1aiw@amsat.org>
Message-ID: <3c834078$0$16802$4d4ebb8e@news.nl.uu.net>
Source record: 147372

Yes it is possible with both antenna`s on a full wave length from each other (vertical?) ! You will get 3 dB gain. You need to use 75 ohm coax and the length of that coax must be 3/4 wave lengt to each site. Connect your feedline in the middele and you are on!

Correct me if I am wrong!

Michel

"Screaming Skull" <KG4IVT@hot.mail.spicedmeat.sucks.leave.me.alone.com>
schreef in bericht news:LmBg8.19593$3O2.6764652@typhoon.southeast.rr.com...
> I have two identical pre-made dipoles for 10m. Would it be possible to
> "stack" (use both of them) off of the same coax? Would I need to use some
> sort of phasing harness and if so, how do I make it? What should the
> spacing be as well?
>
> Any suggestions welcome, thanks!
>
>

4394. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 10:44:34 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <cpi68ugd1q0ba3m8rdscosre96up6tuu3b@4ax.com>
Source record: 147375

On Mon, 04 Mar 2002 00:28:28 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi Piero,
>Piero, Piero..... I told you personnally a lot of things....please try to
>build one with my help...than you will reach those saying it perform very
>well....when well build and well tuned the eh antenna meet all claims we
>did.
>ALL.
>steve Ik5IIR
>
>--
>Voglia gradire i nostri pii¿½ cordiali e distinti saluti
>
> Stefano Galastri
>direzione tecnica

Hi Stefano,

In fact you have failed to demonstrate any claims to anyone here.

This could only arise from one of several conditions:
1. you cannot yourself build an eh antenna;
II. you cannot yourself tune an eh antenna;
or, more likely;
c. your claims are false.

Isn't there a better spokesman among your group that could present us
evidence that they could
A. build an eh antenna;
2. tune an eh antenna;
iiv. present unbiased data that show your claims are valid?

73's
Richard Clark, KB7QHC

4395. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 11:05:52 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C8354C6.9B3@earthlink.net>
Source record: 147376
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Don Pearce wrote:
...
> Would they be related to the two Indian chaps on a bus in Bradford?
> They were discussing spelling. One said "It is Woom, spelled W O O M".
> "No, no", said the other. It is "Woomp - W O O M P".
> At this point the Englishman in the seat behind leaned forward and
> said, "Excuse me for interrupting, but it is actually Womb, spelled "W
> O M B".
> One of the Indians turned round to him and said, "Sir, I doubt whether
> you have even seen an elephant, let alone heard one fart".

What is it about some jokes that, even though they're 20 years old,
and you've heard them three times, and you can see it coming a mile
away, they still make one LOL? :-) (maybe seeing it coming contributes
to the laugh. :-))

I made one up:

How many white guys does it take to replace a light bulb?

v

v

v

v

One.
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4396. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 11:15:36 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C83570F.144F@earthlink.net>
Source record: 147377
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

John Woodgate wrote:
>
> I read in sci.electronics.design that Roger Johansson <no.email@home.se>
...
> >If Bailly is a french name, and it looks like that, it should
> >probably be pronounced Bay-ee, with the tension on the ee and
> >also with a raised tone on the ee.
>
> Yes. Actually 'buy-ee' (or even 'Bye-ee') is a bit nearer.
> --
> Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk

There's one example off the top of my head, and I think there's
another, but can't think of it, but anyway, Pierre, SD is pronounced
"Peer," not "Pee-air." Of course, there's the eternal argument between
"Saint Loo-iss" and "Saint Loo-ee," and god knows how many possible
pronunciations of "New Orleans." Anybody recall that other famous
example?
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4397. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 11:17:45 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C835790.6597@earthlink.net>
Source record: 147378
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Roger Johansson wrote:

> > >ö is pronounced like the first wovel
> >
> > Pardon?
>
> Pardon what?
> Roger

Probably, "What's a 'wovel?'"
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4398. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 12:10:44 UTC
From: Nicolas Matringe <nicolas.matringe@ipricot.com>
Message-ID: <3C836444.FB00F856@ipricot.com>
Source record: 147380
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Rich Grise wrote:
>
>[...] god knows how many possible pronunciations of "New
> Orleans." Anybody recall that other famous example?

Just call it "Lar Noovayl Orlay-arn" (hope I got the phonetic spelling right ;o)

Didn't read the whole thread but I'll have a look, sounds funny :o)
--
Nicolas MATRINGE IPricot European Headquarters
Conception electronique 10-12 Avenue de Verdun
Tel +33 1 46 52 53 11 F-92250 LA GARENNE-COLOMBES - FRANCE
Fax +33 1 46 52 53 02 http://www.IPricot.com/

4399. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 12:15:44 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <ZkpTvpAwV2g8EwI8@jmwa.demon.co.uk>
Source record: 147386
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Roger Johansson <no.email@home.se>
wrote (in <a5vfgr$adgur$1@ID-86336.news.dfncis.de>) about 'HELP needed
in understanding Bode Plots', on Mon, 4 Mar 2002:

>I think it is pronounced like ï¿½ anyway.

So did I, but it isn't. According to 'The Man Who Loved Only Numbers', a
biographical sketch by Paul Hoffmann, ISBN 1-85702-829-5, Paul Erdo"s
pronounced his name 'Air-dish'.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4400. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 12:17:26 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <aEQT3vAWX2g8EwLj@jmwa.demon.co.uk>
Source record: 147387
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Rich Grise
<richgrise@earthlink.net> wrote (in <3C835790.6597@earthlink.net>) about
'HELP needed in understanding Bode Plots', on Mon, 4 Mar 2002:
>Roger Johansson wrote:
>
>> > >ï¿½ is pronounced like the first wovel
>> >
>> > Pardon?
>>
>> Pardon what?
>> Roger
>
>Probably, "What's a 'wovel?'"

I didn't notice that RJ was posting from .se and it was an apposite
frolic in a sentence on pronunciation.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4401. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 12:19:49 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <T0MR7wAIZ2g8EwJr@jmwa.demon.co.uk>
Source record: 147385
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Kevin Aylward
<kevin@anasoft.co.uk> wrote (in <Q3Fg8.90432$Ah1.12371272@news2-win.serv
er.ntlworld.com>) about 'HELP needed in understanding Bode Plots', on
Mon, 4 Mar 2002:
>I assume that the pronunciation of my name is rather obvious:-)

Yes, 'Kewin ï¿½lfard' in several countries!
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4402. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 12:24:12 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <WkeQf0Asd2g8EwIA@jmwa.demon.co.uk>
Source record: 147384
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Rich Grise
<richgrise@earthlink.net> wrote (in <3C83570F.144F@earthlink.net>) about
'HELP needed in understanding Bode Plots', on Mon, 4 Mar 2002:
>There's one example off the top of my head, and I think there's
>another, but can't think of it, but anyway, Pierre, SD is pronounced
>"Peer," not "Pee-air." Of course, there's the eternal argument between
>"Saint Loo-iss" and "Saint Loo-ee," and god knows how many possible
>pronunciations of "New Orleans." Anybody recall that other famous
>example?

Cairo, USA, IIRC, but I don't know which of the four such places listed
in my atlas, is 'Kay-ro', not 'Kai-ro'. But we were really discussing
the names of people.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4403. Re: DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 12:24:43 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203040424.ad7a741@posting.google.com>
Source record: 147381

"marvin rosen" <raghead@worldnet.att.net> wrote in message
news:<YXyg8.12209$gK2.898456@bgtnsc04-news.ops.worldnet.att.net>...
> If the center of a dipole is 72-75 ohms why can't a 6:1 balun be used (with
> coax) in place of 450 ohm ladder line? a tuner would also be used in the
> shack.

The impedance is only 50-75 ohms on the design frequency. "1/2 wave".
In that case,only a 1:1 balun is needed. If you use the antenna on
other bands with coax,balun,and tuner, the losses will be high on most
other bands. IE: If you use an 80m dipole on 40m, the impedance will
be very high. Even with a 6:1 balun the losses will be high using
coax. MK

4404. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 12:27:05 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <uKJg8.4258$7Y4.749369@news20.bellglobal.com>
Source record: 147382
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Rich Grise"
> Anybody recall that other famous example?

Beijing vs. Peking ?

4405. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 13:21:34 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203040521.26c35c79@posting.google.com>
Source record: 147383

Anyone who has any training in navigation, such as pilots, knows this.
As I recall, in the Los Angeles area it would be at least 60 degrees
off!

Another good source is Aviation Sectional Charts put out by the FAA.
Don't remember what they are called in Canada.

I learned a memory aid when getting my pilots license: "East is
Least, West is Best. Rule is True when you start from True".

Mathematically this can be stated: Magnetic Bearing = True Bearing -
Easterly Deviation, or Magnetic Bearing = True Bearing + Westerly
Deviation.

I leave it as an excercies for the reader as to how to apply this to
aiming an antenna.

me <inspector3985@yahoo.com> wrote in message
news:<ar838u4kvgpkl5d8rthbullkc8k6avqkv2@4ax.com>...
> This may be of interest to people setting up antennas using a compass.
> Magnetic North and True North are not always the same. If you were
> calibrating a beam heading using magnetic north as a reference on your
> readout you could be in error. The declinatin or correction factor can
> be significant. A case in point is my location in Nova Scotia. True
> North and Magnetic North are different by 20 degrees! If you wish to
> know the declination for your particular part of the world a good
> place to visit is http://www.geolab.nrcan.gc.ca/geomag/e_cgrf.html
> Hope this is of interest to antenna buffs. Thanks for reading.
> Scott VE1AFN.>

4406. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 13:26:16 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <3C836DD2.A0333D4B@austininstruments.com>
Source record: 147388
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

This Native American girl gets on a bus in Atlanta, and when she sits
down this Black girl sitting in front of her turns around and says,
"What you is?"
"Navajo", she replies, "and you?"
"Geo'gia ho." she answers.

John Fields
Professional circuit designer

4407. Re: Stacking Dipoles?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 13:38:35 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C8377D8.BA5DFF1A@gte.net>
Source record: 147389

Michel de Ruiter wrote:

> Yes it is possible with both antenna`s on a full wave length from each other
> (vertical?) ! You will get 3 dB gain. You need to use 75 ohm coax and the
> length of that coax must be 3/4 wave lengt to each site. Connect your
> feedline in the middele and you are on!
>
> Correct me if I am wrong!
>
> Michel

What is it you are trying to accomplish? There are a number of ways to combine the antennas- and yes, you can achieve some gain- but it will be dorectional, so w/o the means to rotate it, you will lose in other directions. It would probably be easier to put up the 2nd wire as a reflector or director- w/ proper spacing you can maintain 50 Ohms, get directionality and have to feed just the one element.
re: the harness- the lenght must be adjusted to take into account the V.F. of the coax you decide to use.
Dale

4408. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 13:50:36 UTC
From: mike.luther@ziplog.com
Message-ID: <u86utcoqp8hu8b@corp.supernews.com>
Source record: 147390

In <3C8311F1.BBC72E57@eznec.com>, Roy Lewallen <w7el@eznec.com> writes:

Thanks for taking the time to explain it nicely, Roy ..

>Many of the common "viruses" (technically, worms) being sent today --

> ... There are a lot of firewalls
>available, and installing one will go a long way in preventing a worm or
>other pernicious software from being installed on your machine. Zone
>Alarm is one of the very few that will also spot outgoing messages being
>sent by a worm, should one ever get onto your machine. But Norton
>Anti-Virus doesn't prevent a worm from being planted by a hacker, or
>notify you when the worm sends infected email to others.

>Roy Lewallen, W7EL

Even on OS/2 I use a hardware firewall as well as a software firewall
for better log and trace advantage .. plus checking software, just to do
as good a job as I can from even passing anything on through the system
or the number of BBS operations the site hosts as well.

For any of you that use OS/2 you should also be careful how you
implement NETBIOS over TCP/IP as a protocol! Although OS/2 makes you
decide exactly what and how you do everything on install, rather than
assuming you want it, there are some otherwise ought to be gotcha's that
have vectors to you with that one. On installation of OS/2 even as PEER
LAN applications with no formal server .. please change your ADMIN name
and password from the vanilla install one. As well, the vanilla install
leaves the GUEST user as one with no password!

The disadvantages of running OS/2 even with no hardware NAT and firewall
and a software firewall alone can be seen with the following.

NETBIOS over TCP/IP was deliberately designed with the idea that a
standardized communications interchange can be made between computers
which have vastly different operating systems! It was the intent! Yet
. lookee here!

An example of oblique entry with NETBIOS over TCP/IP here with OS/2 is
the MIRANDA.A W32 virus which can use Port 137/138 and thence Port 139
to compromise a box on a one in xty-xty chance that a corruption in it
will think that it was successful at creating a new GUEST with ADMIN
priviledges when in reality, GUEST with no password is already on the
box! As one of the very few pest vectors, that can actually let this
one begin to download tons of files to that box which fill the thing up
with at least one in every directory and subdirectory in the found hard
drive partition!

No, they won't execute under native OS/2! And no, JAVA in OS/2 is still restricted to better confinement in the sandbox! But, they are still there! They have to be cleaned out which takes time and the tools such as NORMAN offer (Not NORTON for OS/2! It exists, but it is hard and expensive to come by!)

It is darned well possible to write viruses for OS/2, just seems to be not 'productive' enough for those with the ability to do so and much harder in many ways.

So as Roy so aptly put it .. do what he says. There is almost no way in this world of modern connectivity to minimize your risk without that approach and it is a VERY real risk. That, even if all you do is have your system pass down junk to everyone else, which .. at least in WIN32, something like ZONEALARM will help you to see.

It will get a lot worse. Ever considered how our ham techniques like spread spectrum RF hopping could be adapted to site hopping using the entire internet as the "spectrum"? (!)

It isn't so important that you have a scarlet letter "A" on your forehead, folks. It is how you got it that counts....

--> Sleep well; OS/2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

4409. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 14:31:44 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <kzLg8.14258$106.1058933@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147398

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:Dxrg8.616$7Y4.120383@news20.bellglobal.com...

<snip>
>
> And nobody has yet explained the transition from the far field (I=1/r^2)
to
> the near field (I=1/r). It obviously doesn't "shift gears"
instantaneously.
>

My 2 cents worth::

In the far-field, the EM field components, E and H, decline as a function of 1/r. The power contained in the EM wave, which is a function of E x H*, declines as a function of 1/r^2. In the near field, the E and H fields decline as a function of 1/r, 1/r^2 and 1/r^3. Energy decline in the near field occurs at a rate much quicker than 1/r.

The conventions or definitions of near-field and far-field are primarily based on the mathematical study of the E- and H-field components of small antennas, the infinitesimal dipole and loop being prime examples.

In discussing the EM field components, it is important to recognize that an electromagnetic wave is described by the amplitude, phase AND polarization of both the electric field and the magnetic field. The boundaries between the near and far-fields are not instantaneous. They are simply defined as a function of which field components are dominant as a function of distance, r, away from the antenna. They can also be defined as a function of whether or not time average power flow occurs in the radial direction.

In the far field, where kr >> 1 (k = 2 pi/lambda), the dominant E- and H-fields will primarily be a function of 1/r. For a dipole antenna, the dominant E-field polarization is E-theta (parallel to the dipole) and the dominant H-field polarization is H-phi (perpendicular to the dipole). In the far-field, the dominant E- and H-fields will be orthogonal to one another and orthogonal to the direction of energy propagation.

In general, there are three field components associated with the electric and magnetic fields. These are defined using the spherical coordinate system. These field components are defined as E-theta and H-theta, E-phi and H-phi, and finally, E-radial and H-radial. For the infinitesimal dipole, the electric field has a radial component and a theta component. E-phi = 0. The magnetic field has a phi component. H-theta and H-radial = 0.

E-radial is a function of 1/r^2 and 1/r^3. E-theta is a function of 1/r, 1/r^2 and 1/r^3. The near field and far field boundaries are a function of which terms (1/r, 1/r^2 and 1/r^3) are dominant as a function of distance r from the antenna.

In the reactive near field, (kr << 1), both the E-radial and E-theta fields are primarily defined by the term 1/r^3. E-theta and E-phi are in time phase but they are in phase quadrature with the H-field so there is no time average power flow.

In the intermediate near field (kr > 1), E-radial is primarily defined by the term 1/r^2 and E-theta is primarily defined by the term 1/r. In this region, E-theta and H-phi begin to approach time phase and radial radiation begins. However, E-radial still exists. The radiation patterns of the antenna will differ as a function of distance from the antenna.

In the far-field (kr >> 1), E-radial goes to zero and E-theta is dominant and a function of 1/r. E-theta and H-phi are in time phase and radial power flow occurs. The radiation patterns no longer vary as a function of distance.

For most practical antennas, the field regions are separated into three regions - the reactive near field, the radiating near field and the far field. The boundaries of these regions are approximated as a function of the antenna size. The reactive near field exists (approximately) from r = 0 to r = 0.62 Sqrt(D^3/lambda). D is the maximum dimension of the antenna. The radiating near field exists between r = 0.62 Sqrt(D^3/lambda) and r = 2 D^2/lambda. The far-field exists beyond 2 D^2/lambda.

Steve VE9SRB

4410. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 14:32:47 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <jALg8.14260$106.1058719@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147399

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:Dxrg8.616$7Y4.120383@news20.bellglobal.com...

<snip>
>
> And nobody has yet explained the transition from the far field (I=1/r^2)
to
> the near field (I=1/r). It obviously doesn't "shift gears"
instantaneously.
>

My 2 cents worth::

In the far-field, the EM field components, E and H, decline as a function of 1/r. The power contained in the EM wave, which is a function of E x H*, declines as a function of 1/r^2. In the near field, the E and H fields decline as a function of 1/r, 1/r^2 and 1/r^3. Energy decline in the near field occurs at a rate much quicker than 1/r.

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E-radial is a function of 1/r^2 and 1/r^3. E-theta is a function of 1/r, 1/r^2 and 1/r^3. The near field and far field boundaries are a function of which terms (1/r, 1/r^2 and 1/r^3) are dominant as a function of distance r from the antenna.

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In the far-field (kr >> 1), E-radial goes to zero and E-theta is dominant and a function of 1/r. E-theta and H-phi are in time phase and radial power flow occurs. The radiation patterns no longer vary as a function of distance.

For most practical antennas, the field regions are separated into three regions - the reactive near field, the radiating near field and the far field. The boundaries of these regions are approximated as a function of the antenna size. The reactive near field exists (approximately) from r = 0 to r = 0.62 Sqrt(D^3/lambda). D is the maximum dimension of the antenna. The radiating near field exists between r = 0.62 Sqrt(D^3/lambda) and r = 2 D^2/lambda. The far-field exists beyond 2 D^2/lambda.

Steve VE9SRB

4411. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 14:33:30 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <pIODPBwfIgnCUrXbA3jWYuMon8lr@4ax.com>
Source record: 147391

Roy Lewallen <w7el@eznec.com> wrote:

>sent by a worm, should one ever get onto your machine. But Norton
>Anti-Virus doesn't prevent a worm from being planted by a hacker, or
>notify you when the worm sends infected email to others.

But, this applies mainly to the Microsoft e-mailer that accepts macros? (I use Eudora for e-mail.)

Bob
k5qwg
>
>Roy Lewallen, W7EL
>

4412. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 14:33:30 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <_ALg8.13918$gK2.996028@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147397

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:Dxrg8.616$7Y4.120383@news20.bellglobal.com...

<snip>
>
> And nobody has yet explained the transition from the far field (I=1/r^2)
to
> the near field (I=1/r). It obviously doesn't "shift gears"
instantaneously.
>

My 2 cents worth::

In the far-field, the EM field components, E and H, decline as a function of 1/r. The power contained in the EM wave, which is a function of E x H*, declines as a function of 1/r^2. In the near field, the E and H fields decline as a function of 1/r, 1/r^2 and 1/r^3. Energy decline in the near field occurs at a rate much quicker than 1/r.

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Steve VE9SRB

4413. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 14:36:38 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <WDLg8.13929$gK2.996019@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147400

"VE9SRB" <srbest@att.net> wrote in message
news:_ALg8.13918$gK2.996028@bgtnsc04-news.ops.worldnet.att.net...
>
>

Sorry for the three posts. Outlook Express problems again.

Steve

4414. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 14:41:52 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C8387B0.F567345B@crosslink.net>
Source record: 147402

Jake Brodsky wrote:
>
> ...But who says that to have a good experience in ham radio you must
> have a large beam antenna for HF on a tall tower with slopers in
> various directions?

Second that! For some yet unknown reason (water in cap's, arcing coax,
???) the SWR on the XYL's Butternut skyrocketed and smoked the tubes in
her amp just before the contest this past weekend. So I jury-rigged an
inverted V using two of the Butternut's 40M radials and she worked
something like 150 (IIRC) stations worldwide on 20M and < 100W in two
4-hour sessions. Must prove sumpin .. ;o)
KA3DWW

4415. Re: how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 14:44:20 UTC
From: Bill Ogden <ogden@us.ibm.com>
Message-ID: <3C838844.F57F5F08@us.ibm.com>
Source record: 147401

I use the B&D lawn edger and it works fairly well, even in soil with
LOTS of rocks.
The process is a bit messy and flying rocks can cause a few problems,
but it works.

Bill Ogden
W2WO

> Rick Littlefield had suggested using a lawn edger -- a cheap gizmo
> made by Black and Decker for edging between lawn and sidewalks,
> etc.
>
>

4416. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 15:06:33 UTC
From: John Popelish <jpopelish@rica.net>
Message-ID: <3C838D79.80AADA5A@rica.net>
Source record: 147403
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Rich Grise wrote:
(snip)
> I knew a guy once whose name was Ken Thies, and he pronounced it
> "Teeze."
>
> Do you know that I was lurking in this group for about three months
> before I realized that "Popelish" didn't have an "f" in the middle?

Don't feel too bad about that. Most people guess that my name is pronounced with two syllables: pope' lish, but my family uses 3 syllables: poe pel' lish. In grade school, my nick name was propeller because people who heard it sometimes wanted to repeat it with an r in it.

I think the immigration people screwed the spelling up when my grandfather arrived in the US, but he brought the pronunciation with him. It may have been better to have spelled it ending in ch. My daughter just discovered a very similar word being used as a label for a religious heretic group in the dark ages called the Cathars or Popelicants. Perhaps it is connected to them.

--
John Popelish

4417. Re: goniometer [power line noise cancel] device

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 15:11:25 UTC
From: mcduffie@xactcom.net
Message-ID: <52378uc6mnh2p6odpge0jmg0j4046a3446@4ax.com>
Source record: 147406

On Sun, 3 Mar 2002 22:45:41 -0000, "John Dooley" <lastword@ntlworld.com>
wrote:

> What I want to know is how the phasing works, why does it work etc.

Math is not my fortï¿½, but this is a very simple concept. And no, I
don't know what a goniometer is.

If you have two signals of equal amplitude, and opposite phase, they
will cancel, making them both disappear. To cancel noise, be it AF or
RF, what is needed is a device that allows you to feed the unwanted
signal back into the receiving device (radio receiver, your ear, an
amplifier, whatever) and control its amplitude and phase so that it
exactly cancels the original signal.

Expensive cars are now doing this to lower noise levels. They use
microphones to pick up noise that you would hear as you are driving down
the road, amplify and control them so that they feed speakers inside the
vehicle with a canceling signal, making the vehicle much quieter.

If this isn't what you were asking, I apologize and will step aside.
That's the way I understood the question.

Gary
--
There is no x in my ISPs domain name.

4418. Re: What do you recommend for HF DX

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 15:16:25 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C838FC9.2B78AD9A@crosslink.net>
Source record: 147405

Dick wrote:
>
> I made a lot of antenna's 1/4 wave verticals for 40, 30 , 20, 17 meters
> etc. and have a lot of isolated chickenwire and other wires under it. Also
> the ground is polder land and wet.
> It works fine but changing freq. I have to put down the antenna and make
> another 1/4 wave.

My favorite 2M antenna is a 5/8 wave with a coil to match it to 50 Ohm coax. Works so good I've been considering a "fixed" equivalent - kind of like a Texas Bugcatcher; eg, a 33' vertical with a coil between the bottom and ground using "Roach Clips" on the coax feed to select appropriate feed points for each band. If you try it lemme know how it works.
73, KA3DWW

4419. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 15:25:32 UTC
From: mcduffie@xactcom.net
Message-ID: <et378u817d17h0n5ihfmb73qqccqvtrprc@4ax.com>
Source record: 147409

On 4 Mar 2002 05:21:34 -0800, jim.bolinger@lintek.aeroflex.com (JLB)
wrote:

> Anyone who has any training in navigation, such as pilots, knows this.
> As I recall, in the Los Angeles area it would be at least 60 degrees
> off!

WHOA! Don't confuse the poor guy even more with misinformation!
Someone that ignorant of a subject needs proper information, not
something that is totally wrong. LA is on a line somewhere around 14
degrees off of true. I don't have a proper area map, but SFO is about
15.5 degrees, and Fresno is 15 even.

To be proper, the magnetic pole is constantly moving, so these may be
off be a degree or so, as they come from old charts. Either way,
knowing your area's generally accepted error is enough for any antenna
pointing over a lifetime.

If there's enough interest in this subject, I'll see if I can dig up a
url for better explanation. I know there's one somewhere on
http://joe.mehaffey.com/, the biggest single source of GPS and
navigational information I know of.

73, Gary
--
There is no x in my ISPs domain name.

4420. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 15:40:04 UTC
From: Ravi R <krravi@yahoo.com>
Message-ID: <ozMg8.255411$Aw2.20396785@bin7.nnrp.aus1.giganews.com>
Source record: 147407

Okay Mr Harvey. At the moment i forgot about the dish, since its for professionals...

Now, here is what i came up with for a better reception. You have to tell me.. if i am wrong.

I went to RadioShack the other day and saw a SW antenna kit, for 10 bucks. I guess its one of those 'Inverted L' kinda of antenna.

Now i plan to install that antenna in the backyard, and then buy a MFJ Antenna preselector. As i saw some articles in the net saying that will be a powerful combination.

My problem here is... the connectors from the Preselector, are co-axial..or whatever to the radio.

But my portable has.. a MINI Plug for..."Ext Ant".

How do i connect that output from the preselector to my radio.

Secondly.. apart from lightning and static.. will it damage the sensitivity of my Sony Portable in anyway !

Reply and your valuable advice is appreciated..since am pouring through.."passport to world band radio" and "ARRL Handbook" at the moment..to get a decent SW reception here.

I cant sit by my window with my telescopin antenna,, since its cold and the windows are always closed. And i am not really satisfied with the supplied reel antenna.

And according to reviews.. the SONY AN--LP1 seems to be the best antenna there is.. for a portable, but not available in the USA at the moment.

So... what say you... Mr.Harvey ?

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message news:hbYf8.22905$tA.3801626@news20.bellglobal.com...
> "Ravi R" was LOL:
> Good ! :-)
>
> > I am scared that such high power antennas
> > might damage my radio.
> I don't think that you'll every achieve sufficent gain on HF to damage a
> radio. But you might 'damage' the reception by overloading a front end
> designed for a 12" whip. If you hear signals on the 'obviously wrong'
> frequencies, then you might have too much signal.
>

> > The one from SONY especially AN-1 and AN-LP1
> > are expensive. Anyone has any idea about these antennas ?
> I have the Sony AN-1 Active Antenna and it does pretty much exactly what
it
> sets out to do. It is nice in that it doesn't need constant tuning (just
a
> few switches to adjust once in a while). It more or less replaces a
random
> wire.
>
> > So harvey, how do i connect that coaxial cable that comes
> > into the house from my dish into the radio ?
> Are you asking about the use of the old C-band system to receive various
> 'interesting' audio ? You'll need a C-Band receiver to start. The SW
radio
> might not enter into it (for starters anyway).
>
> For the SW radio, just install a random wire to a convenient tree. Forget
> about the dish - unless you can use it to support the other end of your
> random wire antenna. :-)
>
> > And how do i prevent Lighting and other factors from affecting my set.
> Disconnect when not in use. Don't use when there is lightning about. Too
> much static anyway...
>
>
>
>
>

4421. help on NMT 900 systems

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 15:49:46 UTC
From: Jean-Michel Rouquette <elfjmr@elmagn.chalmers.se>
Message-ID: <3C83979A.61803EAA@elmagn.chalmers.se>
Source record: 147408

hi everybody,
For research purpose we would like to use a "old" NMT 900 Base Station
BS901
as a generator to produce a powerful microwave signal.
I have the technical documentation and the user manual, but in local
mode
it´s impossible (i didn´t succeed) to simulate a handshake with a mobil
phone so I cannot have an output signal (should be FM 900MHz 30Watts).
In the normal configuration this BS communicate with an MTX across RS485
interface, it seems that the MTx have full control of the BS.
so i think that i must simulate a mtx with a computer but i do not have
the
software manual of the system so my questions are:
1 do someone know about the system BS901 (or equivalent)
2 do someone know if it´s possible to run the system in local mode (not
for
test pupose!)
3 do someone have the software manual of the BS 901

Other thing if you live in Sweden or close,
for approximately the same purpose I look for a booster working at these
frequencies (~900MHz) used before during the NMT generation in car for
external antenna:
i need 7Watts output for 2 watts input so if you have such a thing
please
make me an offer feel free to mail me or phone 031 772 1723 (sweden)
I will be very pleased
Thanks for your attention

4422. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 15:54:39 UTC
From: Jim Dicso <dicso123@hotmail.com>
Message-ID: <3NMg8.55454$lu2.17089125@news02.optonline.net>
Source record: 147410

Have you looked into the 'Phifer Quad'. He published an update in QST
(issue?) in 2001. Search ARRL or Google for the info.
A bit more mechanically complex but fits a 40 meter quad within same space
as 20 meter loop! (20 meters in 10 meter space, etc.) The loop is
continuous but looks like a large cross. If you can't find the info, I will
look for the local file I have.

Jim K2SZ

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message
news:3C80BABD.1C1D3609@bellatlantic.net...
> Thanks, the multi-turn idea's out the window.. How come a 20 Meter quad
with 1 WL
> elements doesn't work on 10, whereas a horizontal loop would?
>
> '73 KI4Z
>
> Harry MacLean VE3GRO wrote:
>
> > I remember seeing somthing about this in CQ mag years ago. If I remember
> > correctly, a two-turn quad (2-wavelengths of wire on a 1-wavelength
form) has a
> > feed impedence four times that of a single-turn quad--just as a folded
dipole
> > has a feed impedence four times that of a single-wire dipole. A two-turn
> > quad--after you bring down the feed impedence to around 50 ohms with a
4:1
> > balun-- will likely show a greater >2:1 SWR bandwidth than a single-turn
quad.
> > Other than that, no particular advantage. Hope this helps. 73. Harry,
VE3GRO
> > Harry MacLean, VE3GRO
> > 500 Riverside Drive, London, ON N6H 2R7
> > (519) 473-1668
>

4423. Re: how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 15:54:52 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <gNMg8.6903$A%3.57053@ord-read.news.verio.net>
Source record: 147411

I put down a 50 foot role of chicken wire (about 1.5 feet wide), cut into two 25 foot strips, in an "X" under my 6btv vertical in the back pasture and it has worked GREAT for about 10 years now...the chicken wire has disappeared into the soil and I would hate to have to try to get it back up as it deteriorates into a bunch of sharp small wires. But, it is probably several inches deep by now, so I probably will never care.

73,

Greg N6GK
"AB Brown" <abbrown@nospammail.com> wrote in message
news:a5qmn8$ug0$1@slb5.atl.mindspring.net...
> I am planning on installing a slightly shortened ground vertical for 80
> meters. I have never before worked with a radial wire grounding system,
but
> I would like to install the 16 radials on the *surface* of the ground. I
> have two questions: 1) How can I install the radial wires so that I can
> continue to mow the lawn without the mower catching them? 2) Bill Orr's
> "Vertical Antennas" book describes chicken wire being used as an effective
> ground screen. I'd like an opinion as to the effectiveness of this wire
as
> well as tips for installing it on the ground surface.
>
> Thanks, in advance.
>
> AB
>
>

4424. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 16:02:49 UTC
From: "Sir Charles W. Shults III" <aichip@cfl.rr.com>
Message-ID: <JUMg8.37251$TV4.6549847@typhoon.tampabay.rr.com>
Source record: 147412
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Probably a Suess character- like "never grovel near a wovel" or
something.

Cheers!

Chip Shults
My robotics, space and CGI web page - http://home.cfl.rr.com/aichip

4425. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 16:23:15 UTC
From: richardharrison@webtv.net
Message-ID: <20373-3C839F73-579@storefull-111.iap.bryant.webtv.net>
Source record: 147414

Chip,, N1IR wrote:
"---the intensity falls as 1/r (where r is the distance from the radiator) (in the near field). ----- the intensity falls as 1/r^2 (in the far field)."

Richard Clark has a copy of Arnold B. Bailey`s "TV and Other Receiving Antennas", I believe. He can confirm my interpretation of the "Free-space power graph showing near and far fields" on page 211.

In the near field, the signal drops about 11 db when the distance is increased by a factor of 10. In the far field, the signal drops by 20 db when the distance is increased by a factor of 10. This just a graph on a small scale constructed by humans, but it agrees very closely with the assertion made by Chip.

Best regards, Richard Harrison, KB5WZI

4426. UHF Antenna selection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 16:39:27 UTC
From: Sam <tnlpalmer@worldnet.att.net>
Message-ID: <3rNg8.14177$gK2.1010414@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147413

Hi all,
I know this is probably off-topic, but I need help. I need a UHF ant to pick up local TV. Roof-top mounting is out due to neighborhood restrictions, and attic trusses limit me to an 86" boom lenght if I want to rotate. Channelmaster has an 8 bay bow-tie they claim is good for 60 miles. Winegard sells a similer type. I've always had corner reflector UHF antennas, but the bow-tie would be easier to mount in my attic. Any testimonials as to which way to go with this would be greatly appreciated.
Thank you, Sam

4427. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 17:04:31 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a609evdvf1@slb2.atl.mindspring.net>
Source record: 147415
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Naw-lins" is the way natives (even the Cajuns) pronounce New Orleans.

When I lived there, it took me a long time to get used to articulating
Miami, FL as "My-ama" as the natives do.

--Peter

"Rich Grise" <richgrise@earthlink.net> wrote in message
news:3C83570F.144F@earthlink.net...
> John Woodgate wrote:
> >
> > I read in sci.electronics.design that Roger Johansson <no.email@home.se>
> ...
> > >If Bailly is a french name, and it looks like that, it should
> > >probably be pronounced Bay-ee, with the tension on the ee and
> > >also with a raised tone on the ee.
> >
> > Yes. Actually 'buy-ee' (or even 'Bye-ee') is a bit nearer.
> > --
> > Regards, John Woodgate, OOO - Own Opinions Only.
http://www.jmwa.demon.co.uk
>
> There's one example off the top of my head, and I think there's
> another, but can't think of it, but anyway, Pierre, SD is pronounced
> "Peer," not "Pee-air." Of course, there's the eternal argument between
> "Saint Loo-iss" and "Saint Loo-ee," and god knows how many possible
> pronunciations of "New Orleans." Anybody recall that other famous
> example?
> --
> Cheers!
> Rich
>
> "We have met the enemy, and he is us!"
> - Pogo Possum, ca. 1950's

4428. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 17:05:27 UTC
From: Charles Edmondson <edmondson.ns@ns.ieee.org>
Message-ID: <3C83A956.7026B25E@ns.ieee.org>
Source record: 147416
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Jumping in to the middle of all this...

I learned to pronounce the name as Bo-day from Wade and Matthai, so since they are contemporaries, they may have had a little more direct contact with him...

Charlie

--
Edmondson Engineering
Unique Solutions to Unusual Problems

4429. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 17:06:20 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a609icjop1@slb6.atl.mindspring.net>
Source record: 147417
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Kay-ro" a very nice little town, where the Tennessee River meets the Ohio River about 10 miles from where they both meet the Mississippi.

--Peter

"John Woodgate" <jmw@jmwa.demon.co.uk> wrote in message news:WkeQf0Asd2g8EwIA@jmwa.demon.co.uk...
> I read in sci.electronics.design that Rich Grise
> <richgrise@earthlink.net> wrote (in <3C83570F.144F@earthlink.net>) about
> 'HELP needed in understanding Bode Plots', on Mon, 4 Mar 2002:
> >There's one example off the top of my head, and I think there's
> >another, but can't think of it, but anyway, Pierre, SD is pronounced
> >"Peer," not "Pee-air." Of course, there's the eternal argument between
> >"Saint Loo-iss" and "Saint Loo-ee," and god knows how many possible
> >pronunciations of "New Orleans." Anybody recall that other famous
> >example?
>
> Cairo, USA, IIRC, but I don't know which of the four such places listed
> in my atlas, is 'Kay-ro', not 'Kai-ro'. But we were really discussing
> the names of people.
> --
> Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
> Interested in professional sound reinforcement and distribution? Then go to
> http://www.isce.org.uk
> PLEASE do NOT copy news posts to me by E-MAIL!

4430. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 17:29:44 UTC
From: "Sir Charles W. Shults III" <aichip@cfl.rr.com>
Message-ID: <caOg8.37759$TV4.6624106@typhoon.tampabay.rr.com>
Source record: 147418
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

And there is a little town (Buchanan) in Georgia where the natives are comfortable calling it Buck Annen. Go figure.

Cheers!

Chip Shults
My robotics, space and CGI web page - http://home.cfl.rr.com/aichip

4431. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 17:43:45 UTC
From: Spehro Pefhany <speff@interlog.com>
Message-ID: <lnOg8.204$YtJ.145@news2.bloor.is>
Source record: 147269
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In alt.engineering.electrical Rich Grise <richgrise@earthlink.net> wrote:

> "Saint Loo-iss" and "Saint Loo-ee," and god knows how many possible
> pronunciations of "New Orleans." Anybody recall that other famous
> example?

Baton Rouge (red stick)?

(the red stick in question is a result of a kind of red fungus that grows
in the American south. You can find it in Florida too.)

The UK has lots of places that the natives pronounce strangely in order to
more easily identify outsiders- Reading (redding) and Leister (lester),
for example. What do you expect from a people who pronounce "Infanta
de Castile" as "Elephant and Castle"?

(yes, I know it's disputed, and probably untrue, but it's a good story).

Best regards,
--
Spehro Pefhany --"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com
9-11 United we Stand

4432. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 17:51:40 UTC
From: Mel Martin <ve2dc@rac.ca>
Message-ID: <3C83B42C.F13F9233@rac.ca>
Source record: 147270

JLB wrote:
>
> Anyone who has any training in navigation, such as pilots, knows this.
> As I recall, in the Los Angeles area it would be at least 60 degrees
> off!
>
Not likely! The Mag pole is in Northern Canada, not Vermont....

4433. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 17:56:27 UTC
From: Pie`` IK2VTJ <picarusoNONVOGLIOSPAM@writeme.com>
Message-ID: <a60cfq$ahk5l$1@ID-83989.news.dfncis.de>
Source record: 147271

"VA3ATD" <a.duffy@sympatico.ca> ha scritto nel messaggio
news:3C82DB56.7090603@sympatico.ca...
> Hi Piero,
>
> I was thinking more about the group of experimenters and gurus on this
> side of the pond myself......
>
> I built a simple one from tin foil and a cardboard mailing tube, but
> without a dipole antenna to compare it with.................
>
... but you can say if it works or not, I suppose.
Could you listen to any station? Did some station listen to you? With which
signal, power and QRB?

> But then again, if I could put up a proper dipole I wouldn't need a
> compact antenna, right?

Right! The famous DX and contesting stations, that I can only see on a
picture :-(, really don't need EH at all.
But here we are discussing about the fact that this new 'object' works,
works well, doesn't work at all, just to satisfy our technical 'need to
know'. Moreover, if I could replace my 160mt dipole, that lies almost on the
ground, with something more efficent, it would be great.
Hope to hear you on the air, in the top band....by mean of ...any antenna!

--
73 de IK2VTJ, Piero.

http://www.qsl.net/ik2vtj
http://www.ardf.it

Togli / Remove
NONVOGLIOSPAM
dall'indirizzo / from address

4434. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 17:56:46 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <yzOg8.14319$gK2.1018702@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147272

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:20373-3C839F73-579@storefull-111.iap.bryant.webtv.net...
> Chip,, N1IR wrote:
> "---the intensity falls as 1/r (where r is the distance from the
> radiator) (in the near field). ----- the intensity falls as 1/r^2 (in
> the far field)."
>
> Richard Clark has a copy of Arnold B. Bailey`s "TV and Other Receiving
> Antennas", I believe. He can confirm my interpretation of the
> "Free-space power graph showing near and far fields" on page 211.
>
> In the near field, the signal drops about 11 db when the distance is
> increased by a factor of 10. In the far field, the signal drops by 20 db
> when the distance is increased by a factor of 10. This just a graph on a
> small scale constructed by humans, but it agrees very closely with the
> assertion made by Chip.
>
> Best regards, Richard Harrison, KB5WZI
>

Hi Richard:

I don't have the book you speak of so I can't comment on how the near field number of 11 dB was determined. I wonder about increasing the distance by a factor of 10 and still being in the near field. In any event, I may very well find myseld standing corrected on my initial comment in the post regarding the rate of radial power flow decline in the near-field. I'll think about it a bit.

Steve VE9SRB

4435. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 17:59:41 UTC
From: Spehro Pefhany <speff@interlog.com>
Message-ID: <hCOg8.225$YtJ.177@news2.bloor.is>
Source record: 147273
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In sci.electronics.design Peter O. Brackett <ab4bc@ix.netcom.com> wrote:
> "Kay-ro" a very nice little town, where the Tennessee River meets the Ohio
> River about 10 miles from where they both meet the Mississippi.

Canton OH ("cantun" do *not* try their Cantonese food, it's terrible
IMNSHO).

Best regards,
--
Spehro Pefhany --"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com
9-11 United we Stand

4436. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 18:00:36 UTC
From: Pie`` IK2VTJ <picarusoNONVOGLIOSPAM@writeme.com>
Message-ID: <a60cni$ak5gb$1@ID-83989.news.dfncis.de>
Source record: 147274

Ok, Stefano.

You can repeat everything on next weekend in Montichiari.
But more info and schematics, 40mt version excluded, will be very
appreciated.

--
73 de IK2VTJ, Piero.

http://www.qsl.net/ik2vtj
http://www.ardf.it

Togli / Remove
NONVOGLIOSPAM
dall'indirizzo / from address

4437. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 18:08:58 UTC
From: Greatest Prime <FishyBill@mediaone.net>
Message-ID: <B8A8F8A6.185A%FishyBill@mediaone.net>
Source record: 147275
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I have tried to read through some of these posts. B O R I N G! I am willing to offer some assistance if a reasonably well written and succinct summary is presented. I cannot believe that the topic is so complicated that it requires as many characters as have been posted so far.

Bill

4438. Re: DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 18:15:49 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C83B9D5.1AAD61A@IEEE.org>
Source record: 147277

marvin rosen wrote:
> If the center of a dipole is 72-75 ohms why can't a 6:1 balun (and coax) be
> used in place of 450 ohm ladder line in conjunction with a "tuner" in the
> shack?

I'm not sure I understand. A perfect 6:1 balun would take 72 ohms down to
12 ohms causing an SWR of 4:1 on the coax. Is that what you really want?
The reason for using ladder-line is that it tolerates a relatively high
SWR with relatively low losses. The coax needs to be minimized, not
maximized.
--
cheers, CAM http://www.qsl.net/w5dxp

4439. Re: Stacking Dipoles?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 18:17:31 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C83BA3B.3B3F3E34@IEEE.org>
Source record: 147278

Michel de Ruiter wrote:
>
> Yes it is possible with both antenna`s on a full wave length from each other
> (vertical?) ! You will get 3 dB gain. You need to use 75 ohm coax and the
> length of that coax must be 3/4 wave lengt to each site. Connect your
> feedline in the middele and you are on!

If you put one dipole behind the other and phase them correctly,
you get a beam pattern similar to a Yagi.
--
cheers, CAM http://www.qsl.net/w5dxp

4440. Re: HF antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 18:21:39 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a60drc$267c$1@news1.tribune.com>
Source record: 147276

If you don't need VHF it is hard to beat the Autek Reseach products. I have the fancy one and it fits in my shirt pocket, unlike the mfj which should have included wheels in the design. :^) I find the autek easy to use while hanging off of my tower adjusting my (HF) quad.

http://www.autekresearch.com/

KA9CAR

C <cpierce@usit.net> wrote in message
news:cpierce-98B7C2.16135002032002@news.earthlink.net...
> Looking at buying HF antenna analyzer .
>
> What is good and what is junk.
>
> C.

4441. E-mail address of W7ITB

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 18:24:02 UTC
From: Piero Tognolatti <tognolatti@ing.univaq.it>
Message-ID: <3C83BBC2.DF058893@ing.univaq.it>
Source record: 147279

Is there anyone who knows the e-mail address of W7ITB, Harold F. Tolles?

Best regards,

73 de I0KPT, Piero

4442. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 18:45:31 UTC
From: Jim Thompson <Jim-T@analog_innovations.com.invalid>
Message-ID: <b4g78u81k5089nbqag4iu3sl2fn5d1kbcn@4ax.com>
Source record: 147280
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Mon, 04 Mar 2002 18:08:58 GMT,
Greatest Prime <FishyBill@mediaone.net>,
In Newsgroup: sci.electronics.design,
Article: <B8A8F8A6.185A%FishyBill@mediaone.net>,
Entitled: "Re: HELP needed in understanding Bode Plots",
Wrote the following:

|I have tried to read through some of these posts. B O R I N G! I am willing
|to offer some assistance if a reasonably well written and succinct summary
|is presented. I cannot believe that the topic is so complicated that it
|requires as many characters as have been posted so far.
|
|Bill

Did someone *make* you read the posts? Did someone ask for your
opinion?

...Jim Thompson
--
(If replying by E-mail please observe obscure method of anti-spam.)

James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
Jim-T@analog_innovations.com Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

For proper E-mail replies SWAP "-" and "_", and remove the obvious.

"Things turn out best for those who make the best of how things turn out."

4443. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 19:08:13 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <6gd78u4k0vpmulc1lbucqthdga8s8glgl5@4ax.com>
Source record: 147281

On Mon, 4 Mar 2002 10:23:15 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Chip,, N1IR wrote:
>"---the intensity falls as 1/r (where r is the distance from the
>radiator) (in the near field). ----- the intensity falls as 1/r^2 (in
>the far field)."
>
>Richard Clark has a copy of Arnold B. Bailey`s "TV and Other Receiving
>Antennas", I believe. He can confirm my interpretation of the
>"Free-space power graph showing near and far fields" on page 211.
>
>In the near field, the signal drops about 11 db when the distance is
>increased by a factor of 10. In the far field, the signal drops by 20 db
>when the distance is increased by a factor of 10. This just a graph on a
>small scale constructed by humans, but it agrees very closely with the
>assertion made by Chip.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

After having spent some ten or more years in the study of light
radiation consisting of several complex components, the graph you
reference exhibits those same relationships.

That is, there are three distinct phases exhibited in the graphics
offered. There is the peak of the curve closest to the antenna with a
very small slope, there is its roll-off which is a fairly even
mannered high slope out to the 3rd wavelength, and then there is the
dominant, modest slope of the curve, log-linear from 10 wavelengths
out to 10,000 (and presumably well beyond). Thus there is an odd
region that exists between the 3rd and 10th wavelength where the slope
reverses its decline.

All of this is entirely consistent with Steve's unacknowledged
correspondence in this side thread.

I've read of how fields are imaginative devices (where I have to
suppress the urge to point out that Physics long ago reduced ALL
matter to fields - and we are thus offered the conundrum of living in
a fantasy); I've read that the 1/r law is unsustainable at the
boundary conditions (which is the whole point of such provisos); and
I've seen the most obvious boundary condition missed entirely.

To this last point, the unexpressed boundary condition. As inferred above, I tend to "see" radiation in terms of light (which is, after all, the genesis of the topic) and antennas as lenses. For some reason, many have the common experience of these two related topics and yet cannot bridge the discussion for themselves. The single most obvious boundary condition is found in the relationship of wavelength to distance from the radiator. From a distance, you can make measurements that are consistent over a great range (and this is manifest in the >10 wavelength slope); however, as you approach the emitter, it ceases to be a point source. This is the first and most pernicious unstated presumption of all the math being tossed around. That is, for the math to work, the source and the detector must be point equivalents in that same field.

We do not use instrumentation that qualifies in that regard, so measurement itself must contribute to the perceived error. However, this is not a fault, strictly, of measurement. Rather it is an error of the measurer's faulty conclusion that such a test was valid. That is, the failure of 1/r as an example is found at the boundary of r -> 0 (r approaching 0). It is more than obvious that a radiator at that distance cannot employ the math of point sources to forecast measurements made by gross instrumentation. The graphs offered for any of this discussion (including Richard's and my favorite author, Arnold Bailey) do not show a solution at 0 through the simple imposition of the semi-log format of illustration. The graph offered simply starts at 1/10th wavelength (there being no reason to intuit any "gain" in radiation as r -> 0, provided you do not go beyond the boundaries). In fact, the curve appears to be asymptotic below the 0dB reference point (which allows for the argument to be able to sustain a complete integration of the source radiation without breaking the power budget).

Now, as to the angst over where the 1/r, the 1/rï¿½, and the 1/rï¿½ slopes depart from one another. Too much is put into the associations without regard to their whole indifference to one another. The three processes are tightly bound, but are not in themselves separably significant EXCEPT at a very close distance. There, where they may be appreciated, you have to leave behind the math that got you there. For my own pursuits in research for the NIH, I had to worry about such things as I was forced to make measurements close to the non-linearities. I knew what the sources of the different slopes were, but knowing them did not allow me to extract any particular slope, except mathematically. In other words, the three slopes were inseparable in both their Physics and their physical manifestation. However, knowing the sources of the three slopes and their values allowed me to fix a point out along the "far field" line where I could mathematically prove that the other slopes could not contribute a significant amount of error to that same point. This, too, presents an artificial distinction (the fields inter-relate in no different fashion before or after this point) that is meaningful only for my research. With this anchor as a reference, I could then cross-correlate back closer to the peak of the curve as I changed

conditions (but not the boundaries). In other words, I had to originate the math appropriate to the "near field" condition through extrapolation by observing the boundary conditions in the "far field" condition.

To put numbers to this juggling game I pursued; I went from an accuracy of ï¿½20% in slope determination to ï¿½0.05% well inside the boundaries that would have otherwise confined me to that abysmal first pass rough reading. As I said above, such a gain in accuracy did not come by virtue of academic niceties that could never be realized in a physical world; they arose of ad-hoc, but adequate methods that observed the boundaries AND the premises.

73's
Richard Clark, KB7QHC

4444. F.S. A-99

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 19:09:37 UTC
From: Lou <tech@dp.net>
Message-ID: <a60i3m$21h9$1@news.dp.net>
Source record: 147282

2 - A 99 CB/10 Meter antennas NEW in box. $45 "shipped". They are BRAND NEW - but on clearance. "IF" there were to be a problem, you can seek remedy through the manufacturer for any replacement parts. They are the ones that were sold through R.S., but all paperwork with those already sold, were Solarcon/A-99 papers. Have no reason to think otherwise with these models as well. See payment info below in tag.

1 - R.S. Discone antenna - was used for about 3 days. Seems to be all there and in decent condition. $35 "shipped".

--
Lou
Owner of: C.L. FURLONG ENTERPRISES

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E-Mail: Tech@DP.NET
Hours: M-F 9-5 - S/S by appt.
Closed on Holidays

4445. Re: HF antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 19:17:43 UTC
From: millersg@dmapub.dma.org
Message-ID: <a60h8n$c8a$1@dmapub.dma.org>
Source record: 147283

C <cpierce@usit.net> wrote:
>Looking at buying HF antenna analyzer .
>
>What is good and what is junk.

The AEA CIA-HF is the best I have used:
http://www.aea-wireless.com/via.htm

I have an older Autek RF-1 that no longer gets used. CIA is
superior on all fronts except size & cost. The cost is
justified if you use it a lot and within your budget. Also
used MFJ-259Bs a few times - not in same class as the AEA.

Also, check the eham product reviews at:
http://www.eham.net/reviews/products/31

--
Steve Miller N8SM millersg@dma.org http://www.dma.org/~millersg

4446. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 19:24:10 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <uRPg8.608$Hf7.1102@rwcrnsc51.ops.asp.att.net>
Source record: 147284

> To this last point, the unexpressed boundary condition. As inferred
> above, I tend to "see" radiation in terms of light (which is, after
> all, the genesis of the topic) and antennas as lenses. For some
> reason, many have the common experience of these two related topics
> and yet cannot bridge the discussion for themselves. The single most
> obvious boundary condition is found in the relationship of wavelength
> to distance from the radiator. From a distance, you can make
> measurements that are consistent over a great range (and this is
> manifest in the >10 wavelength slope); however, as you approach the
> emitter, it ceases to be a point source. This is the first and most
> pernicious unstated presumption of all the math being tossed around.
> That is, for the math to work, the source and the detector must be
> point equivalents in that same field.

Precisely. The rest of you have entirely too much free time on your hands.

W4ZCB

4447. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 19:25:15 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <jrh78uc2smgvnod084rs8cieqvp3uet5kc@4ax.com>
Source record: 147285

On 02 Mar 2002 18:48:52 GMT, tdonaly@cs.com (Tdonaly) wrote:

>>
>Cecil wrote,
>>Tdonaly wrote:
>>>
>>> >
>>> Cecil wrote,
>>> >What is your estimate of the feedpoint impedance of a
>>> >one wavelength dipole?
>>>
>>> It depends on where you feed it.
>>
>>Dipole implies equal poles, i.e. center-fed. If it is not center-fed,
>>then an adjective like, "off-center-fed", is necessary.
>>--
>>cheers, CAM http://www.qsl.net/w5dxp
>>
>No, dipole just says there are two poles. It
>doesn't say a thing about being equal, nor
>does it say anything at all about feedpoint
>or if it's fed at all. Moreover, in your original
>post, you didn't even specify that your
>dipole was an antenna. (I assumed it was.)
>However, since you have no less an authority
>than Peter Brackett agreeing with you I
>suppose I should too. However, I won't.
>Enlighten me Cecil; is an off-center-fed
>dipole not a dipole? If it's not, then you have
>a point.
>
>Tom Donaly KA6RUH

Hi Tom,

You missed one fine point of Cecil's definition that was extracted
from the IEEE (and I am not sure Cecil caught it either).

The dipole mentioned was specifically called an "Electric Dipole" (or
rather the radiation's projected shape). This did not mean an open
ended (as distinct from a close ended or loop) antenna. It means that
the form of radiation conforms to the field lines presented by two
point charges separated in space which constitute this same "Electric
Dipole." The two point charges are equal in magnitude but opposite in
charge and are thus balanced in more ways than one. Their graphical

field lines and those of the common dipole antenna presented in academic texts are indistinguishable from one another.

There are other forms of dipoles. Water, as a molecule, is electrically dipolar, but its physical form is not (and it is dipolar because of this imbalance). When we reduce the word dipole to these many meanings, two poles, we can all agree that context is necessary.

73's
Richard Clark, KB7QHC

4448. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 19:29:43 UTC
From: richardharrison@webtv.net
Message-ID: <20373-3C83CB27-592@storefull-111.iap.bryant.webtv.net>
Source record: 147287

I was reiterating a previous set of comments I posted on Arnold B. Bailey`s near field / far field observations by reporting what was on one of his graphs.

I had already reported that Bailey said the near field is the complex summation of three fields. The electric vector (related to the voltage) decays as the cube of the distance. The induction field decays as the square of the distance. Finally, the radiation field decays linearly as the distance grows.

These fields which make up the near field are not in phase with each other, and we have the combination of these constituents which are declining at different rates, making a messy problem in their summation.

Bailey has worked out the solution and graphed it for us. In the near field the slope of decline is changing as opposed to the far field which has the well-known slope. So, the bottom line is that the near field slope is not as precipitous as the far field slope is.

I wasn`t taking aim at anything anyone said. I said again that Chip`s comments on far field / near field looked substantially correct to me.

Best regards, Richard Harrison, KB5WZI

4449. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 19:35:02 UTC
From: k3ph@dxis.monroe.pa.us
Message-ID: <GsGrIz.BzJ@dxis.monroe.pa.us>
Source record: 147286

In article <3C82D074.D2EA2CC1@att.net>, George, W5YR <w5yr@att.net> wrote:
>How does one "turn off" an antenna?

Hmmm... I don't know about turning off an antenna.
I used to show it erotic pictures, but that had the
opposite effect. 8^)

73,
Bob

--
+------------------- \-\-\-\ ----------------------------+
| Bob Schreibmaier K3PH | E-mail: k3ph@dxis.monroe.pa.us |
| Kresgeville, PA 18333 | http://www.qsl.net/k3ph |
+---+

4450. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 19:52:23 UTC
From: richardharrison@webtv.net
Message-ID: <20374-3C83D077-234@storefull-111.iap.bryant.webtv.net>
Source record: 147290

Richard Clark wrote:
"Too much is put into the associations without regard to their whole indifference to one another. The three processes are tightly bound, but are not in themselves separably significant EXCEPT at a very close distance."

Egad! Is the E-H antenna possible?

Best regards, Richard Harrison, KB5WZI

4451. Re: how to install ground radials??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 19:55:35 UTC
From: kc0bom@arrl.net
Message-ID: <e900abb2.0203041155.65203b4@posting.google.com>
Source record: 147288

I know this isn't really answering the question, but another easy way to bury radials is to take a spade/shovel and lift the sod up a little bit. I did that last spring, and it only took about an hour to lay about 100ft of electric-fence wire.

72/73
Rob, kc0bom

4452. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 20:03:42 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <yqQg8.579$aP6.411@rwcrnsc54>
Source record: 147289

> I wasn`t taking aim at anything anyone said. I said again that Chip`s
> comments on far field / near field looked substantially correct to me.

Agreed, it was just that the thread had grown long past where anything was being clarified, and considerable muddling was taking place.

I still think Paul Shuch's article is about as clear as it gets. When you can understand it WITHOUT the math, you really understand it.

W4ZCB

4453. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 20:13:54 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <NPIml2BCW9g8EwYz@jmwa.demon.co.uk>
Source record: 147305
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Roger Johansson <no.email@home.se>
wrote (in <a6031d$al3jf$1@ID-86336.news.dfncis.de>) about 'HELP needed
in understanding Bode Plots', on Mon, 4 Mar 2002:

>I am pretty sure though that when stressed the ï¿½ in hungarian is
>very much like the ï¿½ sound in other languages, otherwise it
>would not be translated with ï¿½.

IT ISN'T! Hungarian has TWO umlauts; the 'two dots' one and the '"' one.
They affect pronunciation differently.

Paul Erdo"s was a pure Hungarian, not a Hungarian-American.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4454. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 20:21:54 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <FPtkl4Bid9g8Ew5O@jmwa.demon.co.uk>
Source record: 147306
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Spehro Pefhany
<speff@interlog.com> wrote (in <lnOg8.204$YtJ.145@news2.bloor.is>) about
'HELP needed in understanding Bode Plots', on Mon, 4 Mar 2002:
>The UK has lots of places that the natives pronounce strangely in order to
>more easily identify outsiders- Reading (redding) and Leister (lester),
>for example. What do you expect from a people who pronounce "Infanta
>de Castile" as "Elephant and Castle"?

Leominster ('Leinster'), Happisburgh ('Hayesbury'), Cirencester
('Cissister'), Teston ('Teeson'), Wrotham ('Root-um'), 'Trottiscliffe
('Trosley'). The three latter are close together in Kent. Then there's
'Ruyton of the XI Towns', where 'XI' means 'eleven', not the Greek
letter.

The English Tourist Board would like to keep these 'delights' quiet.(;-)
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4455. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 20:26:18 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <KLQg8.14704$106.1111491@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147291

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:20373-3C839F73-579@storefull-111.iap.bryant.webtv.net...
> Chip,, N1IR wrote:
> "---the intensity falls as 1/r (where r is the distance from the
> radiator) (in the near field). ----- the intensity falls as 1/r^2 (in
> the far field)."
>
> Richard Clark has a copy of Arnold B. Bailey`s "TV and Other Receiving
> Antennas", I believe. He can confirm my interpretation of the
> "Free-space power graph showing near and far fields" on page 211.
>
> In the near field, the signal drops about 11 db when the distance is
> increased by a factor of 10. In the far field, the signal drops by 20 db
> when the distance is increased by a factor of 10. This just a graph on a
> small scale constructed by humans, but it agrees very closely with the
> assertion made by Chip.
>
> Best regards, Richard Harrison, KB5WZI
>

Hi Richard:

As I thought about this further regarding the statement in my first paragraph and your comments above, I am not sure that there is really a simple answer to the rate of energy decline in the near-field. I would however correct my first paragraph slightly to be consistent with the remainder of my discussion.

In the far-field, the magnitude of the propagating E and H-fields declines at a rate of 1/r, while the energy associated with them declines at a rate of 1/r^2. I think we are all in agreement on this.

In the near-fields, the magnitude of the E- and H-fields (the components that define far-field propagation) decline at a different rate, sometimes consistent with 1/r^2 or 1/r^3 (this being a function of distance VERY close to the antenna). Associating a propagating energy or rate of energy decline with these near fields is a more complex issue.

In the reactive near field, there is no time average power flow, so the rate of propagating energy decline as a function of radial distance has no meaning.

The radiating near-field is a transitional region, where the propagating fields begin to become dominant but there may still be a component of radial field and the patterns will vary as a function of distance. The most important issues affecting our assumptions and discussion in this field

region is the size of the antenna and the operating wavelength. For very small antennas, the radiating near field is sometimes non-existent. For antennas in the 0.5 to 1.0 wavelength size, this region will begin near the antenna and extend out to maybe 2+ wavelengths. For antennas of this size, discussing the rate of energy decline in the near field when increasing the distance by a factor of 10 is for the most part meaningless because the radiating near field may not have that great an extent. For moderately large antennas, the radiating near field may begin several wavelengths away from the antenna but still may not extend out to 10 times that distance. For very large antennas, the radiating near field region will begin further away from the antenna and may extend out a distance 10 times the inner bound. However, I think that at the outer boundary of this radiating near field, the properties of the EM wave will mostly match those of the far-field. Near the inner boundary, I question the validity of trying to define a "rate of near field energy decline" out to several tens of wavelengths of distance. I would expect this rate to vary somewhat over the full extent of what we might define as the radiating near field zone. (note that the numbers used here as examples will vary as a function of both antenna size AND operating frequency)

I would still like to see the reference for where the near-field energy is presumed to decline at a rate of 1/r. It does not seem to be in my reference library of antenna texts.

Steve VE9SRB

4456. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 20:28:12 UTC
From: MW0CDO <gw7lhiJUNK@ntlworld.com>
Message-ID: <a60lco$ancar$1@ID-117699.news.dfncis.de>
Source record: 147292

"Jeff Y." <vswrref@hotmail.com> wrote in message
news:3c826cfd.669435@national-news.stargate.net...
> I've been hearing alot obout the HF6V and I do have one question about
> it. How long is the 75 ohm matching stub?
>
> Jeff Y.

Jeff, look here http://www.bencher.com/pdf_download.html for all the info you could want on Butternut verticals.

The matching line for 20m impedance transformation is 13ft 6in for 0.81vf co-ax, or 11ft 4in if the vf is 0.66 ie: RG59. This matching line must be 75 ohm feeder. It has no effect on any other band, or the efficiency of the antenna at all, it simply transforms the 100 ohm feedpoint impedance on 20m to 50 ohms so that you do not have a permanent 2:1 SWR on 20m.

Hope this helps.

--
Paul MW0CDO

Remove the JUNK in my address before clicking send!

4457. [newbie]microwave beam

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 20:34:35 UTC
From: arnaud lhopiteau <alhopiteau@free.fr>
Message-ID: <3c83da7b$0$14896$626a54ce@news.free.fr>
Source record: 147293

Hi,
i d like to create a microwave beam (2m diam at 100m length 9600Bps),
using the least antenna size, power consumption and cost.
Could someone help me to find which components i need? (emitter kind,
antenna size).

Thanks.

4458. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 20:35:45 UTC
From: richardharrison@webtv.net
Message-ID: <20373-3C83DAA1-595@storefull-111.iap.bryant.webtv.net>
Source record: 147294

George, W5YR wrote:
"How does one "turn off" an antenna?"

That`s a question a broadcaster must answer when a resonant structure is erected close to his station. The structure must be detuned so as not to accept significant signal, which would screw up the radiation pattern and inervate the radiation.

A structure that`s ungrounded and near 1/2-wavelength or a grounded structure which is near 1/4-wavelength could be trouble.

Best regards, Richard Harrison, KB5WZI

4459. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 20:43:22 UTC
From: richardharrison@webtv.net
Message-ID: <20373-3C83DC6A-597@storefull-111.iap.bryant.webtv.net>
Source record: 147298

Bill wrote:
"Hook it to a dummy load."

If the antenna is resonant and if the load is matched, half the
excitation is absorbed. The other half is re-radiated.

Best regards, Richard Harrison, KB5WZI

4460. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 20:48:59 UTC
From: davem@cs.ubc.ca
Message-ID: <a60mjr$7o0$1@trappist.cs.ubc.ca>
Source record: 147295

"Jim Weir" <jim@rst-engr.com> writes:

>> No the com VHF band is from 118.000 to 139.995 mhz AM generally 25khz
>steps

>No sir, the com VHF is from 118.0 to 136.975. Not generally 25 kHz. steps,
>but REALLY 25 kHz. steps.

Actually, it's 135.975, 720 channels total.

>>The middle of the band is 121.5 mhz (also the emergency
>> frequency 121.5

>No, sir, the middle of the band is (sqrt ((118^2 + 137^2)/2), or about 127.5
>MHz.

The "middle of band" is best calculated as the geometric mean of the
band limits, so it's sqrt(118 * 136) = 126.68 MHz. If an antenna is
resonant at 126.68, it will be down the same amount at 118 and 136
(if the resonant peak is symmetric).

I've never seen root mean square used in frequency calculations, and
can't see how it's useful here.

Dave

4461. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 20:51:42 UTC
From: richardharrison@webtv.net
Message-ID: <20373-3C83DE5E-598@storefull-111.iap.bryant.webtv.net>
Source record: 147299

Richard Clark wrote:
"There are other forms of dipoles. Water as a molecule is dipolar----."

Then there are magnetic dipoles which also usually have no electrical connections.

Best regards, Richard Harroison, KB5WZI

4462. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:10:07 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c83e6e2_3@news1.prserv.net>
Source record: 147296

Well, here's a couple of hints:
The North Star is within a couple of degrees of North, certainly close enough for HF antenna aiming.

GPS receivers will do a pretty fair job of locating a point due north of a reference, say your antenna, where a mark may be made to aim at.

The position of the sun with respect to your location is published every spring and fall as part of the solar outage of satellite communications information. Look up the time when a satellite with the same longitude as yours will be occluded, and the sun will be due south at that time that day. Mine occurs at 12:45 this week. Put out two stakes in a N-S line.

Anyone who chooses to live on top of the magnetic pole gets what they deserve, but pity the chaps up at CFS Alert radio monitoring station. They are so far north, the geosynchronous satellites are 10 degrees below the optical horizon.

--
Crazy George
Remove NO and SPAM from return address
me <inspector3985@yahoo.com> wrote in message
news:ar838u4kvgpkl5d8rthbullkc8k6avqkv2@4ax.com...
> This may be of interest to people setting up antennas using a compass.
> Magnetic North and True North are not always the same. If you were
> calibrating a beam heading using magnetic north as a reference on your
> readout you could be in error. The declinatin or correction factor can
> be significant. A case in point is my location in Nova Scotia. True
> North and Magnetic North are different by 20 degrees! If you wish to
> know the declination for your particular part of the world a good
> place to visit is http://www.geolab.nrcan.gc.ca/geomag/e_cgrf.html
> Hope this is of interest to antenna buffs. Thanks for reading.
> Scott VE1AFN.>
>

4463. Re: goniometer [power line noise cancel] device

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:16:10 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <blo78u87p9b4pg5dj0ufrfdq125j6jh8hp@4ax.com>
Source record: 147297

On Sun, 3 Mar 2002 22:45:41 -0000, "John Dooley"
<lastword@ntlworld.com> wrote:

> Anyway, the website with
>information on the device is located here :-
>http://lwca.org/library/articles/kh6sr/artndb5.htm
>
>What I want to know is how the phasing works, why does it work etc. I am
>mathematically minded so plz use equations if you can. I'm currently using
>LCR ccts in a lab so maybe anologies with such things may help me understand
>this device better [I study physics]. This goniometer is used in Physics for
>crystal diffraction techniques I believe, but it has had its Ham Radio uses
>as well...

Hi John,

The page you offer above appears to go to sufficient detail to already
answer your question.

It is not, by the way, a means to tune out 60Hz interference - except
insofar as the interference is separable by the two feed antennas to
the goniometer. They would have different coverages and it is
presumed in this instance that one exhibits the interference in
greater amplitude (an imbalance) or in a phase shift (that is not seen
in the underlying signal; again, an imbalance), either of which allows
the adjustment of the coil rotor to offer a phase rejection to the
summed output to the receiver.

A simpler treatment (especially the math) may be found in the
discussion of synchros, servos, and magnetic amplifiers.

73's
Richard Clark, KB7QHC

4464. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:19:21 UTC
From: richardharrison@webtv.net
Message-ID: <20373-3C83E4D9-604@storefull-111.iap.bryant.webtv.net>
Source record: 147308

Steve, VE9SRB wrote:
"I would still like to see the reference for where the near-field energy is presumed to decline at a rate of 1/r."

I`ve looked st Terman and some other references because Chip`s statement rang an old bell. But all I found was Bailey`s graph and text. Bailey`s solution obviously depends on where he ends his near-field. The slope is at a point on a curve, or the point which best represents the "trend" of the curve.

I am not going to ask Chip for confirming data :^).

Best regards, Richard Harrison, KB5WZI

4465. W9INN Antennas Page now ONLINE!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:25:18 UTC
From: ctj92@hotmail.com
Message-ID: <1a97c9.0203041325.7e797cf9@posting.google.com>
Source record: 147300

The W9INN Antennas Page is now ONLINE at the web site listed below.
The page includes illustrations, actual measured field data, antenna
dimensions, and contact information.

AB7SL - Ham Radio Pages
http://www.ab7sl.com

4466. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:31:33 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C83E75F.1E53@earthlink.net>
Source record: 147301
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

That's the one! My old brain cells knew it had something to do with
Egypt, but I just couldn't come up with it. Incidentally, I've
heard it pronounced "Kerro."

John Woodgate wrote:
>
> I read in sci.electronics.design that Rich Grise
> <richgrise@earthlink.net> wrote (in <3C83570F.144F@earthlink.net>) about
> 'HELP needed in understanding Bode Plots', on Mon, 4 Mar 2002:
> >There's one example off the top of my head, and I think there's
> >another, but can't think of it, but anyway, Pierre, SD is pronounced
> >"Peer," not "Pee-air." Of course, there's the eternal argument between
> >"Saint Loo-iss" and "Saint Loo-ee," and god knows how many possible
> >pronunciations of "New Orleans." Anybody recall that other famous
> >example?
>
> Cairo, USA, IIRC, but I don't know which of the four such places listed
> in my atlas, is 'Kay-ro', not 'Kai-ro'. But we were really discussing
> the names of people.
> --
> Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk

--
Thanks!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4467. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:34:36 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C83E816.73@earthlink.net>
Source record: 147302
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

J. Harvey wrote:
>
> "Rich Grise"
> > Anybody recall that other famous example?
>
> Beijing vs. Peking ?

Reminds me of a cartoon. A customer is sitting in a restaurant,
and the waiter has just brought out one of those covered serving
platters that they use in oh-so-elegant joints, and announces,
"Here is your Peking duck," while the duck has lifted the edge
of the dish cover and is peeking out.
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4468. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:35:56 UTC
From: "Al Lorona, Jr." <al_lorona@agilent.com>
Message-ID: <3C83E8BB.3CDDF9E@agilent.com>
Source record: 147303

dan wrote:

> My question is, why move into an area that has restrictions? Is the
> area a status thing? Is it a wife driven thing? Is there positively
> no other option?

and:

> Maybe there are areas that span 100's of miles where CCR's are the
> norm, I don't know personally of any, but what the heck do I know
> anyway.

Dan, you've never been to California, have you?

Al W6LX

4469. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:39:03 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C83E921.7C67@earthlink.net>
Source record: 147304
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Well, score a half-point for me on that one - I got the three
syllables, but I've been putting the accent on the first:
Poe' puh lish. I think if you'd spelled it with the two l's,
I'd have got much closer. :-)

John Popelish wrote:
>
> Rich Grise wrote:
> (snip)
> > I knew a guy once whose name was Ken Thies, and he pronounced it
> > "Teeze."
> >
> > Do you know that I was lurking in this group for about three months
> > before I realized that "Popelish" didn't have an "f" in the middle?
>
> Don't feel too bad about that. Most people guess that my name is
> pronounced with two syllables: pope' lish, but my family uses 3
> syllables: poe pel' lish. In grade school, my nick name was propeller
> because people who heard it sometimes wanted to repeat it with an r in
> it.
>
> I think the immigration people screwed the spelling up when my
> grandfather arrived in the US, but he brought the pronunciation with
> him. It may have been better to have spelled it ending in ch. My
> daughter just discovered a very similar word being used as a label for
> a religious heretic group in the dark ages called the Cathars or
> Popelicants. Perhaps it is connected to them.
>
> --
> John Popelish

--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4470. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:43:00 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C83EA0E.47C1@earthlink.net>
Source record: 147307
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Sir Charles W. Shults III wrote:
>
> And there is a little town (Buchanan) in Georgia where the natives are
> comfortable calling it Buck Annen. Go figure.
>
> Cheers!
>
> Chip Shults
> My robotics, space and CGI web page - http://home.cfl.rr.com/aichip

And then there were the two carpetbaggers in Natchitoches, LA, who
weren't sure of the pronounciation, so they went into a fast-food
joint, and asked the counter kid, "How do you pronounce the name of
this place? And please say it slowly, so we can get it." And she
says, "Buuuuuuuurrrrrrrr-Gerrrrrrrr Kinnnnnnnnnnng."
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4471. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:51:42 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C83EC19.7586@earthlink.net>
Source record: 147309
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Greatest Prime wrote:
>
> I have tried to read through some of these posts. B O R I N G! I am willing
> to offer some assistance if a reasonably well written and succinct summary
> is presented. I cannot believe that the topic is so complicated that it
> requires as many characters as have been posted so far.
>
> Bill

Well, you're free to not reaad the posts, as Jim has suggested, and I
wouldn't worry too much about some text choking the server - at least
mine has a whole bunch of binaries NGs, and, as they say, one picture
is worth a thousand words! ;-)

And, really, we're just a bunch of friends in sort of an electronic
pub, having some fun, if in a geeky sort of way. ;-)
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4472. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:52:07 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <b0Sg8.14883$gK2.1045185@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147310

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:20373-3C83E4D9-604@storefull-111.iap.bryant.webtv.net...
> Steve, VE9SRB wrote:
> "I would still like to see the reference for where the near-field energy
> is presumed to decline at a rate of 1/r."
>
> I`ve looked st Terman and some other references because Chip`s statement
> rang an old bell. But all I found was Bailey`s graph and text. Bailey`s
> solution obviously depends on where he ends his near-field. The slope is
> at a point on a curve, or the point which best represents the "trend" of
> the curve.
>
> I am not going to ask Chip for confirming data :^).
>
> Best regards, Richard Harrison, KB5WZI
>

Hi Richard:

I don't necessarily doubt Chip, I just cannot find any reference to the 1/r energy or power dependence in the near-field.

My opinion at this point is that defining a general rate of energy decline in the near field is somewhat nebulous because the extent and field behavior in the near field is a function of frequency, antenna size, antenna type, geometry, etc, etc. The far-field is easy.

Steve VE9SRB

4473. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 21:58:01 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <g9p78u43ncn39lnpfr7f7633tkfla8pb77@4ax.com>
Source record: 147311

On Mon, 04 Mar 2002 14:33:30 GMT, Bob Miller <bamiller@texas.net>
wrote:

>Roy Lewallen <w7el@eznec.com> wrote:
>
>>sent by a worm, should one ever get onto your machine. But Norton
>>Anti-Virus doesn't prevent a worm from being planted by a hacker, or
>>notify you when the worm sends infected email to others.
>
>But, this applies mainly to the Microsoft e-mailer that accepts macros? (I use
>Eudora for e-mail.)
>
>Bob
>k5qwg
>>

Hi Bob,

This is one of the popular ways, and the source of the last infection
that hit here. What Roy discusses goes beyond MS typhoid mary
software and may be related only where the original infection then
induced this characteristic.

There is absolutely no need of your e-mail client nor even an e-mail
server to start an e-mail attack FROM your machine. E-mail is
insecure from the get-go. You may not succumb to the attack that hits
Outlook Express with the regularity of a swiss watch; but that does
not mean you are free of e-mail related outgoing activity (unless you
never open nor run attachments nor visit sites that can induce
execution on your system). A fire wall is the appropriate detection
and interdiction mechanism.

As a sidebar to the browser debate (and focusing on sites that may
execute programs through Java Script), it serves to mention that
security issues with IE, OE and other MS products has a solution:
disable the Java Script function of your browser (and I seriously
doubt the last vector of infection has performed this obligation).
This advice, from Microsoft, cynically emasculates its own product,
and yet we have a correspondent here who embraces the insecure
configuration by bowing to the "market" demographics. IE dominates
the market, so the rationale goes, while conveniently neglecting to
observe IE/OE also dominates the occurrences of infection. The irony
here is that this correspondent is arguing the insecure configuration
is speedier, better, and expected by all and that to disappoint them
with older, secure designs would prove to be a disservice. Actually
this is simply the appeal to inertia and the inability to provide

reliable service; and instead simply offer its illusion with the imprimatur of the tainted MS logo. The argument almost conforms to the old saw that "What is good for IE, is good for the Internet." In the past, that was meant to be General Motors, who over time abandoned their customers, their heritage, and their market share. As with the ENRON/Anderson debate, we live in a time of denial.

None of this is speculation, weekly headlines reveal this factually. Microsoft admits it with its own warnings, patches, and configuration details (even if with faint breath in the face of counter assertions from its marketing department). Chairman Bill has even mandated attention to Security is an issue in Microsoft.

73's
Richard Clark, KB7QHC

4474. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 22:00:00 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u87ri14o0jnd6d@corp.supernews.com>
Source record: 147312

"Dave Martindale" <davem@cs.ubc.ca> wrote in message
news:a60mjr$7o0$1@trappist.cs.ubc.ca...
> "Jim Weir" <jim@rst-engr.com> writes:

> >No sir, the com VHF is from 118.0 to 136.975. Not generally 25 kHz.
steps,
> >but REALLY 25 kHz. steps.
>
> Actually, it's 135.975, 720 channels total.

You must be somewhat behind in your news. The top MHz. (136 to 137) was
inserted into the VHF COM band about three years ago. The top of the band
IS 136.975. 760 channels total. Go look at any transceiver
manufacturer's page and you will see that they are advertising 760 channel
radios, not 720.

>
> The "middle of band" is best calculated as the geometric mean of the
> band limits, so it's sqrt(118 * 136) = 126.68 MHz. If an antenna is
> resonant at 126.68, it will be down the same amount at 118 and 136
> (if the resonant peak is symmetric).

Brain fart. Middle of the band is sqrt(118*137), or 127.1. Was thinking
about a totally different problem when I wrote that equation -- obviously.

Jim

4475. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 22:01:31 UTC
From: Fred Hambrecht <w4jle@charter.net>
Message-ID: <u87rmamtjcl8ae@corp.supernews.com>
Source record: 147313
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Not to mention Albany pronounced Al (pause)-Benny

"Sir Charles W. Shults III" <aichip@cfl.rr.com> wrote in message
news:caOg8.37759$TV4.6624106@typhoon.tampabay.rr.com...
> And there is a little town (Buchanan) in Georgia where the natives are
> comfortable calling it Buck Annen. Go figure.
>
> Cheers!
>
> Chip Shults
> My robotics, space and CGI web page - http://home.cfl.rr.com/aichip
>
>
>

4476. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 22:37:41 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a60svl$80r$1@slb6.atl.mindspring.net>
Source record: 147314
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Rich:

Thanks for reminding me that wer'e in a pub, I think I'll have another pint
of Directors.

--Peter K1PO

"Rich Grise" <richgrise@earthlink.net> wrote in message
news:3C83EC19.7586@earthlink.net...
> Greatest Prime wrote:
> >
> > I have tried to read through some of these posts. B O R I N G! I am
willing
> > to offer some assistance if a reasonably well written and succinct
summary
> > is presented. I cannot believe that the topic is so complicated that it
> > requires as many characters as have been posted so far.
> >
> > Bill
>
> Well, you're free to not reaad the posts, as Jim has suggested, and I
> wouldn't worry too much about some text choking the server - at least
> mine has a whole bunch of binaries NGs, and, as they say, one picture
> is worth a thousand words! ;-)
>
> And, really, we're just a bunch of friends in sort of an electronic
> pub, having some fun, if in a geeky sort of way. ;-)
> --
> Cheers!
> Rich
>
> "We have met the enemy, and he is us!"
> - Pogo Possum, ca. 1950's

4477. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 22:41:57 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a60t7n$i73$1@slb7.atl.mindspring.net>
Source record: 147315

Steve:

It wasn't Outlook Express, it was just the signals from those three fields!
Heh, heh...

--Peter K1PO

"VE9SRB" <srbest@att.net> wrote in message
news:WDLg8.13929$gK2.996019@bgtnsc04-news.ops.worldnet.att.net...
>
> "VE9SRB" <srbest@att.net> wrote in message
> news:_ALg8.13918$gK2.996028@bgtnsc04-news.ops.worldnet.att.net...
> > >
> > >
> >
> > Sorry for the three posts. Outlook Express problems again.
> >
> > Steve
> >
> >

4478. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 22:43:24 UTC
From: Jim Thompson <Jim-T@analog_innovations.com.invalid>
Message-ID: <f0u78ucik786ql9tc2g9ait35qjf17totj@4ax.com>
Source record: 147316
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Mon, 4 Mar 2002 17:37:41 -0500,
"Peter O. Brackett" <ab4bc@ix.netcom.com>,
In Newsgroup: sci.electronics.design,
Article: <a60svl$80r$1@slb6.atl.mindspring.net>,
Entitled: "Re: HELP needed in understanding Bode Plots",
Wrote the following:

I'll have another glass of Bodega Lurton Pinot Gris (Argentina, what I
had for lunch...*really nice*). And I like *pictures* too ;-)

|Rich:
|
|Thanks for reminding me that wer'e in a pub, I think I'll have another pint
|of Directors.
|
|--Peter K1PO
|
|
|"Rich Grise" <richgrise@earthlink.net> wrote in message
|news:3C83EC19.7586@earthlink.net...
|> Greatest Prime wrote:
|> >
|> > I have tried to read through some of these posts. B O R I N G! I am
|willing
|> > to offer some assistance if a reasonably well written and succinct
|summary
|> > is presented. I cannot believe that the topic is so complicated that it
|> > requires as many characters as have been posted so far.
|> >
|> > Bill
|>
|> Well, you're free to not reaad the posts, as Jim has suggested, and I
|> wouldn't worry too much about some text choking the server - at least
|> mine has a whole bunch of binaries NGs, and, as they say, one picture
|> is worth a thousand words! ;-)
|>
|> And, really, we're just a bunch of friends in sort of an electronic
|> pub, having some fun, if in a geeky sort of way. ;-)
|> --
|> Cheers!
|> Rich
|>
|> "We have met the enemy, and he is us!"
|> - Pogo Possum, ca. 1950's

|

...Jim Thompson
--
(If replying by E-mail please observe obscure method of anti-spam.)

James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
Jim-T@analog_innovations.com Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

For proper E-mail replies SWAP "-" and "_", and remove the obvious.

"Things turn out best for those who make the best of how things turn out."

4479. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 23:08:56 UTC
From: dan <danlx@execpc.com>
Message-ID: <3c83feef$0$1601$272ea4a1@news.execpc.com>
Source record: 147318

On Mon, 04 Mar 2002 13:35:56 -0800, "Al Lorona, Jr."
<al_lorona@agilent.com> wrote:

>dan wrote:
>
>> My question is, why move into an area that has restrictions? Is the
>> area a status thing? Is it a wife driven thing? Is there positively
>> no other option?
>
>and:
>
>> Maybe there are areas that span 100's of miles where CCR's are the
>> norm, I don't know personally of any, but what the heck do I know
>> anyway.
>
>
>Dan, you've never been to California, have you?
Yes, but it was many years ago. Still know quite a few people out
there. None are hams. Would not live anywhere near LA. Really liked
the high dessert areas east on Hy 10. Ukipa(sp?)/Calamesa(sp?). Did
not care for earth that moved, came home to Milwaukee. Good earth,
never moves, needs back hoe to move, good earth!!! :<}
N9JBF
>
>Al W6LX

Dan

I've rambled enough, back to the rocking chair. ZZZZZZZZZ

Remove left x for a direct reply.

4480. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 23:11:10 UTC
From: Harold Burton <hwburton@swbell.net>
Message-ID: <iaTg8.3219$Nw1.1129557102@newssvr12.news.prodigy.com>
Source record: 147317

"Al Lorona, Jr." <al_lorona@agilent.com> wrote in message
news:3C83E8BB.3CDDF9E@agilent.com...
> dan wrote:
>
>
> > Maybe there are areas that span 100's of miles where CCR's are the
> > norm, I don't know personally of any, but what the heck do I know
> > anyway.
>
>
> Dan, you've never been to California, have you?
>

I was there twice, once in the late 40s and again, for a few days while
returning from
a hitch with the Army in tokyo in the mid 50s. I enjoyed it both times, but
I ain't going back.

4481. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 23:21:39 UTC
From: k1bqt@aol.com
Message-ID: <20020304182139.05816.00001824@mb-cl.aol.com>
Source record: 147319

>Brain fart.<

Being a persistent old fart with half a brain, I decided to call the regional FAA office at MHT this morning and ask about antenna polarization. After a few pings and pongs, I connected up with a helpful chap (also named Jim) who was pegged as the local guru for area radio sites. He never heard anything about circular polarization for Com. sites and seemed puzzled by my question. Said there may be a test bed or two out there somewhere (possibly in your part of the world), but if I want to hear ground stations in the Northeast Corridor, I'd best stick with good old linear vertical polarization 'cause that's what the FAA is using.

Shoot me or call me a bad name if you like, but that's just what he said--and it corroborates totally with what I see on the rooftops of various area facilities.

Rick K1BQT

4482. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 23:41:38 UTC
From: mcduffie@xactcom.net
Message-ID: <3g188u41i0at804vft2ipoh2gbmr51209f@4ax.com>
Source record: 147322

On Mon, 04 Mar 2002 19:35:02 GMT, k3ph@dxis.monroe.pa.us (Bob
Schreibmaier) wrote:

> I used to show it erotic pictures, but that had the
> opposite effect. 8^)

Note: This method is usually used when it is time to erect the device.

gm
--
There is no x in my ISPs domain name.

4483. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 23:43:38 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u881kkfv1idp3a@corp.supernews.com>
Source record: 147320

Hey, anybody that does the research and has somebody they believe to be right, I'm more than willing to listen. I based my words on two people who have never given me a bum steer, and there is every chance (like me) they are very conversant with what goes on in the AIRPLANE and were given bad advice themselves about what goes on on the ground. It happens. Next time I'm down to Sac Metro or over to Reno, I'll look myself at what is on top of the tower. Since the radio bay is two floors below the tower cab, I'm willing to bet what is on top of the tower is the antenna farm for the tower.

Hey, I just thought of something...and I don't have time right now to confirm it. Anybody who lives LINE OF CLOSE SIGHT from the tower (to eliminate as many reflections as possible) and has a spectrum analyzer or service monitor with S-meter, rig up a dipole a few wavelengths above the ground and see if you get a decent null when the antenna is horizontal referenced to vertical. Even better, get a friend with an acro airplane to take you up and put the sucker in knife-edge and note the noise on the signal {;-)

Jim

"Rick Littlefield" <k1bqt@aol.com> wrote in message news:20020304182139.05816.00001824@mb-cl.aol.com...

> I'd best stick with good old linear vertical polarization 'cause that's what
> the FAA is using.
>
> Shoot me or call me a bad name if you like, but that's just what he said--and
> it corroborates totally with what I see on the rooftops of various area
> facilities.

4484. Re: HF antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-04 23:59:05 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C840909.A5F9E4AB@bellatlantic.net>
Source record: 147321

The AEA antenna analyzer is clearly the cadillac of the MFJ and Autek products. It even hooks up to a PC and gives you a SWR vs. Freq. plot! If anyone knows of a uses AEA for sale for $200 or less.. give me a shout!!

'73 KI4Z

C wrote:

> Looking at buying HF antenna analyzer .
>
> What is good and what is junk.
>
> C.

4485. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 00:10:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C840CDA.2D01BC18@eznec.com>
Source record: 147323

No. All you need is a connection to the Internet. Depending on how you've set up your system, what operating system you're using, how you've set various options, and so forth, a hacker might be able to put a program right onto your computer without you knowing anything about it, and without using your email program, browser, Outlook, or any other normal Internet connection program, and without sending you email or your looking at a web site. It can be done any time you're connected. Some of the programs that are implanted this way send out worms. Others are used to remotely send spam, anonymously send messages of the hacker's choice, participate in denial-of-service attacks, send your personal information back to the hacker, or basically anything else the hacker wants to do. This isn't a vague, never-happens kind of thing. My firewall records several attempts to get into my system every day. Roughly 30% of the spam I receive comes from an "open relay" -- a system where the hacker had planted software to send out the spam, unbeknownst to the user whose machine actually sent it. It's happening all the time. The only way to protect yourself is with a firewall. Like locking your door, even that isn't guaranteed to keep out a determined hacker. But like other thieves, they'd rather rob the easy marks instead, so it keeps the vast majority of them at bay.

More and more people are getting DSL and cable connections, which greatly increases your vulnerability, since you're connected to the Internet whenever your computer is on, not just when you've connected with a modem. Also, a lot of ISPs give you a static IP address with a DSL connection. What this means is that once a hacker puts something onto your system, he or she knows exactly where to go to access the implanted program.

Folks, the Internet is the Wild West. There's no law, so you've gotta carry your own 6-gun. Nobody's looking out for you except you. There's a great deal of good information about this on the Internet. It would be well worth your while to spend a couple of hours educating yourself about how to keep yourself relatively secure in this environment. A search on "firewall", "open relay", or "back orifice" would be a good place to start.

Roy Lewallen, W7EL

Bob Miller wrote:
>
> Roy Lewallen <w7el@eznec.com> wrote:
>
> >sent by a worm, should one ever get onto your machine. But Norton
> >Anti-Virus doesn't prevent a worm from being planted by a hacker, or

> >notify you when the worm sends infected email to others.
>
> But, this applies mainly to the Microsoft e-mailer that accepts macros? (I use
> Eudora for e-mail.)
>
> Bob
> k5qwg
> >
> >Roy Lewallen, W7EL
> >

4486. Re: DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 00:19:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C840F1D.F0CFD153@eznec.com>
Source record: 147324

It sounds like what you want to do is to feed a resonant dipole with ladder line, matching the ladder line to the dipole at the dipole's feedpoint. This is ok, you could do it with a 9:1 balun, but why would you want to? Your rig is probably designed to work into 50 ohms, so you'd have to transform back from 450 to 50 or so at the rig end of the line. Instead, just feed the dipole with 50 or 75 ohm coax. Unless you've got an exceptionally long run of feedline, the difference in loss will be negligible. And you won't need a tuner -- you can connect the coax directly to your rig. You might want to use a 1:1 current or "choke" balun at the antenna feedpoint to prevent current on the outside of the feedline.

If, on the other hand, you want to operate the dipole on multiple bands, the impedance will be near 73 or so ohms resistive only on one band. On the others, it'll be wildly different. A match would be good on only one band, but nowhere near right on the others, so there's no point in trying to match the line to the antenna. Just let the transmission line have a high SWR. Ladder line is an appropriate way to feed it, since its loss is low when it has a high SWR (at least when dry). So if that's what you're trying to do, just connect the 450 ohm line directly to the antenna, and let the tuner in the shack take care of matching to the rig.

Roy Lewallen, W7EL

marvin rosen wrote:
>
> If the center of a dipole is 72-75 ohms why can't a 6:1 balun be used (with
> coax) in place of 450 ohm ladder line? a tuner would also be used in the
> shack.
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

4487. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 00:25:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C841073.46466817@eznec.com>
Source record: 147325

Last time I tuned in, a group of credible Italian hams were getting set to actually run some reasonably well controlled and documented tests on a real EH antenna. What happened to that? If it hasn't taken place, does anyone know when it will?

Roy Lewallen, W7EL

4488. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 00:29:34 UTC
From: Pie`` IK2VTJ <picarusoNONVOGLIOSPAM@writeme.com>
Message-ID: <a613gu$aq4le$1@ID-83989.news.dfncis.de>
Source record: 147326

"Roy Lewallen" <w7el@eznec.com> ha scritto nel messaggio
news:3C841073.46466817@eznec.com...
> Last time I tuned in, a group of credible Italian hams were getting set
> to actually run some reasonably well controlled and documented tests on
> a real EH antenna. What happened to that? If it hasn't taken place, does
> anyone know when it will?
>
> Roy Lewallen, W7EL

Unfortunately, not yet. I'm waiting too.
--
73 de IK2VTJ, Piero.

http://www.qsl.net/ik2vtj
http://www.ardf.it

Togli / Remove
NONVOGLIOSPAM
dall'indirizzo / from address

4489. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 00:34:17 UTC
From: davem@cs.ubc.ca
Message-ID: <a613q9$84f$1@trappist.cs.ubc.ca>
Source record: 147327

"Jim Weir" <jim@rst-engr.com> writes:

>You must be somewhat behind in your news. The top MHz. (136 to 137) was
>inserted into the VHF COM band about three years ago. The top of the band
>**IS** 136.975. 760 channels total. Go look at any transceiver
>manufacturer's page and you will see that they are advertising 760 channel
>radios, not 720.

You're right, I hadn't heard that. Is it worldwide, or USA only,
or something in between. Anyone actually using the frequencies yet?

Dave

4490. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 00:44:46 UTC
From: Pie`` IK2VTJ <picarusoNONVOGLIOSPAM@writeme.com>
Message-ID: <a614de$8pal4$1@ID-83989.news.dfncis.de>
Source record: 147328

What about using the sun as a compass?
I set my rotator control box to south and, at midday, I turned the mast on
to the rotator, aiming the antennas to the sun.
Was I right?

--
73 de IK2VTJ, Piero.

http://www.qsl.net/ik2vtj
http://www.ardf.it

Togli / Remove
NONVOGLIOSPAM
dall'indirizzo / from address

"me" <inspector3985@yahoo.com> ha scritto nel messaggio
news:ar838u4kvgpkl5d8rthbullkc8k6avqkv2@4ax.com...
> This may be of interest to people setting up antennas using a compass.
> Magnetic North and True North are not always the same. If you were
> calibrating a beam heading using magnetic north as a reference on your
> readout you could be in error. The declinatin or correction factor can
> be significant. A case in point is my location in Nova Scotia. True
> North and Magnetic North are different by 20 degrees! If you wish to
> know the declination for your particular part of the world a good
> place to visit is http://www.geolab.nrcan.gc.ca/geomag/e_cgrf.html
> Hope this is of interest to antenna buffs. Thanks for reading.
> Scott VE1AFN.>
>

4491. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 01:11:54 UTC
From: k1bqt@aol.com
Message-ID: <20020304201154.28403.00001682@mb-fd.aol.com>
Source record: 147330

> Anybody who lives LINE OF CLOSE SIGHT from the tower (to eliminate as many reflections as possible) and has a spectrum analyzer or service monitor with S-meter, rig up a dipole a few wavelengths above the ground and see if you get a decent null when the antenna is horizontal
referenced to vertical.<

I know someone who works in the engineering lab of an antenna company located direclty across the runway from the tower at a busy Class C airport. Great idea!

73

Rick K1BQT

4492. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 01:14:29 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C841BF5.6FEBF6D5@coqui.net>
Source record: 147329

"Pieï¿½ï¿½ IK2VTJ" wrote:
>
> What about using the sun as a compass?
> I set my rotator control box to south and, at midday, I turned the mast on
> to the rotator, aiming the antennas to the sun.
> Was I right?
>
> --
> 73 de IK2VTJ, Piero.

Midday solar time or Midday local time?
Probably close enough anyway.

-Bill

4493. Re: goniometer [power line noise cancel] device

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 01:31:59 UTC
From: richardharrison@webtv.net
Message-ID: <9742-3C84200F-672@storefull-118.iap.bryant.webtv.net>
Source record: 147332

Gary wrote:
"Math is not my forte`, but this is a very simple concept."

I was told a goniometer is a very sensitive electronic medical instrument. When applied to the patient, the doctor can hear a distinctive clap, clap, clapping sound in the earphones if the patient is infected with gonorrhea.

Best regards, Richard Harrison, KB5WZI

4494. Re: Stacking Dipoles?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 01:35:55 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203041735.6bfcd970@posting.google.com>
Source record: 147331

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C83BA3B.3B3F3E34@IEEE.org>...
> Michel de Ruiter wrote:
> >
> > Yes it is possible with both antenna`s on a full wave length from each other
> > (vertical?) ! You will get 3 dB gain. You need to use 75 ohm coax and the
> > length of that coax must be 3/4 wave lengt to each site. Connect your
> > feedline in the middele and you are on!
>
> If you put one dipole behind the other and phase them correctly,
> you get a beam pattern similar to a Yagi.

I've tried this on 40m. Worked pretty well. Maybe 4-5 db's worth?? The f/b ratio was about 15-20 db's worth. Quite noticable. I can't remember the spacing I used. You would have many spacings that could work ok, but will vary the gain, etc. With mine, I changed feedlines to steer the array. Some have used L/C phasing units with good success. But you can't stack the antennas, you have them set up like a yagi. You could stack them, ala Lazy H, etc, but you need a transposed feeder between the elements. Most that run these use ladder line. With the ladder line it's simple to twist the line for the top element for the transposed feed. I fed mine with coax, and used switches, etc. I think it's easier to run them parallel like a yagi. Also the whole antenna is up in the air better than a stacked pair with a lower bottom element. MK

4495. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 01:50:09 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C842451.1070000@sympatico.ca>
Source record: 147333

Well, ok, it worked I suppose. A couple of weekends ago I tried checking into the Maritime Mobile Net on 20m. The controller in Arizona couldn't make me out but a fellow in Florida picked me up and relayed me in as a checkin. That was at 100w on a TS-120s and the antenna was hanging from the ceiling fan in my room. I didn't have a chance to get a signal report. Florida was coming in at about 5-7/ 9. The down side was that my transmission was getting into the phone big time. I'll have to use lower power, or find a better spot for the antenna when I make a better version. Might even try it out at field day for a hoot (if the rest of the guys don't hang me up in it's place first), but they are a pain in the butt to tune, even the simple one I tried.

That's an EH... not a CFA by the way. I'm tempted to make the "Coffee Can" version a guy has on his web site for a laugh some time :-)
Just can't stomach drinking that much coffee in a short period of time ;-)

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

Pieï¿½ï¿½ IK2VTJ wrote:

> "VA3ATD" <a.duffy@sympatico.ca> ha scritto nel messaggio
> news:3C82DB56.7090603@sympatico.ca...
>
>>Hi Piero,
>>
>>I was thinking more about the group of experimenters and gurus on this
>>side of the pond myself......
>>
>>I built a simple one from tin foil and a cardboard mailing tube, but
>>without a dipole antenna to compare it with.....
>>
>>
> ... but you can say if it works or not, I suppose.
> Could you listen to any station? Did some station listen to you? With which
> signal, power and QRB?
>
>
>>But then again, if I could put up a proper dipole I wouldn't need a
>>compact antenna, right?
>>
>

> Right! The famous DX and contesting stations, that I can only see on a
> picture :-(, really don't need EH at all.
> But here we are discussing about the fact that this new 'object' works,
> works well, doesn't work at all, just to satisfy our technical 'need to
> know'. Moreover, if I could replace my 160mt dipole, that lies almost on the
> ground, with something more efficent, it would be great.
> Hope to hear you on the air, in the top band....by mean of ...any antenna!
>
> --
> 73 de IK2VTJ, Piero.
>
> http://www.qsl.net/ik2vtj
> http://www.ardf.it
>
> Togli / Remove
> NONVOGLIOSPAM
> dall'indirizzo / from address
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>
>
>

4496. Re: goniometer [power line noise cancel] device

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 01:57:56 UTC
From: richardharrison@webtv.net
Message-ID: <9742-3C842624-675@storefull-118.iap.bryant.webtv.net>
Source record: 147338

I`m having second thoughts about a crude joke I posted, but I swear it came from a real experience. A company manager asked me why Dr. Maldonado, the company physician in Argentina, was not the person requesting a goniometer!

Best regards, Richard Harrison, KB5WZI

4497. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 02:08:53 UTC
From: klocko@toad.net
Message-ID: <224d9cd4.0203041808.438d8ebc@posting.google.com>
Source record: 147334

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<20373-3C839F73-579@storefull-111.iap.bryant.webtv.net>...
> Richard Clark has a copy of Arnold B. Bailey`s "TV and Other Receiving
> Antennas", I believe. He can confirm my interpretation of the
> "Free-space power graph showing near and far fields" on page 211.
>
> In the near field, the signal drops about 11 db when the distance is
> increased by a factor of 10. In the far field, the signal drops by 20 db
> when the distance is increased by a factor of 10. This just a graph on a
> small scale constructed by humans, but it agrees very closely with the
> assertion made by Chip.

Hi Richard,
I don't have that particular book, but I'll see if I can track it
down. In the mean time, I'll pose a couple of questions, and throw out
a possible explanation for the 1/r falloff.

Is the graph a compilation of measured data? If so, what two antennas
were used in the measurements? What was the smallest distance between
them?

The reason I ask is that if the two are similar types and have similar
sizes, then the measurements may include additional effects. The first
is a reduction in the received power due to strong coupling between
the antennas. This occurs when radiation is scattered from the
receiving antenna back into the source antenna, changing the source
antenna's impedance. Does this change the power radiated by the source
antenna? At the risk of starting a whole new sub-thread - possibly.
Second, when measuring near fields, the receiving antenna ideally
should be small enough that the fields emitted by the source antenna
are not changed by the presence of the receiving antenna. A fairly
large receive antenna (e.g., a half-wave dipole) could certainly
modify the field distribution. Third, as Richard C. points out, the 2
antennas are not point sources relative to each other and certain
sections may react more strongly than other sections.

All these effects are related, but the bottom line here is that the
1/r variation in received power may be a manifestation of them.

73,
Bill N3WK

4498. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 02:17:21 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <RUVg8.4807$7Y4.1168328@news20.bellglobal.com>
Source record: 147336

"Richard Harrison"
> Then there are magnetic dipoles...

I used to have a very rare magnetic monopole, but one day it just took off heading roughly NNE and was never seen again. ;-)

4499. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 02:20:02 UTC
From: John Larkin <jjlarkin@highlandSNIPTHISTechnology.com>
Message-ID: <qiqEPMG6NzAvN8Xj5Di5yXVcTP+P@4ax.com>
Source record: 147335
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Mon, 04 Mar 2002 11:15:36 GMT, Rich Grise <richgrise@earthlink.net>
wrote:

>John Woodgate wrote:
>>
>> I read in sci.electronics.design that Roger Johansson <no.email@home.se>
>...
>> >If Bailly is a french name, and it looks like that, it should
>> >probably be pronounced Bay-ee, with the tension on the ee and
>> >also with a raised tone on the ee.
>>
>> Yes. Actually 'buy-ee' (or even 'Bye-ee') is a bit nearer.
>> --
>> Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
>
>There's one example off the top of my head, and I think there's
>another, but can't think of it, but anyway, Pierre, SD is pronounced
>"Peer," not "Pee-air." Of course, there's the eternal argument between
>"Saint Loo-iss" and "Saint Loo-ee," and god knows how many possible
>pronunciations of "New Orleans." Anybody recall that other famous
>example?

Accepted pronunciations are...

Noo Awlins

Nawlinz, usually accompanied by 'darlin'

Noo Or-le-enz

Noo Or-leenz is only allowed in song.

John

4500. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 02:26:21 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <h1Wg8.4819$7Y4.1176216@news20.bellglobal.com>
Source record: 147337
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

> The UK has lots of places that the natives
> pronounce strangely...

My mother's parents each came from different regions of England. Since they couldn't understand each other's thick dialect, they could only communicate verbally with each other in Mandarin Chinese...

4501. Re: [newbie]microwave beam

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 02:43:32 UTC
From: richardharrison@webtv.net
Message-ID: <22811-3C8430D4-129@storefull-112.iap.bryant.webtv.net>
Source record: 147341

Arnaud Thopiteau wrote:
"I`d like to create a microwave beam, 2m in diameter at 100m length, 9600 Bps, using the least size, power consumption, and cost."

You could do this at 6725 MHz using an 8-ft dish, spaced 400 feet from your target to get a first Fresnel zone spot 8 feet in diameter. It isn`t cheap. It would take two microwave T/R`s and two 8-foot dishes for full duplex operation. You could multiplex your microwave for 600 channels each carrying 9600 bits per second with SSB multiplex FMed on your carrier and each of the voice channels supplied with the appropriate modem. Or, you could use all digital modulation and equipment.

For a single inexpensive channel, I`d use 9600 bps modems. on a cable if possible, through wireless in space, if not. Optical transceivers could be used with the modems if needed. It is sure to be cheaper than microwave.

Best regards, Richard Harrison, KB5WZI

4502. Re: UHF Antenna selection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 02:55:00 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C843381.9AD66DAC@tampabay.rr.com>
Source record: 147339

sam i have a good deal for you its called cable TV....grin then you dont have to worry about the home owners associations restrictions....smile
check with radio shack they probably have something that will do what you need

Sam wrote:

> Hi all,
> I know this is probably off-topic, but I need help. I need a UHF ant to pick
> up local TV. Roof-top mounting is out due to neighborhood restrictions, and
> attic trusses limit me to an 86" boom lenght if I want to rotate.
> Channelmaster has an 8 bay bow-tie they claim is good for 60 miles. Winegard
> sells a similer type. I've always had corner reflector UHF antennas, but the
> bow-tie would be easier to mount in my attic. Any testimonials as to which
> way to go with this would be greatly appreciated.
> Thank you, Sam

4503. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 03:00:08 UTC
From: vswrref@hotmail.com
Message-ID: <3c843496.16743794@national-news.stargate.net>
Source record: 147340

Hi Paul!

Thanks for the info and link. Will take a look at it and get better
acquianted.

Jeff Y.

On Mon, 4 Mar 2002 20:28:12 -0000, "MW0CDO" <gw7lhiJUNK@ntlworld.com>
wrote:

>
>"Jeff Y." <vswrref@hotmail.com> wrote in message
>news:3c826cfd.669435@national-news.stargate.net...
>> I've been hearing alot obout the HF6V and I do have one question about
>> it. How long is the 75 ohm matching stub?
>>
>> Jeff Y.
>
>Jeff, look here http://www.bencher.com/pdf_download.html for all the info
>you could want on Butternut verticals.
>
>The matching line for 20m impedance transformation is 13ft 6in for 0.81vf
>co-ax, or 11ft 4in if the vf is 0.66 ie: RG59. This matching line must be 75
>ohm feeder. It has no effect on any other band, or the efficiency of the
>antenna at all, it simply transforms the 100 ohm feedpoint impedance on 20m
>to 50 ohms so that you do not have a permanent 2:1 SWR on 20m.
>
>Hope this helps.
>
>
>--
>Paul MW0CDO
>
>Remove the JUNK in my address before clicking send!
>
>

4504. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 03:28:12 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u88eqcb8fneh35@corp.supernews.com>
Source record: 147342
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <3C832411.28C0@earthlink.net>, richgrise@earthlink.net says...
>
>Bob Wilson wrote:
>...
>> Just because you are an Englishman, doesn't mean that you have to go
around
>> mispronouncing people's names. Fact is that the english language (in
spite
>> of its vastly simplified grammar compared to other languages) is a bloody
>> disaster when it comes to consistency of pronounciation. Show the guy
some
>> respect and don't use English language rules (as sloppy as they are) to
>> pronounce names that are rooted in other languages.
>>
>> Bob.
>
>But do you have any idea of the potential jokes that exude from the
>pronunciation "Bow-duh?"

Hmmm. Good point. Better make it "Bowdeeeee"!

Bob.

4505. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 03:30:05 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u88ett8ahdre56@corp.supernews.com>
Source record: 147343
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <3C832278.1F98@earthlink.net>, richgrise@earthlink.net says...
>
>Bob Wilson wrote:
>>
>> In article <Zqhg8.196086$A44.11813355@news2.calgary.shaw.ca>,
>> dhky@peeshaw.ca says...
>> >
>> >I always heard Bo-deh but I am Canadian, eh?
>>
>> Bode's name is Germanic, and pronounced Bo-duh (with the "a" having
>> very little emphasis, and sounding rather like the sound of the "u" at
the
>> start of "under").
>>
>> This is the same as the proper way to pronounce "Porsche" (no, it does
NOT
>> rhyme with "porch", you infadels!! :)). German may be a pain to learn
>> because of its complex grammar, but at least (unlike English) it obeys
its
>> own rules for pronounciation. The "e" on the end of any Germanic word is
>> always sounded.
>>
>> Bob.
>
>I can't restrain myself.
>
>Two semi-retired professors were sitting on the porch having a couple
>of brewskis. (This could also be referred to as a "verandah" or "deck")
>- it was a fairly sizeable porch, encompassing three sides of the house,
>and as it happened, it was badly in need of a paint job. The two old
>fellows were discussing what a pain in the neck it would be to paint
>it themselves, and how expensive it would be to hire pros, when
>suddenly a young blonde shows up. "Hi! I'm LuAnne, and I'm working
>my way through college! Got any work for me?" Well, this is too good
>to be true. The professor says, "I'll give you fifty bucks to paint
>my porch." She says "Sounds great!" He says, "Well, all the paint
>and brushes and stuff are over by the garage back there." This is
>fantastic! He's just saved over a thousand dollars! And made a
>young bimbo happy! But after about an hour or two, they notice
>that she hasn't come around the corner painting the porch, so
>they (the professor and his friend) start to get a little concerned.
>While they're discussing this, LuAnne shows up, paint-stained,
>with a little bead of sweat at her temple, saying, "All Done!

>And I had so much paint left over I gave it two coats!" The two
>old guys look at each other, wondering, "What the F?" And LuAnne
>says, "But, you made a mistake. It's not a porch, it's a Ferrari."

GROAN!!!!

Bob.

4506. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 03:34:30 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u88f66gi2jjub6@corp.supernews.com>
Source record: 147344
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <3C832380.7A0@earthlink.net>, richgrise@earthlink.net says...
>
>Bob Wilson wrote:
>>
>> In article <a5t3jl$a0u4b$1@ID-124126.news.dfncis.de>,
>> g4fgq.regp@btinternet.com says...
>> >
>> >What's the matter with just "Bode" ?
>>
>> The same thing that's wrong with pronouncing Porsche as "Porsh"; namely
that
>> it's wrong.
>>
>> Bob.
>
>So, it'd be something like trying to pronounce "Boad," but getting
>punched
>in the stomach just as you're finishing? ;-)

Hmmm; actually, yes. Maybe we're all just luck that his name was only 4
letters long, instead of one of those horrific German compound nouns that
take several lines to write :)

Bob.

4507. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 03:36:02 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u88f92tu7o3da@corp.supernews.com>
Source record: 147345
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <3C836DD2.A0333D4B@austininstruments.com>,
jfields@austininstruments.com says...
>
>This Native American girl gets on a bus in Atlanta, and when she sits
>down this Black girl sitting in front of her turns around and says,
>"What you is?"
>"Navajo", she replies, "and you?"
>"Geo'gia ho." she answers.
>

Alright you guys, don't make me have to break out my Newfie (Newfoundland,
for you non-Canadians) jokes!

Bob.

4508. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 03:43:04 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <e9Xg8.6470$7Y4.1239509@news20.bellglobal.com>
Source record: 147346

"Ravi R" wrote in a slightly different order:
> I can't sit by my window with my telescopic antenna,
> since it's cold and the windows are always closed.
> And i am not really satisfied with the supplied reel antenna.
> I went to RadioShack the other day and saw a SW antenna kit,
> for 10 bucks. I guess its one of those 'Inverted L' kinda of antenna.

Hi,

If it's $10, then you might as well buy it. If it were to cost much more than that, then it wouldn't be worth it. Remember that it is *just* wire and some fairly obvious hardware.

Portable SW receivers don't usually need very much signal to overload - you might need an attenuator depending on the design of the radio when using an outside antenna. Some portable radios have an attenuator switch on the back close to the whip.

Most of those sorts of portable SW radios work pretty good with just the built-in whip. Is your residence not made of wood ? Do you detect better signals next to those cold windows ?

One advantage of using an external antenna is that the whip stays folded up and safe (as opposed to bent), especially when in bed listening to BBC sports anouncing the scores (helps me to go to sleep).
"Manchester 2, Womanchester 1.
Flogbottom 4, Bot Floggom 2.
Chesterfield 3, Hallway Table 2..."
...yawn... ...zzzzzzzz... <out>

> ...MFJ Antenna preselector...

The one with the tuning knob and assorted switches ? Adding that to a digital radio is a bit like having a nice car with the gear shifter mounted on the roof. Everytime you conveniently punch a button to bring up another preprogrammed channel, you then have to fiddle with the preselector to bring the signal up. Gets tiresome very quickly.

I wouldn't bother unless you proved to yourself that you needed it. It can really slow you down when browsing around the bands. At least, have a way to bypass it. You probably won't use it 95% of the time.

> the SONY AN--LP1 seems to be the best antenna
> but not available in the USA at the moment.

The Sony is (IIRC) an untuned active antenna. It has a switch to insert a filter, but it is basically wideband and doesn't distract from the radio

tuning.

Is it still manufactured ? Sony might not sell it in the USA, but I'll bet there are a hundred companies bringing them in from overseas markets (gray market). My ICF-7600 came from the Middle East to NYC where I bought it. Pick up a SW or Radio magazine and check the ads in the back if you want that antenna.

> My problem here is... the connectors from the Preselector,
> are co-axial..or whatever to the radio. But my portable has
> .. a MINI Plug for..."Ext Ant". How do i connect that output
> from the preselector to my radio.

Mini plug probably = 1/8" mini ("mono", not stereo of course). The MFJ probably has an SO-239 that accepts PL-259 (big threaded socket). I don't believe that Radio Shack has an adapter or a cable directly from one to the other - better ask (You got questions, they make up answers...). You have to learn to solder sooner or later, so you might have to make your own cable sooner than later... Or simply dispense with the preselector for now. Leave it until you know you need it.

To connect the radio to any outside antenna, purchase a prewired cable from Radio Shack with a 1/8" mono plug on each end. Get a long one. Then cut it in half and strip the wire ends. Now you have two cables that you can connect to various antenna projects and plug into your portable radio.

> Secondly.. apart from lightning and static.. will it
> damage the sensitivity of my Sony Portable in anyway !

Shouldn't - that jack is intended for external antennas. It is NOT intended for lightning. Disconnect when not in use. Don't use during storms - too much static anyway.

> "passport to world band radio" and "ARRL Handbook"

Oh my gosh, you're all set. Great books ! Just keep in mind that even the most complex and advanced theories created by Man pale in comparison to the complexities of the real world. Keep an open mind - but don't let your brains fall out.

Good luck.

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

4509. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 03:45:53 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3C843F71.DE6DC073@sympatico.ca>
Source record: 147347

>
> You must be somewhat behind in your news. The top MHz. (136 to 137) was
> inserted into the VHF COM band about three years ago. The top of the band
> **IS** 136.975.

The spacing is 8.33 kHz, although the transition is going to be a slow
process, and as a consequence the top of the band is even higher.

Dave

4510. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 04:47:45 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C844E1C.EDE3311E@bellatlantic.net>
Source record: 147348

Richard Harrison wrote:

> I found my "Radio Handbook" with the "MULTEE", a 2-band antenna for
> 160/80 or 80/40 meters. It seems the intent is to use the antenna as a
> folded dipole on the higher frequency and as a capacitively loaded
> vertical on the lower frequency. I think the authors or their staff made
> mistakes in the presentation.
>
> The folded dipole has its first resonance at an overall length of only
> 1/4-wavelength, end-to-end. The conductor has a periphery or total
> length of about 1/2-wavelength which permits this resonance. 1/4-wave vs
> 1/2-wavelength for an antenna is a real space-saver.
>
> The 1/4-wave folded dipole does not present 300-ohms to its feedpoint as
> the most common folded dipoles do. Maximum current in the 1/4-wave
> folded dipole occurs opposite the feedline, and 1/4-wavelength away from
> the feedline. That makes the impedance character of this antenna a lot
> like a short-circuit 1/4-wave stub. But, the antenna has a radiation
> resistance, so it doesn`t present an open-circuit to the feedline. The
> feedpoint of Arnold B. Bailey`s 1/4-wave folded dipole is 35.6 ohms.
>
> At 80-meters, a twinlead Q-section is nearly 20 meters long, or about
> 65.6 feet. "The Radio Handbook" put the length of the folded dipole at
> 70 feet or a nominal 1/4-wave at 80-meters. The feedline length between
> the antenna and coax is 52 feet, which may have been intended to make
> some sort of match, but it steps the 35.6 ohm impedance up to a very
> high value, nowhere near 50 ohms. 46 feet of 43-ohm coax might have
> matched the antenna to 50-ohm coax. But, I guess they couldn`t readily
> find the 43-ohm coax.
>
> A feedline could be made from two pieces of 75-ohm coax in parallel to
> closely match the antenna. Then any length of feedline could have been
> used with the antenna, within reason. The 35 ohm, or so, impedance
> presented to the the radio should be satisfactory.
>
> At 160-meterss, the 1/8-wave folded dipole would present a very reactive
> and unsatisfactory load to a radio transmitter. I think a switch was
> omitted which would be used to reconnect the antenna as a loaded
> vertical antenna. The idea was probably to use a length of feedline that
> would resonate with the tophat at 160-meters. The radials shown in the
> handbook are evidence of this.
>
> As Cecil said, as it stands it is a bogus antenna. But, with a little
> refinement, the idea will work.

>
> Best regards, Richard Harrison, KB5WZI

Thanks, Richard. I'm still "chewing on" this and the info
you posted is helpful.

4511. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 04:49:40 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C844E15.6B99@earthlink.net>
Source record: 147349
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Bob Wilson wrote:
...
> Alright you guys, don't make me have to break out my Newfie (Newfoundland,
> for you non-Canadians) jokes!
>
> Bob.

Oh, please! Just one?
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4512. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 04:50:59 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <T8Yg8.662$rc.543467@monger.newsread.com>
Source record: 147350

Although I might disagree on a few "fine points", I think we are in
agreement on most. <:-))

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C8311F1.BBC72E57@eznec.com...
> Many of the common "viruses" (technically, worms) being sent today --
> including the one Reg's machine was recently infected with -- are being
> sent via paths that completely bypass programs like Norton Anti-Virus.

The majority, still come in as attachments. I think the writters get a
certain perverse pleasure in having the users "do it to them selves"

> NAV checks only the outgoing email that you intentionally send, and
> downloads from web sites. The common worms send email messages without
> using the browser, and without your knowledge -- and without NAV's
> knowledge.

It makes far more sense to check the incoming mail.

The virus makes use of "ports" on the machine, rather than the browser, or
mail program, although it may (and probably does) use the address book, or
it will select the addresses of all unanswered mail (not sure why any one
would want to do that)

> And your system can contract them from places other than the
> email and web sites that NAV monitors. If you don't have a firewall, a
> hacker could get into your system and implant a worm without you or your
> anti-virus program being the wiser. That worm can then send infected
> emails to others without using your browser, again without the
> anti-virus program knowing about it.

I've set here and watched the firewall report a probe checking the ports on
the computer, going right in order. When it didn't find any, it started
over. Some one has installed a termite on my ISPs server that they didn't
even know they had.

>There are a lot of firewalls
> available, and installing one will go a long way in preventing a worm or
> other pernicious software from being installed on your machine. Zone
> Alarm is one of the very few that will also spot outgoing messages being
> sent by a worm, should one ever get onto your machine. But Norton

You can set it to prompt you every time your computer tries to send a
message too.

> Anti-Virus doesn't prevent a worm from being planted by a hacker, or
> notify you when the worm sends infected email to others.

>
Zone alarm is available free, or you can pay a small fee for the commercial
version. It is a good investment.

No, I have no interest in the company, but I have the product installed
(with license) on all the computers here.

--
Roger (K8RI EN73)
WWW.RogerHalstead.com
N833R, World's Oldest Debonair? S#CD-2

> Roy Lewallen, W7EL
>
> "George, W5YR" wrote:
> >
> > Reg, I have a vested interest in doing all I can to ensure that *you*
among
> > others on this newsgroup never receive a posting from me that contains a
> > virus, worm or other unknown/unwanted visitor.
> >
> > I paid money for my programs and take extra time with each posting to
allow
> > the program to do its thing.
> >
> > Should I do less? No . . .
> >
> > Do I wish that everyone did the same? Yes . . .
> >
> > 72/73/oo, George W5YR - the Yellow Rose of Texas
> > Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
> > Amateur Radio W5YR, in the 56th year and it just keeps getting better!
> > QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
> > Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437
> >
> > All outgoing email virus-checked by Norton Anti-Virus 2002
> >
> > Reg Edwards wrote:
> > >
> > > > Outgoing mail is certified Virus Free.
> > > > Checked by *** anti-virus system (http://www.*******).
> > >
> > > ==
> > >
> > > I've a feeling some people have a vested interest in the worsening
> > > proliferation of these bugs.

4513. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 05:17:29 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <JxYg8.664$rc.547990@monger.newsread.com>
Source record: 147351

"Bob Miller" <bamiller@texas.net> wrote in message
news:pIODPBwfIgnCUrXbA3jWYuMon8lr@4ax.com...
> Roy Lewallen <w7el@eznec.com> wrote:
>
> >sent by a worm, should one ever get onto your machine. But Norton
> >Anti-Virus doesn't prevent a worm from being planted by a hacker, or
> >notify you when the worm sends infected email to others.
>
> But, this applies mainly to the Microsoft e-mailer that accepts macros? (I
use
> Eudora for e-mail.)
>

Actually, and Richard explains it very well...this is one of those mistaken ideas that is believed in strongly.

It is true that MS and IE are prime tartets for the Script, Java, and attachments used to spread viruses, but as viruses get more sophisticated, they don't have to use the "let the user do it to themselves" approach and there are some really mean and capable ones around.

Besides being very easy to write, both worms and viruses are now available in a "do it yourself kit" that some kind soul has provided on the net. This means that the "Script kiddies" can now use a cook book approach for some stuff that with a little manipulation can become really nasty.

It is relatively easy to find a computer attached to the internet (the ones attached to cable modems are particularly vulnerable as they are on all the time and use the same IP which makes finding them and getting in easier). The user with malicious intent, merely finds an open port on said machine and it basically becomes his!
There are many ports on a machine and I have (as I said in another post) set here and watched a program start right through the list of ports on my machine and when it didn't get in, it started over (I had over 500 tries in one day)
Once in an open port that user can do almost anything the owner can.
Actually, in most cases they not only can do any thing the owner can, but many things the owner didn't know was possible. They certainly wouldn't try if they did. <:-))

Think about that for a little while. It can make a lot of converts for using firewalls.

I wanted to show how easy it is to get into an unprotected machine, but I'm not going any farther in providing information on a "how to" basis. <:-))
Just to say that it is very easy to get into the unprotected machine that is

on all the time, or that has a static IP.

BTW, my degree is in CS, I worked in industry as a Sys Admin, then Developmental Analyst (fancy way of saying programmer), and finally a project manager where the projects required FDA validation, prior to retirement.

I went back to school at age 47 (after 26 years as an instrument man) to get my degree which I completed in three years. I was picked up on a graduate assistantship and started into my Masters in CS, but fortunately was offered a very good job half way through the first term. I retired 6 1/2 year later. (It's a good profession<G> if you can stand the long hours, two or three calls per night...and a bit of travel where you never see the out of doors, except between the airport and destination.)

BTW, as a GA I taught 5 classes with 195 students and took two classes which were "The Design and Analysis of Algorithms" and "Digital Image Processing".
The first ended up using five level simultaneous equations for best case, worst case, and average case sorts. The second started with Fourier Transforms (not the Fast Fourier) and by the third week was using Matrix Algebra ...and the PHDs said not much math required.<LOL>

Any one not using a fire wall and not having picked up a virus yet is more than a little lucky. I use both Norton for incoming and Zone Alarm Pro in conjunction.

I mentioned the 500 plus port probes, but I didn't mention that I received over 250 viruses and worms last year. So far this year I have received a even dozen, but these 12 were far more viscious. None got through.

--
Roger (K8RI EN73)
WWW.RogerHalstead.com
N833R, World's Oldest Debonair? S#CD-2

> Bob
> k5qwg
> >
> >Roy Lewallen, W7EL
> >
>

4514. Antenna Testing (receiving)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 05:22:24 UTC
From: Ed Laughery <laughery@bellsouth.net>
Message-ID: <dsYg8.617$tg2.81591@e3500-atl1.usenetserver.com>
Source record: 147352

Hi

So you build a great new antenna (receiving) - the final test is obviously - hook it up and listen. But is it better vs your last great experiment? How do you go about performing a true instrument test of the antenna, homemade balun (easy to construct but was it close to a proper 9:1?), coax feed, sig-to-noise, pattern, etc. Any and all explanations will be greatly appreciated.

Regards
Ed

4515. Scanner Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 05:23:28 UTC
From: Bruce Nolte <brucenol@abs.net>
Message-ID: <3C845650.DD1D7195@abs.net>
Source record: 147353

Well, I decided it was time to drop my tower for service due mainly to a terminally sluggish 35 year old Ham M Rotor, but while the tower is down, I have several other items I would like to address. One of these items is a side-mounted scanner antenna, which I brought at Radio Shack several years ago for use with my scanner, and also found useful as an omnidirectional TV antenna, when mounted to a splitter. It is a cheap design using steel hardware and only six elements, and has corroded to the point of utter uselessness, except possibly as a dummy load.

I would like to replace it with a more robust design. I made an attempt to build one this morning out of some scrap 5/8 aluminum tubing and 3/8 thick aluminum plate, but with my current tooling I was unable to drill the necessary 5/8 diameter holes at the required 30 degree angle neatly enough to retain the tubes securely. My idea is a 12 element discone, with 48 inch diagonals and 32 inch horizontals, 6 of each. I may also decide to make it smaller and use a 54 inch whip on top to extend the range into the 50 Mhz range. Besides the difficulty of drilling large holes at an angle into Aluminum, the other problems I forsee are perhaps corrosion, and limited response at high frequencies (~800 Mhz) due to the large element diameter.

I am also considering buying a new antenna, but so far the Radio Shack piece of junk is the only thing I can easily obtain locally. Can anyone point me to a suitable design that I might be able to construct fairly easily, or a good source for a decent, but reasonably priced (up to about $75.00 or so) commercially made antenna I might be able to find in the Baltimore area, or get on order within a couple of days.

4516. which is the best antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 05:28:51 UTC
From: Papi_Gringo@webtv.net
Message-ID: <8388-3C845793-770@storefull-2234.public.lawson.webtv.net>
Source record: 147355

ok which is the best (nnn - beam) base antenna out there in the market
today for c.b. raidos?
which antenna has the best receive the best db gain? please fill me in
on ths thanks

gary

4517. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 05:39:16 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <uXVujCAEoFh8EwUG@jmwa.demon.co.uk>
Source record: 147361
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that J. Harvey
<JM001.Harvey@sympatico.ca> wrote (in <h1Wg8.4819$7Y4.1176216@news20.bel
lglobal.com>) about 'HELP needed in understanding Bode Plots', on Mon, 4
Mar 2002:
>> The UK has lots of places that the natives
>> pronounce strangely...
>
>My mother's parents each came from different regions of England. Since they
>couldn't understand each other's thick dialect, they could only communicate
>verbally with each other in Mandarin Chinese...
>
They should have used Morse.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4518. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 05:43:47 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <nWYg8.667$rc.551379@monger.newsread.com>
Source record: 147354

Although a bit off topic this information is certainly relevant to anyone
using newsgroups.

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C840CDA.2D01BC18@eznec.com...
> No. All you need is a connection to the Internet. Depending on how
> you've set up your system, what operating system you're using, how
> you've set various options, and so forth, a hacker might be able to put
> a program right onto your computer without you knowing anything about
> it, and without using your email program, browser, Outlook, or any other
> normal Internet connection program, and without sending you email or
> your looking at a web site. It can be done any time you're connected.
> Some of the programs that are implanted this way send out worms. Others
> are used to remotely send spam, anonymously send messages of the
> hacker's choice, participate in denial-of-service attacks, send your
> personal information back to the hacker, or basically anything else the
> hacker wants to do. This isn't a vague, never-happens kind of thing. My
> firewall records several attempts to get into my system every day.
> Roughly 30% of the spam I receive comes from an "open relay" -- a system
> where the hacker had planted software to send out the spam, unbeknownst
> to the user whose machine actually sent it. It's happening all the time.
> The only way to protect yourself is with a firewall. Like locking your
> door, even that isn't guaranteed to keep out a determined hacker. But
> like other thieves, they'd rather rob the easy marks instead, so it
> keeps the vast majority of them at bay.

It's a good start though.

>
> More and more people are getting DSL and cable connections, which
> greatly increases your vulnerability, since you're connected to the
> Internet whenever your computer is on, not just when you've connected
> with a modem. Also, a lot of ISPs give you a static IP address with a
> DSL connection.

Most cable and DSL companies use static IPs (Addresses) so they can keep
track of their users. They pretty much have the ability to track where
their users go, and what they do while on line. Several have been caught
installing monitoring programs that keep track of internet usage.

> What this means is that once a hacker puts something
> onto your system, he or she knows exactly where to go to access the
> implanted program.
>
Some of these programs are smart enough to go visit specific web sites, or
newsgroups where they can check for updates to their payload.

This means what sat on your machine and maybe reported your financial status, or visits to the more seamy side of the net can be changed at a moments notice to send out anything on the computer to any one in the address book/list. It might even send out some of the pictures you were looking at to the people in your address book and they will have your name on them. Or...It just might destroy all of the information on the computer and even create some hardware damage.

> Folks, the Internet is the Wild West. There's no law, so you've gotta
> carry your own 6-gun. Nobody's looking out for you except you.

But there's a lot of people out there looking *for* you and your unprotected computer.

> There's a
> great deal of good information about this on the Internet. It would be
> well worth your while to spend a couple of hours educating yourself
> about how to keep yourself relatively secure in this environment. A
> search on "firewall", "open relay", or "back orifice" would be a good
> place to start.

I would add the following suggestions after checking the above:
Go to the following "reputable" sites and have them evaluate your site.

Privacy dot net http://privacy.net/ is a consumer Information Orginization that will do a system wide analysis for you.

Shields Up, is anoter Internet Security Testing Site.
https://grc.com/x/ne.dll?bh0bkyd2
>
But as Roy has stated so well, there are no gurantees and running an unprotected computer is like publishing your SS#, and any other information you keep on your computer in the daily newspaper.

You could come into the computer room in the morning and find your screen saver has been changed to the front page of a porno site. Nice for the kids to find. ...

These people depend on the average user not installing fire walls. They also depend on them believing that if they don't use Windows, MS Outlook, or Outlook Express they are safe.

It's true these are the most targeted, but no system is bullett proof and no system connected to the net is entirely safe.

The best bet is to get a good firewall, a good virus protection program, and do not leave the computer hooked to the internet when not using it. Don't blindly follow links. They can take you where you don't wish to go and leave the gift that keeps on giving, don't open attachments even when they are from some one you know without first verifying that they sent it intentionally.

--
Roger (K8RI EN73)

WWW.RogerHalstead.com
N833R, World's Oldest Debonair? S#CD-2

> Roy Lewallen, W7EL
>
> Bob Miller wrote:
> >
> > Roy Lewallen <w7el@eznec.com> wrote:
> >
> > >sent by a worm, should one ever get onto your machine. But Norton
> > >Anti-Virus doesn't prevent a worm from being planted by a hacker, or
> > >notify you when the worm sends infected email to others.
> >
> > But, this applies mainly to the Microsoft e-mailer that accepts macros?
(I use
> > Eudora for e-mail.)
> >
> > Bob
> > k5qwg
> > >
> > >Roy Lewallen, W7EL
> > >

4519. Re: which is the best antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 05:49:21 UTC
From: MD <ve3tmt@rac.ca>
Message-ID: <B%Yg8.5846$4E4.1342792@news20.bellglobal.com>
Source record: 147356

"Ashleys_Papi" <Papi_Gringo@webtv.net> wrote in message
news:8388-3C845793-770@storefull-2234.public.lawson.webtv.net...
> ok which is the best (nnn - beam) base antenna out there in the market
> today for c.b. raidos?
> which antenna has the best receive the best db gain? please fill me in
> on ths thanks
>
> gary
>
why not ask one of the buddies in rec.radio.cb?

4520. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 05:50:13 UTC
From: Roger Halstead <rdhalste@tm.net>
Message-ID: <p0Zg8.672$rc.552009@monger.newsread.com>
Source record: 147357

"Jim Weir" <jim@rst-engr.com> wrote in message
news:u881kkfv1idp3a@corp.supernews.com...
> Hey, anybody that does the research and has somebody they believe to be
> right, I'm more than willing to listen. I based my words on two people
who
> have never given me a bum steer, and there is every chance (like me) they
> are very conversant with what goes on in the AIRPLANE and were given bad
> advice themselves about what goes on on the ground. It happens. Next
time
> I'm down to Sac Metro or over to Reno, I'll look myself at what is on top
of
> the tower. Since the radio bay is two floors below the tower cab, I'm
> willing to bet what is on top of the tower is the antenna farm for the
> tower.
>
> Hey, I just thought of something...and I don't have time right now to
> confirm it. Anybody who lives LINE OF CLOSE SIGHT from the tower (to
> eliminate as many reflections as possible) and has a spectrum analyzer or
> service monitor with S-meter, rig up a dipole a few wavelengths above the
> ground and see if you get a decent null when the antenna is horizontal
> referenced to vertical. Even better, get a friend with an acro airplane
to
> take you up and put the sucker in knife-edge and note the noise on the
> signal {;-)

I'm game if you can provide the airplane <:-))

And I'm quite willing to take Jim's word...He's regularly published in
several of the current Aviation rags.

--
Roger (K8RI EN73)
WWW.RogerHalstead.com
N833R, World's Oldest Debonair? S#CD-2

>
> Jim
>
>
>
> "Rick Littlefield" <k1bqt@aol.com> wrote in message
> news:20020304182139.05816.00001824@mb-cl.aol.com...
>
> > I'd best stick with good old linear vertical polarization 'cause that's
> what

> > the FAA is using.
> >
> > Shoot me or call me a bad name if you like, but that's just what he
> said--and
> > it corroborates totally with what I see on the rooftops of various area
> > facilities.
>
>
>

4521. Re: Antenna Testing (receiving)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 05:54:24 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <60n88ukdvgptchum345kob3q0q747afb1k@4ax.com>
Source record: 147358

On Mon, 4 Mar 2002 23:22:24 -0600, "Ed Laughery"
<laughery@bellsouth.net> wrote:

>Hi
>
>So you build a great new antenna (receiving) - the final test is obviously -
>hook it up and listen. But is it better vs your last great experiment? How
>do you go about performing a true instrument test of the antenna, homemade
>balun (easy to construct but was it close to a proper 9:1?), coax feed,
>sig-to-noise, pattern, etc. Any and all explanations will be greatly
>appreciated.
>
>Regards
>Ed
>

Hi Ed,

Maintain a log of your stations. Compare logs.

Or to perhaps trim down the process, select several representational
stations and log them. Also note conditions, especially those that
affect propagation, or use the SINPO code. The WWV(H) stations are
suitable markers and would represent a consistent but modest (by
commercial standards) signal for clear channel conditions.

73's
Richard Clark, KB7QHC

4522. Re: What do you recommend for HF DX

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 06:26:56 UTC
From: "..." <mecs@voyager.net>
Message-ID: <3c8468cb$0$35571$bbae4d71@news.net-link.net>
Source record: 147360

Find an old Hy-Gain Hy Tower.
If you are over good ground you will be able to operate 160,80,40,20,15 with excellent results.
Or build a similar antenna.
It uses the same principle as multiple dipoles connected to a common feed.
The one "closest" will radiate the most.
Keep your excellent ground system.
Build a vertical antenna with multiple stubs so that each stub is resonant for a given band.
Connect one feedline.
In my opinion this will work much better than a Butternut (have owned/used both the Butternut/Cushcraft/Hytower verticals) as well as have built shortened helically wound ones.

In my experience I have found the following:
Use the longest radiator you can. Even if you can get a short vertical to tune it won't receive worth anything.
If you must use traps be sure they are top mounted. A coil at the base eliminates much of the current in the antenna.
Use at least eight radials for the longest frequency desired. The efficiency with more than sixteen vs the ideal 120 is not worth the effort involved.

Due to the lower radiation angle with the vertical properly grounded your ability to work DX will be greater than that with a dipole unless the dipole is >1 wavelength high. That assumes that your not clobberred by QRM as the vertical will have no directionality.

Best wishes,
Richard W9EEE

Dick wrote in message ...
>I made a lot of antenna's 1/4 wave verticals for 40, 30 , 20, 17 meters
>etc. and have a lot of isolated chickenwire and other wires under it. Also
>the ground is polder land and wet.
>It works fine but changing freq. I have to put down the antenna and make
>another 1/4 wave.
>
>I also made a lot of deltaloops/loops,dipoles, edz etc. with ladderlines in
>the past but the verticals worked best for DX.
>
>As I am tired of changing the ant. what would be (nearly) as good or better?
>
>Pls advice:

>
>1. Butternut (HF6V or HF2V)... Hustler (6 or 5BTV.) Sigma 5 vertical or
>other vert.
> a. Ground mounted or b. Roof mounted (40 feet high)
>2. Auto tuners SGC or LDG ?
>3. Balun MTFT etc 1:10
>4. Should I keep what I have as everything else is compromise?.
>5. Others...
>
>73 Dick
>
>

4523. Re: Antenna Testing (receiving)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 06:34:49 UTC
From: Ed Laughery <laughery@bellsouth.net>
Message-ID: <5wZg8.807$tg2.97467@e3500-atl1.usenetserver.com>
Source record: 147359

Hi Richard

Thanks for the reply.

Regards
Ed

"Richard Clark" <kb7qhc@attbi.com> wrote in message
news:60n88ukdvgptchum345kob3q0q747afb1k@4ax.com...
> On Mon, 4 Mar 2002 23:22:24 -0600, "Ed Laughery"
> <laughery@bellsouth.net> wrote:
>
> >Hi
> >
> >So you build a great new antenna (receiving) - the final test is
obviously -
> >hook it up and listen. But is it better vs your last great experiment?
How
> >do you go about performing a true instrument test of the antenna,
homemade
> >balun (easy to construct but was it close to a proper 9:1?), coax feed,
> >sig-to-noise, pattern, etc. Any and all explanations will be greatly
> >appreciated.
> >
> >Regards
> >Ed
> >
>
> Hi Ed,
>
> Maintain a log of your stations. Compare logs.
>
> Or to perhaps trim down the process, select several representational
> stations and log them. Also note conditions, especially those that
> affect propagation, or use the SINPO code. The WWV(H) stations are
> suitable markers and would represent a consistent but modest (by
> commercial standards) signal for clear channel conditions.
>
> 73's
> Richard Clark, KB7QHC

4524. Re: [newbie]microwave beam

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 06:52:15 UTC
From: arnaud lhopiteau <alhopiteau@free.fr>
Message-ID: <3c846b4c$0$14910$626a54ce@news.free.fr>
Source record: 147362

Thanks a lot for the answer.
But is it possible with tiny antennas? (2 inches diam).
Best regards.

4525. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 07:25:10 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u88slvk4bjm6f3@corp.supernews.com>
Source record: 147363

No sir. The idiots that proposed this scheme in Europe are trying to impose it on the rest of the world. The rest of the world ain't interested. If there is going to be a division of frequencies, it is going to be a binary split like the one that split the 100 kHz. channels to 50, then 50 to 25, and then if we need them, 25 to 12.5.

In actuality, the top of the band is really 136.99999999999999999999..., but for those of us with reason and sanity in our band plans, it is 136.975.

Jim

"Dave Holford" <holford@sympatico.ca> wrote in message news:3C843F71.DE6DC073@sympatico.ca...
>
>
> The spacing is 8.33 kHz, although the transition is going to be a slow
> process, and as a consequence the top of the band is even higher.

4526. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 07:26:14 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u88snmqpartq14@corp.supernews.com>
Source record: 147364

I can only speak for the USA. Of course, like any new playtoy tossed into the playpen, there is a catfight to see who gets the lion's share of the goodies.

Jim

"Dave Martindale" <davem@cs.ubc.ca> wrote in message news:a613q9$84f$1@trappist.cs.ubc.ca...
> "Jim Weir" <jim@rst-engr.com> writes:
>
>
> You're right, I hadn't heard that. Is it worldwide, or USA only,
> or something in between. Anyone actually using the frequencies yet?
>
> Dave

4527. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 07:28:26 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u88srrb9u7nl50@corp.supernews.com>
Source record: 147365

Don't never take my word for nuthin'. I enjoy being proved wrong. I learn a great deal from it. Then again, I generally fight for what I know to be true like a chihuahua separated from his pork chop. {;-)

Jim

"Roger Halstead" <rdhalste@tm.net> wrote in message news:p0Zg8.672$rc.552009@monger.newsread.com...
>
> And I'm quite willing to take Jim's word...He's regularly published in
> several of the current Aviation rags.
>
>

4528. Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 09:14:53 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a622ip$ed0$1@slb4.atl.mindspring.net>
Source record: 147366

Question for the NG:

Using simple constants for the classical R-L-C-G primary parameters of a transmission line does not allow for the modelling of frequency dependent skin effects. It is well known that the largest skin effect frequency effects are on the series R and L parameters. Normally the shunt parameters C and G may be considered constant with respect to frequency when compared to the variations in the R and L parameters.

Currently I am looking for some fairly simple formulae to easily/quickly calculate skin effects on R and L for practical amateur radio HF transmission lines like the common coaxial cables and ladder lines used by radio amateurs.

I am aware of the of skin effect formulae derived from first physical principles (e.g. Maxwell's equations, etc.) as elaborated for instance in Chapter 4 of: Ramo, Whinnery, and Van Duzer, "Fields and Waves in Communication Electronics", Wiley, New York, 1965, and other such textbooks. Specific calculations of the skin effects using such derivations from first principles often requires the evaluation of Bessel Functions and/or the use of nomographs over certain parameterized ranges, etc... These complex formulations are fairly detailed and not amenable to dinner napkin, slide rule, calculator or back-of-the-envelope calculations.

I am looking for something simpler than those rigorous formulae, some simple ad hoc "fitted" parametric formulae.

An area where I have some experience with this kind of calculation is in the area of telephone twisted pair wireline transmission as practiced by the xDSL community which uses the following practical parametric formulae, documented in ANSI T1.417, "Spectrum Management for Loop Transmission Systems", Annex B: "Loop Information". In that document is shown two formulae for the series resistance R and inductance L per unit length as a function of frequency f. These simple parametric formulae are quite accurate and easy to calculate for typical lines:

1.) R(f) = (Ro**4 + a*f**2)**(1/4)
2.) L(f) = (Lo + Li*(f/fm)**b)/(1 + (f/fm)**b)

Besides the Ro and Lo, the two fundamental transmission line primary parameters involved here, there are only four other parameters required to predict the skin effect over quite wide ranges, namely: "a", "Li", "fm" and "b". These four parameters closely characterize the lines over the frequency range of zero to the double digit MegaHz. I don't know the "derivation" or original source of these neat formulae, most probably they were arrived at by some ad hoc heuristic method. If anyone knows of an

attribution for their source, author, or inventor I would be pleased to hear of those. Here:

"Ro" and "Lo" are the "classical" low frequency primary parameters, evaluated at or near DC, these are the static resistance and inductance per unit length respectively. "a" is a parameter chosen to fit equation 1.) to practical field measurements. "Li" is a measured high frequency inductance, and "b" and "fm" are parameters chosen to fit equation 2.) to practical field measurements.

For examples:

(1) AWG 26, plastic insulated, twisted pair copper cable modeled with the following parameters yeilds exceedingly good fits to measured data: Ro = 286.2 Ohms per kilometer, Lo = 675.4 uHy per kilometer, Li = 489.0 uHy per kilometer, with the parameters: a = 0.14770, fm = 806.34 kHz, b = 0.929.

(2) ANSI Category 5 twisted pair, used in high speed LANs, Ro = 176.6 Ohms per km, Lo = 1090.8 uHy per km, Li = 504.5 uHy per km, a = 0.05001, fm = 32.57 kHz, b = .705.

Now my question...

Does anyone here know of a source for formulae, perhaps 1.) and 2.) are sufficient for this use, and values of parameters for common amateur radio transmission lines. i.e. 50, 75, and 93 Ohm coaxial cables and ladder style window line or open wire line?

I'd appreciate any feedback...

Thanks,

--Peter K1PO

4529. Balun Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 09:20:20 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <o50h8.16017$gK2.1140698@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147367

How does one test a balun to be sure it is the correct ratio that the
manufacturer specified?

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

4530. Re: goniometer [power line noise cancel] device

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 09:33:30 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a623da$4ct$1@slb2.atl.mindspring.net>
Source record: 147368

Richard:

[snip]
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:9742-3C842624-675@storefull-118.iap.bryant.webtv.net...
> I`m having second thoughts about a crude joke I posted, but I swear it
> came from a real experience. A company manager asked me why Dr.
> Maldonado, the company physician in Argentina, was not the person
> requesting a goniometer!
>
> Best regards, Richard Harrison, KB5WZI
>[snip]

Second thoughts? Naaa!

My reaction was... Wow Richard has had quite varied International
exeriences, I'll bet you also might have homebrewed one of Woody Allen's
"Orgasmatrons".

--Peter K1PO

4531. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 09:46:36 UTC
From: Ian Buckner <Ian_Buckner@agilent.com>
Message-ID: <1015321598.510742@cswreg.cos.agilent.com>
Source record: 147219
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

My favo(u)rite is a town near Glasgow called Milngarvie,
pronounced "Mulgye".

Ian

(It's "Leicester", not "Leister".)

"John Woodgate" <jmw@jmwa.demon.co.uk> wrote in message
news:FPtkl4Bid9g8Ew5O@jmwa.demon.co.uk...
> I read in sci.electronics.design that Spehro Pefhany
> <speff@interlog.com> wrote (in <lnOg8.204$YtJ.145@news2.bloor.is>)
about
> 'HELP needed in understanding Bode Plots', on Mon, 4 Mar 2002:
> >The UK has lots of places that the natives pronounce strangely in
order to
> >more easily identify outsiders- Reading (redding) and Leister
(lester),
> >for example. What do you expect from a people who pronounce
"Infanta
> >de Castile" as "Elephant and Castle"?
>
> Leominster ('Leinster'), Happisburgh ('Hayesbury'), Cirencester
> ('Cissister'), Teston ('Teeson'), Wrotham ('Root-um'),
'Trottiscliffe
> ('Trosley'). The three latter are close together in Kent. Then
there's
> 'Ruyton of the XI Towns', where 'XI' means 'eleven', not the Greek
> letter.
>
> The English Tourist Board would like to keep these 'delights'
quiet.(;-)
> --
> Regards, John Woodgate, OOO - Own Opinions Only.
http://www.jmwa.demon.co.uk
> Interested in professional sound reinforcement and distribution?
Then go to
> http://www.isce.org.uk
> PLEASE do NOT copy news posts to me by E-MAIL!

4532. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 10:45:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C84A1E7.887E34A5@eznec.com>
Source record: 147220

When the wire radius is at least several skin depths, virtually all the current flows in a thin layer near the surface. The current density follows an exponential curve until it gets to an insignificantly small value. So for practical purposes, we assume that it has decayed to zero. With this assumption -- again valid as long as the radius is at least several skin depths -- we can further simplify by observing that the integral of the current density from the surface downward to an infinite depth is the same as for a uniform current density equal to the surface current density but abruptly ending at the skin depth. That is, if the current density at the surface is I and decays exponentially to zero as I*exp(-x/d) where x is the depth and d is the skin depth, then the total current is the same as for a current whose density is uniform and equal to I, but which extends from the surface down to the skin depth but not below. Of course, this observation is true only if the wire is homogeneous as well as being adequately thick.

Armed with these approximations, we simply calculate the area of the ring carrying this imaginary uniform current and multiply by the resistivity and length to get the resistance. The inside radius of the ring is r - d where r is the wire radius and d is the skin depth. The outside radius is r. So the area of the ring is pi*(r^2 - (r - d)^2) = pi*(r^2 - r^2 + 2rd - d^2) = pi*(2rd - d^2). d^2 is much smaller than 2rd because of the initial requirement that d << r, so the area of the current-carrying ring is about pi*2rd. The resistance of a wire of length L is then rho*L/(2rd) where rho is the resistivity of the conductor in ohms*length. (The RF resistance is r/(2d) times the DC resistance.) You'll find that the resistance increases as the square root of frequency, since the skin depth, hence the area of the imaginary conducting ring, decreases as the square root of frequency. Nasty math is necessary only if significant current extends either to the center of the wire or to a material of different conductivity than the surface material.

I haven't dealt with the frequency effects of inductance as much, since the effect is much smaller and can often be ignored. But in Walter C. Johnson's _Transmission Lines and Networks_, you'll find (ending on p. 79) a derivation showing that the internal inductance is 2d/r times the DC inductance -- just the reciprocal of the resistance factor -- when applying the same conditions as for the resistance calculation. As Johnson points out, the internal inductance is almost always a minor part of the total inductance, and the external inductance doesn't change with frequency. So over moderate frequency ranges the change is minor.

Combining the formula for skin depth with the formula for RF resistance, you get that the RF resistance per unit length = ~ sqrt(f*mu*R')/2 where

mu is the permeability (NOT relative permeability) of the wire and R' is
the DC resistance of the wire per unit length. Another way of expressing
the RF resistance per unit length is sqrt(pi*fmhz*mur/(10*R')) where
fmhz is the frequency in MHz and mur is the relative permeability of the
wire (1 for copper or other nonferrous metals).

Roy Lewallen, W7EL

"Peter O. Brackett" wrote:
>
> Question for the NG:
>
> Using simple constants for the classical R-L-C-G primary parameters of a
> transmission line does not allow for the modelling of frequency dependent
> skin effects. It is well known that the largest skin effect frequency
> effects are on the series R and L parameters. Normally the shunt parameters
> C and G may be considered constant with respect to frequency when compared
> to the variations in the R and L parameters.
>
> Currently I am looking for some fairly simple formulae to easily/quickly
> calculate skin effects on R and L for practical amateur radio HF
> transmission lines like the common coaxial cables and ladder lines used by
> radio amateurs.
>
> I am aware of the of skin effect formulae derived from first physical
> principles (e.g. Maxwell's equations, etc.) as elaborated for instance in
> Chapter 4 of: Ramo, Whinnery, and Van Duzer, "Fields and Waves in
> Communication Electronics", Wiley, New York, 1965, and other such textbooks.
> Specific calculations of the skin effects using such derivations from first
> principles often requires the evaluation of Bessel Functions and/or the use
> of nomographs over certain parameterized ranges, etc... These complex
> formulations are fairly detailed and not amenable to dinner napkin, slide
> rule, calculator or back-of-the-envelope calculations.
>
> I am looking for something simpler than those rigorous formulae, some simple
> ad hoc "fitted" parametric formulae.
>
> An area where I have some experience with this kind of calculation is in the
> area of telephone twisted pair wireline transmission as practiced by the
> xDSL community which uses the following practical parametric formulae,
> documented in ANSI T1.417, "Spectrum Management for Loop Transmission
> Systems", Annex B: "Loop Information". In that document is shown two
> formulae for the series resistance R and inductance L per unit length as a
> function of frequency f. These simple parametric formulae are quite
> accurate and easy to calculate for typical lines:
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> 1.) R(f) = (Ro**4 + a*f**2)**(1/4)
> 2.) L(f) = (Lo + Li*(f/fm)**b)/(1 + (f/fm)**b)
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> Besides the Ro and Lo, the two fundamental transmission line primary
> parameters involved here, there are only four other parameters required to

> predict the skin effect over quite wide ranges, namely: "a", "Li", "fm" and
> "b". These four parameters closely characterize the lines over the
> frequency range of zero to the double digit MegaHz. I don't know the
> "derivation" or original source of these neat formulae, most probably they
> were arrived at by some ad hoc heuristic method. If anyone knows of an
> attribution for their source, author, or inventor I would be pleased to hear
> of those. Here:
>
> "Ro" and "Lo" are the "classical" low frequency primary parameters,
> evaluated at or near DC, these are the static resistance and inductance per
> unit length respectively. "a" is a parameter chosen to fit equation 1.) to
> practical field measurements. "Li" is a measured high frequency inductance,
> and "b" and "fm" are parameters chosen to fit equation 2.) to practical
> field measurements.
>
> For examples:
>
> (1) AWG 26, plastic insulated, twisted pair copper cable modeled with the
> following parameters yeilds exceedingly good fits to measured data: Ro =
> 286.2 Ohms per kilometer, Lo = 675.4 uHy per kilometer, Li = 489.0 uHy per
> kilometer, with the parameters: a = 0.14770, fm = 806.34 kHz, b = 0.929.
>
> (2) ANSI Category 5 twisted pair, used in high speed LANs, Ro = 176.6 Ohms
> per km, Lo = 1090.8 uHy per km, Li = 504.5 uHy per km, a = 0.05001, fm =
> 32.57 kHz, b = .705.
>
> Now my question...
>
> Does anyone here know of a source for formulae, perhaps 1.) and 2.) are
> sufficient for this use, and values of parameters for common amateur radio
> transmission lines. i.e. 50, 75, and 93 Ohm coaxial cables and ladder style
> window line or open wire line?
>
> I'd appreciate any feedback...
>
> Thanks,
>
> --Peter K1PO

4533. Re: Balun Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 10:47:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C84A227.F6FA0B72@eznec.com>
Source record: 147221

What kind of test equipment do you have? SWR meter? Antenna analyzer?
Dummy load? Oscilloscope? RF voltmeter?

Roy Lewallen, W7EL

marvin rosen wrote:
>
> How does one test a balun to be sure it is the correct ratio that the
> manufacturer specified?
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

4534. Re: Balun Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 11:08:30 UTC
From: Val <nishikeit@zilch.com>
Message-ID: <3C84A72E.4B498A05@zilch.com>
Source record: 147222

What kind of instruments do You have?
What kind of balun?

The easiest set up: A QRP SWR meter (bridge).
Broadband HF Balun.

Say the balun is 4:1. Obtain a 5W, 200ohm resistor.
(200 ohm = 50 ohm x 4). Attach the resistor across the
ouput of the Balun (disconnect all antenna wires).
Transmit 5W at any shortwave band into the balun. Is
the SWR= 1. Good. The Balun is 4:1. You can test on
each band You want to use to be sure...

Harder set: Narrowband HF balun. Same method, but use
correct frequency.

No QRP SWF meter available (>approx 10 W), or VHF:
Obtain a balun with a 100% known ratio (reference), e.g.
loan one from a friend. And it shall have the same
ratio You want the unknown Balun to have.
Connenct the 2 balanced ends ot the Baluns to to
one-anothe. Connect a 50 ohm dummy-load to the reference
balun. Connect a Hi-power (some 100W) to the un-known
balun. Measure SWR at TX end. 1:1 (or very near) = The
two baluns have identical ratios! In this case,
If NOT SWR= 1:1, You can easily calulate the real
ratio, concidering the ratio of the reference Balun
and the SWR reading!

Good Luck!
V.

marvin rosen wrote:
>
> How does one test a balun to be sure it is the correct ratio that the
> manufacturer specified?
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02

4535. Re: What do you recommend for HF DX

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 11:35:33 UTC
From: Dick <hoogerwaard@wanadoo.nl>
Message-ID: <942h8.35$Il5.249@castor.casema.net>
Source record: 147223

Tnx Richard
>Or build a similar antenna.
>It uses the same principle as multiple dipoles connected to a common feed.
>The one "closest" will radiate the most.

I will try to build one for a few freq. I hope they will not interfear to
much
with eachother. At least I give it a try..

73 pa3glf

"..." <mecs@voyager.net> wrote in message
news:3c8468cb$0$35571$bbae4d71@news.net-link.net...
> Find an old Hy-Gain Hy Tower.
> If you are over good ground you will be able to operate 160,80,40,20,15
with
> excellent results.
> Or build a similar antenna.
> It uses the same principle as multiple dipoles connected to a common feed.
> The one "closest" will radiate the most.
> Keep your excellent ground system.
> Build a vertical antenna with multiple stubs so that each stub is resonant
> for a given band.
> Connect one feedline.
> In my opinion this will work much better than a Butternut (have owned/used
> both the Butternut/Cushcraft/Hytower verticals) as well as have built
> shortened helically wound ones.
>
> In my experience I have found the following:
> Use the longest radiator you can. Even if you can get a short vertical to
> tune it won't receive worth anything.
> If you must use traps be sure they are top mounted. A coil at the base
> eliminates much of the current in the antenna.
> Use at least eight radials for the longest frequency desired. The
> efficiency with more than sixteen vs the ideal 120 is not worth the effort
> involved.
>
> Due to the lower radiation angle with the vertical properly grounded your
> ability to work DX will be greater than that with a dipole unless the
dipole
> is >1 wavelength high. That assumes that your not clobberred by QRM as
the
> vertical will have no directionality.
>
> Best wishes,

> Richard W9EEE
>
>
> Dick wrote in message ...
> >I made a lot of antenna's 1/4 wave verticals for 40, 30 , 20, 17 meters
> >etc. and have a lot of isolated chickenwire and other wires under it.
Also
> >the ground is polder land and wet.
> >It works fine but changing freq. I have to put down the antenna and make
> >another 1/4 wave.
> >
> >I also made a lot of deltaloops/loops,dipoles, edz etc. with ladderlines
in
> >the past but the verticals worked best for DX.
> >
> >As I am tired of changing the ant. what would be (nearly) as good or
> better?
> >
> >Pls advice:
> >
> >1. Butternut (HF6V or HF2V)... Hustler (6 or 5BTV.) Sigma 5 vertical or
> >other vert.
> > a. Ground mounted or b. Roof mounted (40 feet high)
> >2. Auto tuners SGC or LDG ?
> >3. Balun MTFT etc 1:10
> >4. Should I keep what I have as everything else is compromise?.
> >5. Others...
> >
> >73 Dick
> >
> >
>
>

4536. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 11:55:17 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <3C84B221.CC9F28FD@austininstruments.com>
Source record: 147224
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Rich Grise wrote:

> Oh, please! Just one?

Newfie 1, "Let's have a counting contest."

Newfie 2, "OK, but how are we going to decide the winner?"

Newfie 1, "Whoever can count higher?"

Newfie 2, "OK. You start."

Newfie 1, "1, 2, 3..."

Newfie 2, "I quit."

John Fields
Professional circuit designer

4537. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 11:56:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a62c6l$b43i6$1@ID-124126.news.dfncis.de>
Source record: 147225

Peter, you don't need formulae. They've already been worked out for you and incorporated in easy-to-use programs. You forgot to mention conductor proximity effect on balanced lines. Did you know close-spaced, air-insulated twin-lines have a higher loss than coax?

The following programs analyse transmission line performance for any complex terminating impedance, from power frequencies, via audio and carrier freqs, to UHF.

Enter dimensions of well-known products and compare with manufacturers' data, and with loss/freq curves in the ARRL handbook.

Check performance of SHV power lines stalking over mountainsides. Or of those olde-worlde, overhead, wide-spaced, porcelain-insulator phone lines. Yes, in 1900, you really could speak over the 400 miles of open-wire line between London and Edinburgh, long before the negative feedback line amplifier had been invented. Heaviside had already invented the distortion-reducing line-equaliser. He was the first true Hi-Fi enthusiast.

Sorry, programs deal only with copper, or perhaps aluminium conductors.

Download in a few seconds -

RJELINE2
RJELINE3
RJELINE4
COAXPAIR
COAXRATE (power ratings, not down to AF)

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****
Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
news:a622ip$ed0$1@slb4.atl.mindspring.net...
> Question for the NG:
>
> Using simple constants for the classical R-L-C-G primary parameters of a
> transmission line does not allow for the modelling of frequency dependent
> skin effects. It is well known that the largest skin effect frequency
> effects are on the series R and L parameters. Normally the shunt
parameters
> C and G may be considered constant with respect to frequency when compared
> to the variations in the R and L parameters.
>

> Currently I am looking for some fairly simple formulae to easily/quickly
> calculate skin effects on R and L for practical amateur radio HF
> transmission lines like the common coaxial cables and ladder lines used by
> radio amateurs.
>
> I am aware of the of skin effect formulae derived from first physical
> principles (e.g. Maxwell's equations, etc.) as elaborated for instance in
> Chapter 4 of: Ramo, Whinnery, and Van Duzer, "Fields and Waves in
> Communication Electronics", Wiley, New York, 1965, and other such
textbooks.
> Specific calculations of the skin effects using such derivations from
first
> principles often requires the evaluation of Bessel Functions and/or the
use
> of nomographs over certain parameterized ranges, etc... These complex
> formulations are fairly detailed and not amenable to dinner napkin, slide
> rule, calculator or back-of-the-envelope calculations.
>
> I am looking for something simpler than those rigorous formulae, some
simple
> ad hoc "fitted" parametric formulae.
>
> An area where I have some experience with this kind of calculation is in
the
> area of telephone twisted pair wireline transmission as practiced by the
> xDSL community which uses the following practical parametric formulae,
> documented in ANSI T1.417, "Spectrum Management for Loop Transmission
> Systems", Annex B: "Loop Information". In that document is shown two
> formulae for the series resistance R and inductance L per unit length as a
> function of frequency f. These simple parametric formulae are quite
> accurate and easy to calculate for typical lines:
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> parameters involved here, there are only four other parameters required to
> predict the skin effect over quite wide ranges, namely: "a", "Li", "fm"
and
> "b". These four parameters closely characterize the lines over the
> frequency range of zero to the double digit MegaHz. I don't know the
> "derivation" or original source of these neat formulae, most probably they
> were arrived at by some ad hoc heuristic method. If anyone knows of an
> attribution for their source, author, or inventor I would be pleased to
hear
> of those. Here:
>
> "Ro" and "Lo" are the "classical" low frequency primary parameters,
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per

> unit length respectively. "a" is a parameter chosen to fit equation 1.)
to
> practical field measurements. "Li" is a measured high frequency
inductance,
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>
> For examples:
>
> (1) AWG 26, plastic insulated, twisted pair copper cable modeled with the
> following parameters yeilds exceedingly good fits to measured data: Ro =
> 286.2 Ohms per kilometer, Lo = 675.4 uHy per kilometer, Li = 489.0 uHy per
> kilometer, with the parameters: a = 0.14770, fm = 806.34 kHz, b = 0.929.
>
> (2) ANSI Category 5 twisted pair, used in high speed LANs, Ro = 176.6 Ohms
> per km, Lo = 1090.8 uHy per km, Li = 504.5 uHy per km, a = 0.05001, fm =
> 32.57 kHz, b = .705.
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> Now my question...
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> Does anyone here know of a source for formulae, perhaps 1.) and 2.) are
> sufficient for this use, and values of parameters for common amateur radio
> transmission lines. i.e. 50, 75, and 93 Ohm coaxial cables and ladder
style
> window line or open wire line?
>
> I'd appreciate any feedback...
>
> Thanks,
>
> --Peter K1PO
>
>
>
>
>
>

4538. Broadband matching of dual-band Sierpinski patch antenna for mobile communication

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 12:27:07 UTC
From: rafael <rafahol@hotmail.com>
Message-ID: <a62dda$k4o$1@news.tudelft.nl>
Source record: 147226

Dear people,

As you know I'm a student of TU Delft doing research in your patented technology. Because I'm know able to simulate such kind of structures, I have to design a dual-band Sierpinski patch antenna. The problem is that this antenna is very narrowband (1.5% or less).
What techniques are known for broadband matching such a Sierpinski patch antenna? What are your experiences?

Let me know, because then I can continue to finish my thesis, Rafael

4539. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 12:32:04 UTC
From: Rex <notreally@hotmail.invalid>
Message-ID: <ble98uohs57pu5qm981i24mn51ei88rcvd@4ax.com>
Source record: 147227
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Mon, 4 Mar 2002 20:21:54 +0000, John Woodgate
<jmw@jmwa.demon.co.uk> wrote:

>Leominster ('Leinster'), Happisburgh ('Hayesbury'), Cirencester
>('Cissister'), Teston ('Teeson'), Wrotham ('Root-um'), 'Trottiscliffe
>('Trosley'). The three latter are close together in Kent. Then there's
>'Ruyton of the XI Towns', where 'XI' means 'eleven', not the Greek
>letter.

Worcestershire sauce -- wooster shire sauce. Anyhoo thats the way
I've heard most people say it.

How 'bout Beaujolais -- I tend to jab by saying bee-jewel-yas? --
them frenchies have more devious pronounciations than most anyone
else. Why can't they spell them like you say them.

-Rex
[rexa -TheAtSign- Next4dnaiLetters -period- (UsualComEnd)]< my_eemale_addy

4540. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 12:44:57 UTC
From: Nicolas Matringe <nicolas.matringe@ipricot.com>
Message-ID: <3C84BDC9.F9C3F0DA@ipricot.com>
Source record: 147228
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Rex wrote:
>
> How 'bout Beaujolais -- I tend to jab by saying bee-jewel-yas?
> them frenchies have more devious pronounciations than most
> anyone else. Why can't they spell them like you say them.

The pronouciation is pretty obvious, it's just not the same as in
english/american :o)
Say bo-jo-lay (with the "o"s pronoucend almost as the "oa" in "boat") and you'll
be pretty close. There's just a problem with the "j" which must NOT be
pronounced "dj".

Another funny english pronounciation problem: nature and mature. Only the first
letter changes...

--
Nicolas MATRINGE IPricot European Headquarters
Conception electronique 10-12 Avenue de Verdun
Tel +33 1 46 52 53 11 F-92250 LA GARENNE-COLOMBES - FRANCE
Fax +33 1 46 52 53 02 http://www.IPricot.com/

4541. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 12:47:19 UTC
From: Rex <notreally@hotmail.invalid>
Message-ID: <e5f98u0ggplg1qnhqvt7shhbbje4cth172@4ax.com>
Source record: 147229
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Mon, 04 Mar 2002 18:08:58 GMT, Greatest Prime
<FishyBill@mediaone.net> wrote:

>I have tried to read through some of these posts. B O R I N G! I am willing
>to offer some assistance if a reasonably well written and succinct summary
>is presented. I cannot believe that the topic is so complicated that it
>requires as many characters as have been posted so far.
>
>Bill

So how would you pronounce it? Straight line or not? You have the
final answer? A bit of humor doesn't hurt from time to time too.
Some of us find information beside the largest prime factor.

You German?

-Rex
[rexa -TheAtSign- Next4dnaiLetters -period- (UsualComEnd)]< my_eemale_addy

4542. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 12:54:45 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a62fj5$b13ht$1@ID-124126.news.dfncis.de>
Source record: 147230

Peter, as for so-call ladder lines, the most accurate way of determining Zo
and dB per 100-feet is to measure the stuff.

It is clear manufacturers make no quality-control measurements except for
space travel - they just carry on making it to some incorrect formula they
forgot long ago. In their ignorance they probably use the ARRL bible
air-spaced line dimensions.

But the previously mentioned programs can easily be worked backwards to
estimate dielectric properties by inserting measured conductor diameters,
measured spacings and measured Zo.

BINGO! It will then be possible to predict Zo and dB/100-feet by using a
formula !

As Cecil will confirm, advertised 450-ohm line is a misnomer. If Cecil used
truly 450-ohm line he might have to change his recommended line lengths as a
replacement for tuners.

On the other hand, who cares about a couple of dBs more or less ? ;o)

Radio is the most inexact of all the sciences. Therein lies its mystical
beauty !

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****
Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
news:a622ip$ed0$1@slb4.atl.mindspring.net...
> Question for the NG:
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> Using simple constants for the classical R-L-C-G primary parameters of a
> transmission line does not allow for the modelling of frequency dependent
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> formulations are fairly detailed and not amenable to dinner napkin, slide
> rule, calculator or back-of-the-envelope calculations.
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> (2) ANSI Category 5 twisted pair, used in high speed LANs, Ro = 176.6 Ohms
> per km, Lo = 1090.8 uHy per km, Li = 504.5 uHy per km, a = 0.05001, fm =
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> transmission lines. i.e. 50, 75, and 93 Ohm coaxial cables and ladder
style
> window line or open wire line?
>
> I'd appreciate any feedback...
>
> Thanks,
>
> --Peter K1PO
>
>
>
>
>
>

4543. Re: [newbie]microwave beam

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 13:04:27 UTC
From: richardharrison@webtv.net
Message-ID: <2146-3C84C25B-736@storefull-113.iap.bryant.webtv.net>
Source record: 147232

Arnaud Thopiteau wrote:
"But is it possible with tiny antennas? (2 inches diameter)"

Unfortunately, the smaller the spot at a great distance, the larger the antenna required for the necessary concentration.

If one requires a microwave illuminated spot limited to a small diameter at a great distance from where it is formed, a pipe or waveguide may be used to contain the wave to prevent spreading. The lowest frequency a 2-inch diameter pipe will permit pass is 19 GHz.

A small laser will retain collimation within a 2m diameter at 100m distance through a clear atmosphere.

Best regards, Richard Harrison, KB5WZI

4544. YK-88 C Kenwood CW filtar

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 13:09:51 UTC
From: Vlatko Lovric <vlatko.lovric@sb.hinet.hr>
Message-ID: <3C84C39F.F4207891@sb.hinet.hr>
Source record: 147233

Need YK-88 C CW filtar for Kenwood TS 120
Let me know the price..
73, Vlatko, 9A2TD

4545. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 13:13:48 UTC
From: Rex <notreally@hotmail.invalid>
Message-ID: <s0h98uskae8rna7c0l9a651cj4di6g8ene@4ax.com>
Source record: 147231
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Tue, 05 Mar 2002 11:55:17 GMT, John Fields
<jfields@austininstruments.com> wrote:

>Newfie 1, "Let's have a counting contest."
>
>Newfie 2, "OK, but how are we going to decide the winner?"
>
>Newfie 1, "Whoever can count higher?"
>
>Newfie 2, "OK. You start."
>
>Newfie 1, "1, 2, 3..."
>
>Newfie 2,
N finity, hahaha!

[rexa -TheAtSign- Next4dnaiLetters -period- (UsualComEnd)]< my_eemale_addy

4546. Re: Balun Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 13:40:25 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a62ipj$b6f35$1@ID-124126.news.dfncis.de>
Source record: 147236

Just count the number of turns. It is a FAR MORE accurate method of finding
impedance ratio than any measurement method. Can't go wrong !

Reg, G4FGQ

==========

> How does one test a balun to be sure it is the correct ratio that the
> manufacturer specified?
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.325 / Virus Database: 182 - Release Date: 2/19/02
>
>

4547. how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 13:41:54 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <CW3h8.3232$5G3.395827312@newssvr16.news.prodigy.com>
Source record: 147234

I have some ground rods in the ground that I don t need now. Is there a way to extract them, other than excavation? This is copper clad steel 8 foot.

4548. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 13:44:05 UTC
From: Paul Burke <sales@scazon.com>
Message-ID: <3C84CBA5.FB80097F@scazon.com>
Source record: 147235
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Rex wrote:
>
> On Mon, 4 Mar 2002 20:21:54 +0000, John Woodgate
> <jmw@jmwa.demon.co.uk> wrote:
>
> >Leominster ('Leinster'), Happisburgh ('Hayesbury'), Cirencester
> >('Cissister'), Teston ('Teeson'), Wrotham ('Root-um'), 'Trottiscliffe
> >('Trosley'). The three latter are close together in Kent. Then there's
> >'Ruyton of the XI Towns', where 'XI' means 'eleven', not the Greek
> >letter.
>
> Worcestershire sauce -- wooster shire sauce. Anyhoo thats the way
> I've heard most people say it.

Worcester rhymes with Custer in England, Gloucester with Costa,
Towcester is pronounced Toaster, and there's a place near here called
Gotham (Derbyshire not Notts) that even the locals can't tell me whether
it's Goat-am, Got-am Goth-am or something else entirely.

>
> How 'bout Beaujolais -- I tend to jab by saying bee-jewel-yas? --
> them frenchies have more devious pronounciations than most anyone
> else. Why can't they spell them like you say them.
>

Some years ago, a popular French wine sold in England went under the
name Macon Rouge. The way most English people pronounce it, a Frenchman
would have thought they were saying "my red c**t".

Oh, by the way, the Smith of Smith chart fame is actually pronounced
"Llanfairpwllgwyngyllgogerychwyrndrwbllllantisiliogogogoch".

Paul Burke

4549. Re: Antenna Testing (receiving)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 13:46:55 UTC
From: richardharrison@webtv.net
Message-ID: <3391-3C84CC4F-1@storefull-113.iap.bryant.webtv.net>
Source record: 147239

Ed Laughery wrote:
"How do you go about performing a true instrument test of the antenna?"

Commercial stations measure the field strength in the target area. For shortwave that isn`t good enough. Propagation is too variable. So, commercial stations erect a standard antenna more or less alongside the test antenna for field strength comparison between test and standard antennas in the target area. How many db better is the test antenna than the standard antenna?

You could turn this around and compare received signals on the test and standard antennas. How many db better is the signal from the test antenna than it is from the standard antenna.

We couldn`t make meaningful receive measurements conveniently in a high-power transmitter site with a host of transmitters pouring out a megawatt of power in the same frequency range. But we were able to make good bridge measurements with a Hammarlund SP-600 as a bridge detector. We also couldn`t conveniently transmit from the target areas.

But, we could erect a standard antenna to compare our curtain antennas against, as received in the target area. Our standard test antenna was a three-wire folded dipole to match our 600-ohm transmission lines. It was at the same height as our curtain drivepoint. Then we measured and compared signals from the two antennas in the target area. No matter what the actual signal strengths were running at the measurement time, the difference between the antennas was a fixed advantage. We made many measurements and averaged.

Best regards, Richard Harrison, KB5WZI

4550. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 13:55:16 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a62ksr$b652c$1@ID-124126.news.dfncis.de>
Source record: 147240

There are such tools as pole jacks used by phone line companies to extract
old telephone poles.

Regards, Reg G4FGQ

==========

Jerry <jerryaa@prodigy.net> wrote in message
news:CW3h8.3232$5G3.395827312@newssvr16.news.prodigy.com...
> I have some ground rods in the ground that I don t need now. Is there a
way
> to extract them, other than excavation? This is copper clad steel 8 foot.
>
>

4551. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 14:02:15 UTC
From: K7SAM <2smoore@nemontel.net>
Message-ID: <X74h8.12017$hK4.4340443@e420r-atl1.usenetserver.com>
Source record: 147237

I've had luck by wrapping a chain around the ground rod, and attaching the chain to my handy man jack and just jacking it right out of the ground.

4552. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 14:04:11 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C84D058.A4132D70@tampabay.rr.com>
Source record: 147238

the easist way is to take a car jack and hook it under the grounding screw clamp
and start jacking they will come right out

Jerry wrote:

> I have some ground rods in the ground that I don t need now. Is there a way
> to extract them, other than excavation? This is copper clad steel 8 foot.

4553. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 14:31:14 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C84D6B2.AC6920E6@IEEE.org>
Source record: 147242

Reg Edwards wrote:
> As Cecil will confirm, advertised 450-ohm line is a misnomer. If Cecil used
> truly 450-ohm line he might have to change his recommended line lengths as a
> replacement for tuners.

My 450 ohm ladder-line measurements have averaged about 400 ohms with a VF
of about 0.9. That's what I presently use for estimations. 300 ohm ladder-
line came in about 265 ohms with a VF of about 0.8.
--
cheers, CAM http://www.qsl.net/w5dxp

4554. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 14:32:15 UTC
From: the 3 holer <kla800@giganet.com>
Message-ID: <PF4h8.110853$7a1.9275755@bin5.nnrp.aus1.giganews.com>
Source record: 147241

Why, take them out ? Just pound them down below ground level unless you want to reuse them, or need to remove them. Also you may want to try a pipe wrench, this helps in 2 ways first you grip the rodand spin it around in both directions with the wrench to loosen it up, Once it is loose leave the wrench on it and work it out while turning and pulling, watch your lower back on this one tho, depending on your soil I have seen people pull out 10-12' rods with a pipe wrench and the twist and spin technique. Good Luck

"Jerry" <jerryaa@prodigy.net> wrote in message
news:CW3h8.3232$5G3.395827312@newssvr16.news.prodigy.com...
> I have some ground rods in the ground that I don t need now. Is there a
way
> to extract them, other than excavation? This is copper clad steel 8 foot.
>
>
>

4555. Re: HF antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 14:36:15 UTC
From: EAG <n5nug@ix.netcom.com>
Message-ID: <a62l9p$209$1@slb5.atl.mindspring.net>
Source record: 147243

Mark, I have a AEA SWR-121 for sale. Write to me off reflector. Your email address came up as invalid to me here. 73, Ed - N5NUG

"Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message news:3C840909.A5F9E4AB@bellatlantic.net...
> The AEA antenna analyzer is clearly the cadillac of the MFJ and Autek
> products. It even hooks up to a PC and gives you a SWR vs. Freq. plot!
> If anyone knows of a uses AEA for sale for $200 or less.. give me a
> shout!!
>
> '73 KI4Z
>
> C wrote:
>
> > Looking at buying HF antenna analyzer .
> >
> > What is good and what is junk.
> >
> > C.
>

4556. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 14:44:48 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <ToFWQ+AgnNh8EwwP@pickmere.demon.co.uk>
Source record: 147251
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <ble98uohs57pu5qm981i24mn51ei88rcvd@4ax.com>, Rex
<notreally@hotmail.invalid> writes
>On Mon, 4 Mar 2002 20:21:54 +0000, John Woodgate
><jmw@jmwa.demon.co.uk> wrote:
>
>>Leominster ('Leinster'),

'Lemster'

Mike
--
M.J.Powell

4557. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 14:46:58 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <CIVSYCBipNh8Eww4@pickmere.demon.co.uk>
Source record: 147250

In article <CW3h8.3232$5G3.395827312@newssvr16.news.prodigy.com>, Jerry
<jerryaa@prodigy.net> writes
>I have some ground rods in the ground that I don t need now. Is there a way
>to extract them, other than excavation? This is copper clad steel 8 foot.

clamp something on them. 'G' clamp? Mole grips? Then tap upwards.

Or use a car jack

Mike
--
M.J.Powell

4558. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 14:54:47 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <KNqEPFJ7RNQAHlHZD=BW1YgTS94M@4ax.com>
Source record: 147244

"Roger Halstead" <rdhalste@tm.net> wrote:

> Zone
>> Alarm is one of the very few that will also spot outgoing messages being
>> sent by a worm, should one ever get onto your machine. But Norton
>
>You can set it to prompt you every time your computer tries to send a
>message too.
>
>> Anti-Virus doesn't prevent a worm from being planted by a hacker, or
>> notify you when the worm sends infected email to others.
>>
>Zone alarm is available free, or you can pay a small fee for the commercial
>version. It is a good investment.

I'll do a search for Zone Alarm and check it out. I've always thought of
firewalls as something that only the pros with commercial sites put up, but
maybe there's something for a budget home user like me.

Thanks very much to all for the detailed info...

Bob
k5qwg
>
> No, I have no interest in the company, but I have the product installed
>(with license) on all the computers here.

4559. Broadband matching using Smith chart

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:02:27 UTC
From: rafael <rafahol@hotmail.com>
Message-ID: <a62mgi$n3m$1@news.tudelft.nl>
Source record: 147245

Dear people,

Do you know of a very specialistic software whereby it's easy to construct matching networks using the Smithchart??What packages are available of design of broadband networks using the graphical Smithchart??

I have used already WinSmith but wanted to know it there is not other software.

Greetings, Rafael

4560. Re: Broadband matching using Smith chart

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:03:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C84DE4D.A16AE0@IEEE.org>
Source record: 147246

rafael wrote:
>
> Dear people,
>
> Do you know of a very specialistic software whereby it's easy to construct
> matching networks using the Smithchart??What packages are available of
> design of broadband networks using the graphical Smithchart??
>
> I have used already WinSmith but wanted to know it there is not other
> software.

Microsmith will do that. You have a selection of transmission lines,
parallel and serial L/C combinations, and loads. The components are
variable so you can change them and observe what happens on the Smith
Chart.
--
cheers, CAM http://www.qsl.net/w5dxp

4561. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:05:07 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C84DEA3.E1E934D6@IEEE.org>
Source record: 147247

Bob Miller wrote:
> I'll do a search for Zone Alarm and check it out. I've always thought of
> firewalls as something that only the pros with commercial sites put up, but
> maybe there's something for a budget home user like me.

I've installed Zone Alarm and it finds two or three things per hour to
block.
--
cheers, CAM http://www.qsl.net/w5dxp

4562. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:14:06 UTC
From: n7ws@yahoo.com
Message-ID: <3c84de51.35280764@news.triconet.org>
Source record: 147248

On Tue, 05 Mar 2002 08:31:14 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

|Reg Edwards wrote:
|> As Cecil will confirm, advertised 450-ohm line is a misnomer. If Cecil used
|> truly 450-ohm line he might have to change his recommended line lengths as a
|> replacement for tuners.
|
|My 450 ohm ladder-line measurements have averaged about 400 ohms with a VF
|of about 0.9. That's what I presently use for estimations. 300 ohm ladder-
|line came in about 265 ohms with a VF of about 0.8.

QSL. The results of my measurements on the "Wireman" lines seen at:

http://users.triconet.org/wesandlinda/ladder.htm

pretty much agree.

Wes N7WS

4563. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:15:25 UTC
From: richardharrison@webtv.net
Message-ID: <24070-3C84E10D-9@storefull-112.iap.bryant.webtv.net>
Source record: 147256

The 3-Holer wrote:
"Why take them out?

Depends on retrieved value and labor cost.

I actually had big concrete encased tower anchors dug up by hand and replanted in new locations because labor was about one dollar per man day. The cost to relocate the anchors where needed was substantially less than the cost to place new anchors!

I finally discontinued the practice because it was resented as demeaning.

Best regards, Richard Harrison, KB5WZI

4564. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:17:24 UTC
From: KB9TMP <NoMoreSpam4Me@antisocial.com>
Message-ID: <a62ngb$sl0$1@dagobah.blueriver.net>
Source record: 147259

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C84DEA3.E1E934D6@IEEE.org...
> Bob Miller wrote:
> > I'll do a search for Zone Alarm and check it out. I've always thought of
> > firewalls as something that only the pros with commercial sites put up,
but
> > maybe there's something for a budget home user like me.
>
> I've installed Zone Alarm and it finds two or three things per hour to
> block.
> --
> cheers, CAM http://www.qsl.net/w5dxp

When Code Red was running wild, Zone Alarm was blocking at a rate of 25 to
30 an hour on my computer. It really works great and you can't beat the
price ;^)

--
"73"
KB9TMP

The secret of life is honesty and fair dealing..
if you can fake that, you've got it made.
-Groucho Marx

4565. Re: Broadband matching using Smith chart

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:19:32 UTC
From: rafael <rafahol@hotmail.com>
Message-ID: <a62nginfs1@news.tudelft.nl>
Source record: 147249

Hello CAM,

Thanks for answering my question so soon!!Do you know where to download it??

Do you know something about broadband matching networks using microstrip lines with different characteristic impedance and different length of widths??
For my thesis I can't find any information about that about the design of a broadband impedance matching network to that. Anyone knows something about that??

Thanks already for answering my questions, Rafael
CAM <Cecil.A.Moore@IEEE.org> wrote in message news:3C84DE4D.A16AE0@IEEE.org...
> rafael wrote:
> >
> > Dear people,
> >
> > Do you know of a very specialistic software whereby it's easy to construct
> > matching networks using the Smithchart??What packages are available of
> > design of broadband networks using the graphical Smithchart??
> >
> > I have used already WinSmith but wanted to know it there is not other
> > software.
>
> Microsmith will do that. You have a selection of transmission lines,
> parallel and serial L/C combinations, and loads. The components are
> variable so you can change them and observe what happens on the Smith
> Chart.
> --
> cheers, CAM http://www.qsl.net/w5dxp

4566. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:36:07 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a62ol7tqc1@slb6.atl.mindspring.net>
Source record: 147252

Roy, Reg:

Roy, that explanation was a great help. Thanks for that feedback.

FYI... a little background on the ANSI Committee T1 transmission line models...

Operating high bandwidth (broadband) digital signals on public telephone plant is a non-trivial task. This copper based broadband signalling technology is generally referred to as Digital Subscriber Loop or "DSL" and tends to use very advanced coded modulation and other coding techniques to pack as many bits per second per Hz as possible, e.g. upwards of 10bps/Hz or more in very messy transmission and interference conditions. Some of the more recent DSL versions are known as HDSL (~1.5 Mbps), ADSL (~2-4 Mbps), VDSL (~50 Mbps), SDSL (~1.5mbps), G.SHDSL (~1.5mbps), etc... The committees are now approaching standards for Ethernet speeds, 10Mbps at varous distances. These digital modulations are sent over very long lossy cables with lots of interference aka cross-talk. Universally these techniques use application specific digital signal processing techniques, stressing very low power dissipation requirements.

A typical local carrier serving area (CSA) has maybe upwards of 2000 or more subscribers inside a radius of approximately 1500 Ohms. That's about 12,000 feet of AWG 26. Those individual AWG twisted pairs are bound together in binder groups of 50 pairs. There is substantial cross-talk between pairs especially at the higher frequencies. Imagine one signal with 49 hostile cross-talkers. The cross-talk can be foreign or self. Foreign is cross-talk from a different kind of DSL into the given DSL, and self-crosstalk is when a DSL cross-talks into it's brothers. The terminating resistances are around 100 Ohms, compared to the transmission resistances of up to 1500 Ohms, a very lossy environment. These technologies have to run "full-duplex", that is run both transmit and receive on the same wire pairs and successfully receive signals in the presence of their own transmitters as well as the cross-talkers. Duplexing methods in use are: Echo Cancellation (EC), Frequency Division Duplexing, (FDD) and Time Division Duplexing (TDD).

The public network standards setting groups around the world (ANSI, ETSI, ITU) who "bless" new proposed DSL technlogies for use on public loop plant cannot do so unless they can guarantee both performance and spectral compatibility.

Such guarantees are a messy techno-political business involving, among other things, lots of computer simulations. Computer simulations are mandatory, since before anyone commits to $5 - $20 MM for new VLSI dsp hardware, they want to know that it is going to work and that it has a fair chance of

becoming standardized.. To "prove in" each new proposed xDSL Standard modulation mode lots of these computer simulations must be performed and double checked. These simulations are generally done by the companies who voluntarily participate in the standards setting process, in the hope of generating business of course. This means many transmission computer simulations performed by competing companies technical folks performed over various lengths of copper pairs with various impairments added in the presence of mixed sets of hostile cross-talkers, etc. Additionally sometimes, out at the feeder-distribution interfaces there are bridged taps or open circuit stubs of varying lengths applied across pairs as well, these act as 1/4 wave "notches" which affect performance. Also diurnal and seasonal temperature variations cause the copper resistance to vary substantially. To say the least, these are generally very substantial and difficult computer simulations. The simulations are generally done on various simulated sets of "test lines". All participants in these simulations are companies, in competition with each other, e.g. Alcatel, Lucent, Broadcom, Globespan, etc... and to make progress without political-economic standoffs, they must first agree on a basic "platform" e.g. models on which they will do their simulations and cross-confirmations of simulations.

And so... the parametric formulae involving skin effect that I quoted in the earlier posting comes from some of that simulation work done for the ANSI Committee T1, and is documented in ANSI T1.417.

My interest in all of this is because I am interested in how far such work might be carried on into other transmission line areas and whether any of the computer codes developed for DSL evaluation could be easlily "migrated" to other applications.

Thoughts, comments?

Thanks again,

--Peter K1PO

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C84D6B2.AC6920E6@IEEE.org...
> Reg Edwards wrote:
> > As Cecil will confirm, advertised 450-ohm line is a misnomer. If Cecil
used
> > truly 450-ohm line he might have to change his recommended line lengths
as a
> > replacement for tuners.
>
> My 450 ohm ladder-line measurements have averaged about 400 ohms with a VF
> of about 0.9. That's what I presently use for estimations. 300 ohm ladder-
> line came in about 265 ohms with a VF of about 0.8.
> --
> cheers, CAM http://www.qsl.net/w5dxp

4567. Re: which is the best antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:37:37 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C84E63D.B99F99C2@icok.net>
Source record: 147253

Gary,
There isn't any ~one~ antenna that's the 'best' in
all circumstances, doesn't make any difference if it's
a 'CB' antenna or any other kind. Thre are only antennas
that work well for ~you~, in particular circumstances.
It depends more on how the antenna is situated and tuned.
Antenna manufacturers are like politicians, if you believe
anything they tell you, you're in trouble!
'Doc

4568. Re: DIPOLE/BALUN QUESTION

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:43:36 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C84E7A4.4975D9C5@icok.net>
Source record: 147254

marvin,
The 'quick and dirty' answer is that you can certainly do
that. The question is, why go to the bother?
'Doc

4569. Re: Broadband matching using Smith chart

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:45:11 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a62p66$8rm$1@slb6.atl.mindspring.net>
Source record: 147255

Rafael:

I don't know what *your* definition of broadband is, but generally...

The Smith Chart is thought of as a "narrow-band" calculator. It has no real application to broadband matching.

Use of the Smith Chart assumes that the reactances are all represented at a single frequency or very narrow band of frequencies. The Smith Chart is not really suitable for broadband calculations.

For broadband analysis and synthesis other, more sophisticated, tools are required.

For interest, just what is your definition of "broadband"? i.e. in relative terms what is the ratio of the bandwidth of interest to you say (f2 - f1) to the center frequency (f1 + f2)/2 ?

Best,

--Peter K1PO

"rafael" <rafahol@hotmail.com> wrote in message
news:a62nginfs1@news.tudelft.nl...
> Hello CAM,
>
> Thanks for answering my question so soon!!Do you know where to download
it??
>
> Do you know something about broadband matching networks using microstrip
> lines with different characteristic impedance and different length of
> widths??
> For my thesis I can't find any information about that about the design of
a
> broadband impedance matching network to that. Anyone knows something about
> that??
>
> Thanks already for answering my questions, Rafael
> CAM <Cecil.A.Moore@IEEE.org> wrote in message
> news:3C84DE4D.A16AE0@IEEE.org...
> > rafael wrote:
> > >
> > > Dear people,
> > >
> > > Do you know of a very specialistic software whereby it's easy to
> construct
> > > matching networks using the Smithchart??What packages are available of

> > > design of broadband networks using the graphical Smithchart??
> > >
> > > I have used already WinSmith but wanted to know it there is not other
> > > software.
> >
> > Microsmith will do that. You have a selection of transmission lines,
> > parallel and serial L/C combinations, and loads. The components are
> > variable so you can change them and observe what happens on the Smith
> > Chart.
> > --
> > cheers, CAM http://www.qsl.net/w5dxp
>
>

4570. Re: which is the best antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:45:33 UTC
From: richardharrison@webtv.net
Message-ID: <4380-3C84E81D-764@storefull-117.iap.bryant.webtv.net>
Source record: 147261

Papi wrote:
"What is the best (nnn-beam) base antenna out there on the market today for c.b. radios?"

Most places you want to communicate in all directions and would not use a beam.

Most places, except near polar regions, you are exposed to lightning.

The choice is then clear. The world`s best antenna is Andrew Corporation`s stainless folded monopole, cut for your 27 MHz frequency, and factory tuned for 50-ohm impedance at resonance.

It will safely ground out lightning strikes to the top of your grounded metal supporting structure, and receive well in all directions for years requiring no attention in most cases.

Best regards Richard Harrison, KB5WZI

4571. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:53:51 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C84EA0F.3DB1FE1C@IEEE.org>
Source record: 147258

Wes Stewart wrote:
> QSL. The results of my measurements on the "Wireman" lines seen at:
> http://users.triconet.org/wesandlinda/ladder.htm

Wow, nice loss chart, Wes, it's a keeper.
--
cheers, CAM http://www.qsl.net/w5dxp

4572. Re: goniometer [power line noise cancel] device

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 15:56:50 UTC
From: John Dooley <lastword@ntlworld.com>
Message-ID: <vT5h8.54000$Hg1.8644583@news6-win.server.ntlworld.com>
Source record: 147257

LoL, found all of them kind of helpful, some more than others, i.e not Richards but still worthy of the post.

These servo's will get my attention now, and again, if im going to get stuck u know where I'll be posting :)

Thanks again,
J.Dooley.

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message news:a623da$4ct$1@slb2.atl.mindspring.net...
> Richard:
>
> [snip]
> "Richard Harrison" <richardharrison@webtv.net> wrote in message
> news:9742-3C842624-675@storefull-118.iap.bryant.webtv.net...
> > I`m having second thoughts about a crude joke I posted, but I swear it
> > came from a real experience. A company manager asked me why Dr.
> > Maldonado, the company physician in Argentina, was not the person
> > requesting a goniometer!
> >
> > Best regards, Richard Harrison, KB5WZI
> >[snip]
>
> Second thoughts? Naaa!
>
> My reaction was... Wow Richard has had quite varied International
> exeriences, I'll bet you also might have homebrewed one of Woody Allen's
> "Orgasmatrons".
>
> --Peter K1PO
>
>

4573. Re: Broadband matching using Smith chart

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 16:02:28 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C84EC14.2D09D17@IEEE.org>
Source record: 147260

rafael wrote:
> Thanks for answering my question so soon!!Do you know where to download it??

I think Microsmith is still available from the ARRL. My version is DOS based.
Don't know about Windows based or downloading.

> Do you know something about broadband matching networks using microstrip
> lines with different characteristic impedance and different length of
> widths??

Not enough to matter.
--
cheers, CAM http://www.qsl.net/w5dxp

4574. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 16:49:56 UTC
From: AB2HR <ab2hr@arrl.net>
Message-ID: <m7k98uoh703phjdqflu4nlmtshkkh3c91a@4ax.com>
Source record: 147262

On Tue, 5 Mar 2002 01:44:46 +0100, "Pieï¿½ï¿½ IK2VTJ"
<picarusoNONVOGLIOSPAM@writeme.com> wrote:

>What about using the sun as a compass?
>I set my rotator control box to south and, at midday, I turned the mast on
>to the rotator, aiming the antennas to the sun.
>Was I right?

No....

You're assuming that noon in your time zone coorelates to solar
noon... This is not the case... The best way or fixing solar noon is
to put a stake in the ground... at about 11am, start plotting the
shadow of the stake every few minutes... You should see the shadows
growing shorter, then longer again... When the shadow is at it's
shortest, you'll have an indication of when solar noon occurred, and
the shadow will be pointing to the true north pole...

You MAY want to plot this out on a few different days, just to smooth
out any errors in timing/marking...

Raymond Sirois AB2HR
SysOp: The Lost Chord BBS
607-733-5745
telnet:\\thelostchord.dns2go.com:6000

4575. Re: What do you recommend for HF DX

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 16:50:51 UTC
From: richardharrison@webtv.net
Message-ID: <2996-3C84F76B-2@storefull-114.iap.bryant.webtv.net>
Source record: 147265

Dick wrote:
"As I am tired of changing the antenna, what would be nearly as good or better?"

On continually wet land near the sea, you will do poorly with low horizontal antennas. You can do well with vertical antennas. Dick has already done some of the right things. He put up vertically polarized antennas.

One good vertical may be enough. It needs to be well connected at all times with that good earth system. Surely there are times when the surface dries out, and then enough radials are needed. Chicken wire is bad according to Ed Laport. Cross connections between radials beyond the immediate tower area, where the copper needs to be sheets, is bad according to Ed. It only encourages eddy currents which increase ground loss.

If the vertical antenna would be used at frequencies where it is longer/higher than 5/8-wave, traps can be used to shorten it.

An efficient, wide ranging antenna tuner is probably needed.

Best regards, Richard Harrison, KB5WZI

4576. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 17:06:09 UTC
From: dan <danlx@execpc.com>
Message-ID: <3c84fd9a$0$35566$272ea4a1@news.execpc.com>
Source record: 147264

On Tue, 05 Mar 2002 09:05:07 -0600, CAM <Cecil.A.Moore@IEEE.org>
wrote:

>Bob Miller wrote:
>> I'll do a search for Zone Alarm and check it out. I've always thought of
>> firewalls as something that only the pros with commercial sites put up, but
>> maybe there's something for a budget home user like me.
>
>I've installed Zone Alarm and it finds two or three things per hour to
>block.
Hi all,
I installed Zone Alarm and have been very satisfied with it. You say
you had 2 or 3 per hour? I had to shut off the notification of
attempts because of the volume of them. I had so many all I did was
click ok. Now I just make sure it is on and ignore it.
BTW, the reason I installed Zone was, when I was connected to the net,
and not sending or receiving actively, my computer was! I couldn't
figure out what program it was that was using my system without my
permission. After installing Zone I found out that my Eudora was
initiating contact with its web site. It took me 3 levels of customer
service to get to one that would admit Eudora had a feature that did
this. It then took another level to get to someone that would
instruct me on how to remove this feature. All the while telling me
to disable Zone so Eudora could work properly without Zone "bothering"
me!!! Well, I finally got the info needed to remove the problem.
Zone works great both ways, incoming intruders and outgoing
unauthorized contacts. Another BTW, for what it's worth. The last
place I worked had a strict policy of only using Microsoft programs or
programs that had been purchased by the company "Wonder Girl", the
bosses personal assistant. Fresh out of college and probably would
have become Gates' slave girl for free. Anyway, I told her I was
going to put my paid version of Eudora on my laptop because MS's
e-mail program is a joke. She was very upset until the next day when
one of the big virus strikes hit. I got virus e-mails from everyone
in and out of the company that used MS for e-mail. Later that same
day I confronted the "Wonder Girl" about why she sent me virus laden
e-mails. After she denied doing it I had her, she is the sys admin
after all, check the server and see who sent what. I then told her
that when Eudora asked me if I wanted to send out e-mails I did not
write, I just told it no. She also learned that day that once a week
is not often enough to update virus information!!! Oh yes, she did
also learn about firewalls too, although I heard afterward it was a
little late to help the network she set up. I hear they now hire
someone to operate the network. WHEW, way to much work!

Dan

I've rambled enough, back to the rocking chair. ZZZZZZZZZ

Remove left x for a direct reply.

4577. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 17:07:25 UTC
From: jdteske@comcast.net
Message-ID: <3c84f858.3088475@news.md.comcast.giganews.com>
Source record: 147263

The easiest way to find true north [or certainly close enough for antenna purposes is to use the old boy scout method. Find the outer most two stars on the big dipper. They are the non-handle end of the "pot". follow a line from those two stars upward from the pot's perspective [remember this varies by time and season of the year] and you will find the end of the handle of the little dipper. That is Polaris which is directly over the true north pole [with some minor seasonal variations] Drop an imaginary line from Polaris [North Star], straight down to the horizon and you are looking at true north.

You can find the magnetic variation of that from a geodetic survey map or navigation map. If you live in say Milwaukee [near where I grew up] you are in luck, for on a line roughly from Milwaukee to West Florida, the True and Magnetic Norths are almost the same. In Annapolis, where I sail, were are about 10 degrees off, so that a compass reading of 350 degrees is actually pointing you to true north. {In practice, most small boat navigators just stick to magnetic reading since that is how our boat compass's read...a GPS can usually read out in either. I have my GPS set to read Magnetic since I can match where I want to go with my boat compass.

In California, you will be in the opposite direction that I am. Find a friend with a boat, or go to a Marine store and any local navigation map will give you the nominal figure for your area...it will be right on the compass rose on the map.

Jon Teske, W3JT

On Mon, 04 Mar 2002 12:51:40 -0500, Mel Martin <ve2dc@rac.ca> wrote:

>
>
>JLB wrote:
>>
>> Anyone who has any training in navigation, such as pilots, knows this.
>> As I recall, in the Los Angeles area it would be at least 60 degrees
>> off!
>>
>Not likely! The Mag pole is in Northern Canada, not Vermont....

4578. Re: [newbie]microwave beam

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 17:18:03 UTC
From: richardharrison@webtv.net
Message-ID: <2993-3C84FDCB-36@storefull-114.iap.bryant.webtv.net>
Source record: 147170

I wrote that 19 GHz was the lowest frequency passed through a 2-inch pipe. Wrong!

2 inches is about 5 cm or the wavelength of a frequency of 6 GHz. As the diameter of the pipe only has to be 1/2-wavelength at the cut-off frequency, 3 GHz is the lowest frequency you could squeeze through a 2-inch pipe. Dang me!

Best regards, Richard Harrison, KB5WZI

4579. Re: Broadband matching of dual-band Sierpinski patch antenna for mobile communication

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 17:20:02 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <8au98uc0vtsilfmvql8f3fcshnkg1a7uur@4ax.com>
Source record: 147267

On Tue, 5 Mar 2002 13:27:07 +0100, "rafael" <rafahol@hotmail.com>
wrote:

>Dear people,
>
>As you know I'm a student of TU Delft doing research in your patented
>technology. Because I'm know able to simulate such kind of structures, I
>have to design a dual-band Sierpinski patch antenna. The problem is that
>this antenna is very narrowband (1.5% or less).
>What techniques are known for broadband matching such a Sierpinski patch
>antenna? What are your experiences?
>
>Let me know, because then I can continue to finish my thesis, Rafael
>

Hi Rafael,

Build it with about 10 times the size you anticipated and treat it
like a 300 to 400 Ohm antenna. Review:
http://www.qsl.net/kb7qhc/antenna/fractal/Wide%20Band%20Comparisons.htm
However, I would add this has all been pointed out several times
before, and nothing has changed in the interval. What have you
accomplished in the past several months?

73's
Richard Clark, KB7QHC

4580. Re: Broadband matching using Smith chart

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 17:22:29 UTC
From: rafael <rafahol@hotmail.com>
Message-ID: <a62un3$pn1$1@news.tudelft.nl>
Source record: 147266

Hello Peter,

In reality I have to design for my thesis two equilateral triangular patch antennas resonating at 2.14 GHz and 1.95 GHz respectively. The bandwidth at each of these frequencies has to be
60 MHz. Thus 2.11-2.17 GHz and 1.92-1.98 GHz. Because the antennas will be used for mobile communication, the structure has to be planair and easy to made. Therefore I excited them with
microstrip line feeding. Because one section of microstrip line feeding the antennas at one of the edges seems to achieve narrow band behavior my tutor suggested me to design a broadband matching network
with different microstrip line sections of characteristic impedance.

Do you know other tools that are able to do that quickly using optimization??

Thanks already for helping me, Rafael

P.S. I was using a Smith chart program for plotting different kinds of points of impedance for different kind of frequencies and by impedance transformations these point could be transformed to the VSWR circle and therefore achieve wideband behavior.

Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message news:a62p66$8rm$1@slb6.atl.mindspring.net...
> Rafael:
>
> I don't know what *your* definition of broadband is, but generally...
>
> The Smith Chart is thought of as a "narrow-band" calculator. It has no real
> application to broadband matching.
>
> Use of the Smith Chart assumes that the reactances are all represented at a
> single frequency or very narrow band of frequencies. The Smith Chart is not
> really suitable for broadband calculations.
>
> For broadband analysis and synthesis other, more sophisticated, tools are
> required.
>
> For interest, just what is your definition of "broadband"? i.e. in relative
> terms what is the ratio of the bandwidth of interest to you say (f2 - f1) to

> the center frequency (f1 + f2)/2 ?
>
> Best,
>
> --Peter K1PO
>
>
> "rafael" <rafahol@hotmail.com> wrote in message
> news:a62nginfs1@news.tudelft.nl...
> > Hello CAM,
> >
> > Thanks for answering my question so soon!!Do you know where to download
> it??
> >
> > Do you know something about broadband matching networks using microstrip
> > lines with different characteristic impedance and different length of
> > widths??
> > For my thesis I can't find any information about that about the design
of
> a
> > broadband impedance matching network to that. Anyone knows something
about
> > that??
> >
> > Thanks already for answering my questions, Rafael
> > CAM <Cecil.A.Moore@IEEE.org> wrote in message
> > news:3C84DE4D.A16AE0@IEEE.org...
> > > rafael wrote:
> > > >
> > > > Dear people,
> > > >
> > > > Do you know of a very specialistic software whereby it's easy to
> > construct
> > > > matching networks using the Smithchart??What packages are available
of
> > > > design of broadband networks using the graphical Smithchart??
> > > >
> > > > I have used already WinSmith but wanted to know it there is not
other
> > > > software.
> > >
> > > Microsmith will do that. You have a selection of transmission lines,
> > > parallel and serial L/C combinations, and loads. The components are
> > > variable so you can change them and observe what happens on the Smith
> > > Chart.
> > > --
> > > cheers, CAM http://www.qsl.net/w5dxp
> >
> >
>

>

4581. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 17:27:09 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <7NPLFIAt$Ph8EwXu@jmwa.demon.co.uk>
Source record: 147169
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Rex <notreally@hotmail.invalid>
wrote (in <ble98uohs57pu5qm981i24mn51ei88rcvd@4ax.com>) about 'HELP
needed in understanding Bode Plots', on Tue, 5 Mar 2002:

>How 'bout Beaujolais -- I tend to jab by saying bee-jewel-yas? --

Bow-zho-lay

>them frenchies have more devious pronounciations than most anyone
>else. Why can't they spell them like you say them.

Because they spell them like THEY say them. (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4582. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 17:31:56 UTC
From: Bill Turner <w7ti@dslextreme.com>
Message-ID: <u40a8uoob961u8kekc4ccff8t68sorhnck@4ax.com>
Source record: 147268

On Tue, 05 Mar 2002 13:41:54 GMT, "Jerry" <jerryaa@prodigy.net> wrote:

>I have some ground rods in the ground that I don t need now. Is there a way
>to extract them, other than excavation? This is copper clad steel 8 foot.
>

What ever method you use for pulling it out, if you have time to
thoroughly water the ground around it, that will help. Ideally, put a
slow-running hose on it and let it run a long time. Days, if possible.

Bill, W7TI

4583. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 17:51:46 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C85059E.B1EEF26F@shaw.ca>
Source record: 147171

Jerry wrote:
>
> I have some ground rods in the ground that I don t need now. Is there a way
> to extract them, other than excavation? This is copper clad steel 8 foot.

Use a car jack and a piece of chain. Put a clamp at the top
of the rod, wrap the chain
around it a couple of turns, and jack the rod out. It works
100%. Put some support
under the jack (a piece of 2 x 4 or something).
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my website at http://members.home.net/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4584. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:08:19 UTC
From: Pie`` IK2VTJ <picarusoNONVOGLIOSPAM@writeme.com>
Message-ID: <a631i4$b3aml$1@ID-83989.news.dfncis.de>
Source record: 147172

"AB2HR" <ab2hr@arrl.net> ha scritto nel messaggio
news:m7k98uoh703phjdqflu4nlmtshkkh3c91a@4ax.com...
> On Tue, 5 Mar 2002 01:44:46 +0100, "Pie`` IK2VTJ"
> <picarusoNONVOGLIOSPAM@writeme.com> wrote:
>
> >What about using the sun as a compass?
> >I set my rotator control box to south and, at midday, I turned the mast
on
> >to the rotator, aiming the antennas to the sun.
> >Was I right?
>
> No....
>
> You're assuming that noon in your time zone coorelates to solar
> noon... This is not the case... The best way or fixing solar noon is
> to put a stake in the ground... at about 11am, start plotting the
> shadow of the stake every few minutes... You should see the shadows
> growing shorter, then longer again... When the shadow is at it's
> shortest, you'll have an indication of when solar noon occurred, and
> the shadow will be pointing to the true north pole...
>
> You MAY want to plot this out on a few different days, just to smooth
> out any errors in timing/marking...
>

Hi Raymond,
many thanks for the explanation. Honestly I'd never tought about solar noon,
but just local noon.
Next time I'll follow your indications and will also see the difference
between the two methods.
I had to do the job again, because the wind has rotated the mast almost
90`!!
--
73 de IK2VTJ, Piero.

http://www.qsl.net/ik2vtj
http://www.ardf.it

Togli / Remove
NONVOGLIOSPAM
dall'indirizzo / from address

4585. Long square antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:10:02 UTC
From: "news.jonged.myweb.nl" <ed@jonged.myweb.nl>
Message-ID: <a631tegui1@cyan.nl.gxn.net>
Source record: 147174

The only place I have for my antenna is on my attic.
The ceiling (the floor of the attic) is made of alluminium strips with pressed cardboard tiles on the strips. The distance between the strips is 1 by 3 ft. At the moment I use a simple wire running half to one foot above the strips, length 16 ft.
I am planning to replace this with a square of wire that runs on the outer edges above the alluminium strips. The square is a rectangle about 14 x 16 feet. The idea is to keep it a closed loop. The two ends go to the 500 ohm antenna connection on my receiver and to ground on the same rig. I use a Icom IC-R75. (Yeah, I know, hang a wet wire on it and enjoy..:-).)

Could there be any disadvantages about this construction?
Are any tips recommendable?

Thnx, 73's!

--
Ed de Jong
Balk. The Netherlands
URL: http://beam.to/galact
E-mail: ed@jonged.myweb.nl <mailto:ed@jonged.myweb.nl> (default)

_____
{The night hides a world but unveils a universe}

4586. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:12:29 UTC
From: Pie`` IK2VTJ <picarusoNONVOGLIOSPAM@writeme.com>
Message-ID: <a631pu$bgaaj$1@ID-83989.news.dfncis.de>
Source record: 147173

"J. Teske" <jdteske@comcast.net> ha scritto nel messaggio
news:3c84f858.3088475@news.md.comcast.giganews.com...
> The easiest way to find true north .....

Easiest?! I'm enough worried to climb the roof during sunshining... that I
can only... dream to do that! :-))
--
73 de IK2VTJ, Piero.

http://www.qsl.net/ik2vtj
http://www.ardf.it

Togli / Remove
NONVOGLIOSPAM
dall'indirizzo / from address

4587. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:22:39 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <P18h8.16498$106.1296597@bgtnsc05-news.ops.worldnet.att.net>
Source record: 147176

>> Doc, W5LZ, wrote:
>> Jerry,
>> I don't 'see' how a 'shorting lead' and the unused
>> coil turns of a 'Bug Catcher' antenna are any different,
>> other than mechanical, than the unused coil turns inside
>> the tube of a screw driver antenna....

> Jerry, K4KWH, replied:
> It may be just an opinion, but I do believe it does
> affect, at least, the efficiency of the antenna
> as opposed to the coil turns down inside the mast
> of a SD. Those turns that are down inside the mast
> are decoupled at the fingerstock and become, in effect,
> a part of the lower mast. I believe, from some admittedly
> very unscientific experiments I have done, that those
> turns that are by-passed still have *some* RF on them,
> but, because of the jumper, can't "do" anything resulting
> in wasted power--kinda like back pressure in a car muffler.
>.......

Just a few observations: (1) My bugcatcher does exhibit
undesirable resonances on the upper bands (eg: 17 meters)
when I use a single jumper wire. By leaving the 40 m
and 20 m jumpers in place in addition to the one for 17 m,
the undesirable resonances are suppressed. (2) The mast
of the ScrewDriver (SD), in addition to shorting out
the coil with the fingerstock, also acts as a huge
shorted turn closely coupled to the unused portion of
the coil. This further "shorts out" the unused
portion of the SD coil and suppresses any resonances
excited by flux linkage from the top (active) portion
of the coil. (3) The length of the SD mast is crucial
to its operation and, as correctly surmised, actually
carries most of the radiative current. The longer
(higher) this is, the better.

--
Jim Bromley, K7JEB k7jeb @ arrl.net
Glendale, Arizona

4588. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:23:24 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C850D1C.606A4E41@IEEE.org>
Source record: 147177

AB2HR wrote:
> When the shadow is at it's
> shortest, you'll have an indication of when solar noon occurred, and
> the shadow will be pointing to the true north pole...

But, but, but, that doesn't account for Daylight Savings Time. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

4589. Re: Adjusting a CB antenna for Low VHF?.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:25:06 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <TZ7h8.4334$tg2.262274@e3500-atl1.usenetserver.com>
Source record: 147178

If you are just listening, I am not sure you would help your reception
that much by trimming it off any more. If you should decide to sell the
antenna, it would be easier to sell
if it is not shortened to something that is not useable to CBers or hams.
Just my .02.

73

Jerry
K4KWH

Paul Logan <Paul.Logan4@btinternet.com> wrote in message
news:a5u87kgke1@knossos.btinternet.com...
> Hi all,
>
> I was wondering could someone provide me some information about modifying
a
> 5/8th wave CB antenna to have a centre frequency of say 42.5 mhz. I am
> interested in Low VHF reception and have been having fun in recent times
> hearing the California Highway patrol in the evenings around these
> frequencies.
>
> I understand that the length of a 5/8th wave at 42.5 will be 14.47 feet or
> 4.34 metres. Now I hav'nt opened the butt of the antenna yet but I imagine
> there is a loading coil in there- how do I adjust this for the new
> frequency?. How many turns and where do I tap it?.
>
> At present I have the antenna length at 20.5 feet resonant at 30 mhz and
it
> works well from 25- up across 10 metres. It also seems to do quite well
> between 39 and 43 mhz. Is there any way I can improve bandwidth with such
an
> antenna or should I think of something like a half wave?.
>
> Any ideas or information on this subject would be most welcome- thanks.
>
> regards,
>
>
> --
> Paul Logan,
> Lisnaskea, N. Ireland
>
> Located 54 15 N 7 27 W in IO64GF.
> Interests: FM and TV-DX, SWL, Scanning.

>
> Low VHF Skip and Scanning page: http://www.geocities.com/yogi540
>
>

4590. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:25:26 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C850D96.F5CD2F18@coqui.net>
Source record: 147175

dan wrote:
>
> On Tue, 05 Mar 2002 09:05:07 -0600, CAM <Cecil.A.Moore@IEEE.org>
> wrote:
>
> >Bob Miller wrote:
> >> I'll do a search for Zone Alarm and check it out. I've always thought of
> >> firewalls as something that only the pros with commercial sites put up, but
> >> maybe there's something for a budget home user like me.
> >>
> >I've installed Zone Alarm and it finds two or three things per hour to
> >block.
> Hi all,
> I installed Zone Alarm and have been very satisfied with it. You say
> you had 2 or 3 per hour? I had to shut off the notification of
> attempts because of the volume of them. I had so many all I did was
> click ok. Now I just make sure it is on and ignore it.
> BTW, the reason I installed Zone was, when I was connected to the net,
> and not sending or receiving actively, my computer was!

I think Zone Alarm ought to be REQUIRED on online computers. It would
put a screeching halt to the burgeoning spyware industry.
-Bill

4591. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:33:53 UTC
From: mike.luther@ziplog.com
Message-ID: <u8a3shcvh74360@corp.supernews.com>
Source record: 147179

In <3C84DEA3.E1E934D6@IEEE.org>, CAM <Cecil.A.Moore@IEEE.org> writes:

You're so lucky .. CAM ..

>I've installed Zone Alarm and it finds two or three things per hour to
>block.

>cheers, CAM http://www.qsl.net/w5dxp

During the peak of all the infection runs for Code Red .. etc .. they seem to peak out at between 3000 and 5000 attempts a day here mostly on Port 80 alone. The Port 137/138 game usually runs about 10% of that more during the whatma-jamma slurry peaks. That per the firewall and filter logs .. here.. Broadband 24X7 access is kinda a two-edged sword as has been properly noted.

Zone Alarm isn't available for OS/2 ..

As an additional note, in OS/2 you can use the command line form all in lower case please:

netstat -s

That will tell you what's connected to your box at that particular time. If it has established connections to what you don't want there, you can sure enough start looking for who, why, when and what to do about it. I have no idea how any of this works at command line levels in non-OS/2 systems, but the information, the techniques, are all pretty much the same for an in-depth study and learning project about all this mess.

Those running unprotected on the Web will have a lot of data to absorb once they begin to look, if they are up 24X7 and broadband!

The URL below that you may wish to look at gives a nice sobering BEGINNING display of what you face at all this and what to look for in Port and infiltation techniques:

http://www.robertgraham.com/pubs/firewall-seen.html

Bob Graham has done a nice job at presenting the first layer of the onion here! You should look at it if you've not been wild about thinking about these kind of thingees in my humble opinion!

Again ... visualize, if you will, that the whole Internet experience, has some very similar conceptual parallels to our ham experiences! You can think about filters, firewalls, and so on, much like we think about our beloved antennas here in this forum! In a way, impedance, SWR, and the like, all have a sort of a kind of a parallel experience when it

comes to exploring the medium there, as opposed to the medium we all know and love upstairs, kinda!

Wait until they combine arrival vectors similar to spread spectrum techiniques with internal polymorphic tools ... ;*(

The sad part of all this is that we spend more and more time on the technical parts of the IP medium game and less and less on antennas, talking to people over our medium, and love and care for those with problems we can solve if we share just basic information for all who need the help .. The couple hours a day wasted supervising a site now could much better have possibly spent working aluminum and talking to f0olks out there on RF!

;(

--> Sleep well; OS/2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

4592. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:39:39 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8510EB.E0E8477A@IEEE.org>
Source record: 147180

K7JEB wrote:
> Just a few observations: (1) My bugcatcher does exhibit
> undesirable resonances on the upper bands (eg: 17 meters)
> when I use a single jumper wire. By leaving the 40 m
> and 20 m jumpers in place in addition to the one for 17 m,
> the undesirable resonances are suppressed. (2) The mast
> of the ScrewDriver (SD), in addition to shorting out
> the coil with the fingerstock, also acts as a huge
> shorted turn closely coupled to the unused portion of
> the coil. This further "shorts out" the unused
> portion of the SD coil and suppresses any resonances
> excited by flux linkage from the top (active) portion
> of the coil. (3) The length of the SD mast is crucial
> to its operation and, as correctly surmised, actually
> carries most of the radiative current. The longer
> (higher) this is, the better.

Hi Jim, as you know I run an HS-1600 screwdriver with the
RV bottom extension so my bottom section is six feet. I
use a one foot section between my coil and my top hat.
With the top hat off, the screwdriver resonates on 10m
at the minimum coil rail.
--
cheers, CAM http://www.qsl.net/w5dxp

4593. Two things for your attention

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:45:24 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <Vg8h8.4379$tg2.265785@e3500-atl1.usenetserver.com>
Source record: 147182

I know that this subject has come up in the past, but I thought you might want to hear my most recent experience with UPS. I decided to try them again to see how they handled the shipments of my Carolina Cyclone antennas. Two of the shipments were damaged by virtue of slamming the packages down on one end SO HARD that they managed to ruin the decoupling collars. Now listen to (read) this one: The final shipment was packaged in 3" PVC pipe with plastic caps on each end. The ends were fastened with reinforced AND clear tape. The package was slammed down so HARD at some point that they lost the screwdriver component out of the package. Then the stupid idiots just re-taped the end that had been breached with the tube empty and shipped it on to its destination. DUH!
HOW do I know they slam shipments around so. HA! The Lexan coil cover was jammed down in the other end so tightly that it literally STUCK and can't be retreived--and that is with wads of newspapers on that end. The rest of the packing--and there was a lot--was missing along with the antenna unit. Now. To my mind, if a package weighs 10 lbs at point of departure, and it is 4' long, it arrives at some station along the way suddenly weighing less that 3 lbs. I would think something was wrong. It takes a blithering stupe to tape up an empty tube and ship it on. Never again will I ship UPS--I can't afford the b******s.

For those of you who are looking at HF mobile antennas, I would like to invite you to take a look at the Carolina Cyclone series of mobile antennas. Slightly larger than the generic units sold on the 'net and at hamfests, these antennas also put out a BIG signal because they do not use PVC anywhere, they use #14 wire (instead of that skinny #16 stuff), and they can be configured with lengths of lower masts to conform to the distance from your mount and the top of the vehicle. That is so that your coil can "peek" over the top of the car. Normally the masts are 3' unless otherwise specified. Additionally, I betcha some of you have bought the "other" brands only to have your weather cover crack and split after a year--or even a few months. I use 1/8" wall Lexan and I have several sizes to fit your particular unit whether it be "skinny" or "fat". Just measure and let me know via my website.

Thanks for reading==and letting me vent about UPS.

73 all,

Jerry
K4KWH

4594. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:47:43 UTC
From: Ravi R <krravi@yahoo.com>
Message-ID: <jp8h8.60660$Dh.6004481@bin2.nnrp.aus1.giganews.com>
Source record: 147181

"You got questions and we *make* up answers"

ROTFL !!!!

My Gawds...Harvey.. you are such a Trip !!!

I actually talked to guys in RadioShack.. they are a helpful lot.but seem to have no idea about antennas and such. Just helped me browse through the various CB Antennas. Maybe there were convincing me to get rid of my Shortwave and get a CD Radio ?

> "Ravi R" wrote in a slightly different order:

In a different order eh ? Does that mean i am getting into the barebones of antennas ? lol

Alright.. now. since you have a 7600... i guess we are in the same league..(Albiet you have more points lol)

Actually my house is built of brick and mortar.. and add to that.. metal frames to prevent burgulary...in the windows, making my windows not only burglar proof but also shortwave proof !

And i do get a superb reception, with the whip..extended in the backyard of my house.. but i cant stay out long since it gets cold.

And yes i get better reception when am close to a window.
Yesterday i logged around 50 stations.. from Indonesia to.Peru.. to Chile.
Amazing piece of radio this little guy SONY.
You exactly know what i want.. lol Yes i hate to open up my whip antenna often, and turni it into a Loop antenna.. by mistake.

So a ext antenna is cool.. in the sense that.. i can just place the radio in any position in want in my bed or whatever and listen to stations.

I do agree.. that having a preselector..can get cumbersome.. operating so many switches to get a single station.. and i might as well look like a WWII era Codebreaker.

So i poured though that book and the AN-LP1 actenna had thumbs up from the editors
In their own words..

"Hands down this is the best antenna for portables and a bargain for what it does.."

So i cudnt resist that and i actually found a store in USA that carries that antenna. I admit that the fancy folding option and its performance was a sucker and i gave into it.

But this is just a start.. and after a while i plan to get a tabletop model...and all the circuits and diagrams in the ARRL book are interesting. Actually it has sparked me into designing my own antenna by trial and error and of course some logic.. in free time.

But i will still buy that 10 buck antenna.. and install it.. for i guess nothing can beat.. a passive outdoor antenna..(man .. did i sound..so confident ? its the ARRL book !)

So i wil use the outdoor antenna.. when at home and..the AN-LP1.. when am travelling.

But all your advice is sincerely appreciated Mr.Harvey.

I guess you should actually host a talk show in Radio.."Beginers guide to antennas and cloth hangers" Am serious !!!

And dont feel relieved.. once i get that Wire antenna from Shack.. i might still come up with something to ask you !

:)

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message news:e9Xg8.6470$7Y4.1239509@news20.bellglobal.com...
> "Ravi R" wrote in a slightly different order:
> > I can't sit by my window with my telescopic antenna,
> > since it's cold and the windows are always closed.
> > And i am not really satisfied with the supplied reel antenna.
> > I went to RadioShack the other day and saw a SW antenna kit,
> > for 10 bucks. I guess its one of those 'Inverted L' kinda of antenna.
>
> Hi,
>
> If it's $10, then you might as well buy it. If it were to cost much more
> than that, then it wouldn't be worth it. Remember that it is *just* wire
> and some fairly obvious hardware.
>
> Portable SW receivers don't usually need very much signal to overload -
you
> might need an attenuator depending on the design of the radio when using
an
> outside antenna. Some portable radios have an attenuator switch on the
back
> close to the whip.
>
> Most of those sorts of portable SW radios work pretty good with just the
> built-in whip. Is your residence not made of wood ? Do you detect better
> signals next to those cold windows ?
>
> One advantage of using an external antenna is that the whip stays folded
up
> and safe (as opposed to bent), especially when in bed listening to BBC
> sports anouncing the scores (helps me to go to sleep).

> "Manchester 2, Womanchester 1.
> Flogbottom 4, Bot Floggom 2.
> Chesterfield 3, Hallway Table 2..."
> ...yawn... ...zzzzzzzz... <out>
>
> > ...MFJ Antenna preselector...
>
> The one with the tuning knob and assorted switches ? Adding that to a
> digital radio is a bit like having a nice car with the gear shifter
mounted
> on the roof. Everytime you conveniently punch a button to bring up
another
> preprogrammed channel, you then have to fiddle with the preselector to
bring
> the signal up. Gets tiresome very quickly.
>
> I wouldn't bother unless you proved to yourself that you needed it. It
can
> really slow you down when browsing around the bands. At least, have a way
> to bypass it. You probably won't use it 95% of the time.
>
> > the SONY AN--LP1 seems to be the best antenna
> > but not available in the USA at the moment.
>
> The Sony is (IIRC) an untuned active antenna. It has a switch to insert a
> filter, but it is basically wideband and doesn't distract from the radio
> tuning.
>
> Is it still manufactured ? Sony might not sell it in the USA, but I'll
bet
> there are a hundred companies bringing them in from overseas markets (gray
> market). My ICF-7600 came from the Middle East to NYC where I bought it.
> Pick up a SW or Radio magazine and check the ads in the back if you want
> that antenna.
>
> > My problem here is... the connectors from the Preselector,
> > are co-axial..or whatever to the radio. But my portable has
> > .. a MINI Plug for..."Ext Ant". How do i connect that output
> > from the preselector to my radio.
>
> Mini plug probably = 1/8" mini ("mono", not stereo of course). The MFJ
> probably has an SO-239 that accepts PL-259 (big threaded socket). I don't
> believe that Radio Shack has an adapter or a cable directly from one to
the
> other - better ask (You got questions, they make up answers...). You have
> to learn to solder sooner or later, so you might have to make your own
cable
> sooner than later... Or simply dispense with the preselector for now.
> Leave it until you know you need it.
>

> To connect the radio to any outside antenna, purchase a prewired cable
from
> Radio Shack with a 1/8" mono plug on each end. Get a long one. Then cut
it
> in half and strip the wire ends. Now you have two cables that you can
> connect to various antenna projects and plug into your portable radio.
>
> > Secondly.. apart from lightning and static.. will it
> > damage the sensitivity of my Sony Portable in anyway !
>
> Shouldn't - that jack is intended for external antennas. It is NOT
intended
> for lightning. Disconnect when not in use. Don't use during storms - too
> much static anyway.
>
> > "passport to world band radio" and "ARRL Handbook"
>
> Oh my gosh, you're all set. Great books ! Just keep in mind that even
the
> most complex and advanced theories created by Man pale in comparison to
the
> complexities of the real world. Keep an open mind - but don't let your
> brains fall out.
>
> Good luck.
>
> J. Harvey, Ottawa
> VE1BLL@rac.ca /VE3
>
>
>

4595. Re: Long square antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 18:51:48 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C8513C0.E5728D92@icok.net>
Source record: 147183

Ed,
It should work. Another alternative would be to
have the wire follow the rafter lines instead of the
floor. It would more than double the area of the loop,
which should improve things.
'Doc

4596. Re: Two things for your attention

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 19:24:30 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a63664$c0o$1@slb5.atl.mindspring.net>
Source record: 147184

Jerry:

Have a look at http://www.ista.org/

--Peter K1PO

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:Vg8h8.4379$tg2.265785@e3500-atl1.usenetserver.com...
> I know that this subject has come up in the past, but I thought you might
> want to hear my most recent experience with UPS. I decided to try them
> again to see how they handled the
> shipments of my Carolina Cyclone antennas. Two of the shipments were
> damaged by virtue
> of slamming the packages down on one end SO HARD that they managed to ruin
> the decoupling collars. Now listen to (read) this one: The final
shipment
> was packaged in 3" PVC pipe with plastic caps on each end. The ends were
> fastened with reinforced AND clear tape. The package was slammed down so
> HARD at some point that they lost the
> screwdriver component out of the package. Then the stupid idiots just
> re-taped the end
> that had been breached with the tube empty and shipped it on to its
> destination. DUH!
> HOW do I know they slam shipments around so. HA! The Lexan coil cover
was
> jammed
> down in the other end so tightly that it literally STUCK and can't be
> retreived--and that is with wads of newspapers on that end. The rest of
the
> packing--and there was a lot--was
> missing along with the antenna unit. Now. To my mind, if a package
weighs
> 10 lbs at point
> of departure, and it is 4' long, it arrives at some station along the way
> suddenly weighing less
> that 3 lbs. I would think something was wrong. It takes a blithering
stupe
> to tape up an empty tube and ship it on. Never again will I ship UPS--I
> can't afford the b******s.
>
>
> For those of you who are looking at HF mobile antennas, I would like to
> invite you to take a
> look at the Carolina Cyclone series of mobile antennas. Slightly larger
> than the generic units

> sold on the 'net and at hamfests, these antennas also put out a BIG signal
> because they do not use PVC anywhere, they use #14 wire (instead of that
> skinny #16 stuff), and they can
> be configured with lengths of lower masts to conform to the distance from
> your mount and
> the top of the vehicle. That is so that your coil can "peek" over the top
> of the car. Normally
> the masts are 3' unless otherwise specified. Additionally, I betcha some
of
> you have bought
> the "other" brands only to have your weather cover crack and split after a
> year--or even a few months. I use 1/8" wall Lexan and I have several
sizes
> to fit your particular unit whether
> it be "skinny" or "fat". Just measure and let me know via my website.
>
> Thanks for reading==and letting me vent about UPS.
>
>
> 73 all,
>
> Jerry
> K4KWH
>
>
>

4597. Re: Balun Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 19:28:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C851C6E.36FC50BD@eznec.com>
Source record: 147185

Marvin emailed me that he has an MFJ antenna analyzer, so the first method Val proposes is what I'd recommend. You won't, of course, need the transmitter -- just connect the analyzer to the 50 ohm end of the balun with the appropriate resistor at the other end. Since only very low power will be involved, you can use a small carbon film, metal film, or carbon composition resistor -- anything except wire wound.

Of course, this doesn't test the balun's ability to achieve balance, just that its ratio is correct.

Roy Lewallen, W7EL

Val wrote:
>
> What kind of instruments do You have?
> What kind of balun?
>
> The easiest set up: A QRP SWR meter (bridge).
> Broadband HF Balun.
>
> Say the balun is 4:1. Obtain a 5W, 200ohm resistor.
> (200 ohm = 50 ohm x 4). Attach the resistor across the
> ouput of the Balun (disconnect all antenna wires).
> Transmit 5W at any shortwave band into the balun. Is
> the SWR= 1. Good. The Balun is 4:1. You can test on
> each band You want to use to be sure...
>
> Harder set: Narrowband HF balun. Same method, but use
> correct frequency.
> . . .

4598. Re: Broadband matching using Smith chart

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 19:42:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C851F99.6524CA74@eznec.com>
Source record: 147186

I don't think MicroSmith is any longer available. The ARRL now sells
Noble Publishing's WinSmith.

Roy Lewallen, W7EL

CAM wrote:
>
> rafael wrote:
> > Thanks for answering my question so soon!!Do you know where to download it??
>
> I think Microsmith is still available from the ARRL. My version is DOS based.
> Don't know about Windows based or downloading.
>
> > Do you know something about broadband matching networks using microstrip
> > lines with different characteristic impedance and different length of
> > widths??
>
> Not enough to matter.
> --
> cheers, CAM http://www.qsl.net/w5dxp

4599. Re: Broadband matching using Smith chart

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 19:44:30 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a6376u$oh7$1@slb6.atl.mindspring.net>
Source record: 147187

Rafael:

Tools, no I don't know of any "ready made" or off-the-shelf tools.

But the limitations and the methodologies for broadband matching were laid out by the "masters" many years ago.

See for instance:

H. W. Bode, "Network Analysis and Feedback Amplifier Design", D. Van Nostrand, New York, 1945. (Nice original work on limitations of broadband matching.)

R. M. Fano, "Theoretical Limitations on the Broadband Matching of Arbitrary Impedance", Journal of the Franklin Institute, Vol. 249, No's 1 & 2, pp. 57-83, 139-154, 1950.

D. C. Youla, "A New Theory of Broadband Matching", IEEE Transactions on Circuit Theory, Vol. CT-11, No. 1, pp. 30-49, 1964. (The seminal and definitive modern work on the subject.)

E. S. Kuh and R. A. Rohrer, "Theory of Linear Active Networks", Holden-Day, San Francisco, 1967. Especially Chapters 7, "Broadband Limitations on Network Performance", and Chapter 8, "Theory of Broadband Matching".

The few times in my career when I/we had to do this, we developed the tools ourselves (One time project specific programming efforts in Fortran .) to perform the approximation and synthesis algorithm steps outlined in the above references. Today I would probably do it using MatLab.

As I stated at the top, I really don't know if there are any "general purpose" tools available to solve such problems... the reason being that there are so few such problems to be solved that it simply doesn't pay for a tool vendor to make them available. But that doesn't mean that such tools don't exist, perhaps someone lurking on the NG knows of modern tools for broadband matching... I admit that I just don't know, haven't researched it for years.

Best of luck,

--Peter K1PO

"rafael" <rafahol@hotmail.com> wrote in message
news:a62un3$pn1$1@news.tudelft.nl...
> Hello Peter,
>
> In reality I have to design for my thesis two equilateral triangular patch
> antennas resonating at 2.14 GHz and 1.95 GHz respectively. The bandwidth

at
> each of these frequencies has to be
> 60 MHz. Thus 2.11-2.17 GHz and 1.92-1.98 GHz. Because the antennas will be
> used for mobile communication, the structure has to be planair and easy to
> made. Therefore I excited them with
> microstrip line feeding. Because one section of microstrip line feeding
the
> antennas at one of the edges seems to achieve narrow band behavior my
tutor
> suggested me to design a broadband matching network
> with different microstrip line sections of characteristic impedance.
>
> Do you know other tools that are able to do that quickly using
> optimization??
>
> Thanks already for helping me, Rafael
>
> P.S. I was using a Smith chart program for plotting different kinds of
> points of impedance for different kind of frequencies and by impedance
> transformations these point could be transformed to the VSWR circle and
> therefore achieve wideband behavior.
>
>
> Peter O. Brackett <ab4bc@ix.netcom.com> wrote in message
> news:a62p66$8rm$1@slb6.atl.mindspring.net...
> > Rafael:
> >
> > I don't know what *your* definition of broadband is, but generally...
> >
> > The Smith Chart is thought of as a "narrow-band" calculator. It has no
> real
> > application to broadband matching.
> >
> > Use of the Smith Chart assumes that the reactances are all represented
at
> a
> > single frequency or very narrow band of frequencies. The Smith Chart is
> not
> > really suitable for broadband calculations.
> >
> > For broadband analysis and synthesis other, more sophisticated, tools
are
> > required.
> >
> > For interest, just what is your definition of "broadband"? i.e. in
> relative
> > terms what is the ratio of the bandwidth of interest to you say (f2 -
f1)
> to
> > the center frequency (f1 + f2)/2 ?

> >
> > Best,
> >
> > --Peter K1PO
> >
> >
> > "rafael" <rafahol@hotmail.com> wrote in message
> > news:a62nginfs1@news.tudelft.nl...
> > > Hello CAM,
> > >
> > > Thanks for answering my question so soon!!Do you know where to
download
> > it??
> > >
> > > Do you know something about broadband matching networks using
microstrip
> > > lines with different characteristic impedance and different length of
> > > widths??
> > > For my thesis I can't find any information about that about the design
> of
> > a
> > > broadband impedance matching network to that. Anyone knows something
> about
> > > that??
> > >
> > > Thanks already for answering my questions, Rafael
> > > CAM <Cecil.A.Moore@IEEE.org> wrote in message
> > > news:3C84DE4D.A16AE0@IEEE.org...
> > > > rafael wrote:
> > > > >
> > > > > Dear people,
> > > > >
> > > > > Do you know of a very specialistic software whereby it's easy to
> > > construct
> > > > > matching networks using the Smithchart??What packages are
available
> of
> > > > > design of broadband networks using the graphical Smithchart??
> > > > >
> > > > > I have used already WinSmith but wanted to know it there is not
> other
> > > > > software.
> > > >
> > > > Microsmith will do that. You have a selection of transmission lines,
> > > > parallel and serial L/C combinations, and loads. The components are
> > > > variable so you can change them and observe what happens on the
Smith
> > > > Chart.
> > > > --
> > > > cheers, CAM http://www.qsl.net/w5dxp

> > >
> > >
> >
> >
>
>

4600. Re: HF antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 19:48:37 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C852112.2AC8E0C2@att.net>
Source record: 147188

I have used the AEA/Tempo CIA-HF impedance analyzer for several years now
and am very well satisfied with it. I also use the computer program by Dr.
Grant Bingeman for remote control and graphics displays, etc.

I believe that the CIA-HF is currently selling for about $500 - in my view
it is a good investment for a near-professinal grade instrument. Its
ability to present a graphic display over a frequency range of any of
several mesured parameters sets it apart from other, less capable
instruments.

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

EAG wrote:
>
> Mark, I have a AEA SWR-121 for sale. Write to me off reflector. Your email
> address came up as invalid to me here. 73, Ed - N5NUG
>
> "Mark Hall" <vze2mhvc@bellatlantic.net> wrote in message
> news:3C840909.A5F9E4AB@bellatlantic.net...
> > The AEA antenna analyzer is clearly the cadillac of the MFJ and Autek
> > products. It even hooks up to a PC and gives you a SWR vs. Freq. plot!
> > If anyone knows of a uses AEA for sale for $200 or less.. give me a
> > shout!!

4601. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 19:59:28 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a6382vrbe1@nntp9.atl.mindspring.net>
Source record: 147189

Wes:

I've looked at your site before, nice work BTW...

In the kind of work that you reported it is assumed that the line has a "definable constant characteristic impedance" Zo and loss, which is a secondary parameter, not a primary parameter, is measured (or used) at a single frequency or narrow band of frequencies. i.e. one just chooses a frequency (ham band or whatever) of interest and picks off the loss at that frequency from the graph. In the application the line would only be used/evaluated at that narrow band frequency range where the loss is a "constant".

In the wireline work in DSL investigations I was discussing, the lines are characterized, and indeed used, in a broad band sense. i.e. the characteristic impedance is "all over the map" throughout the signalling band and so simple "one number loss" calculations are not suitable for the computer simulation/evaluation of DSL communications system evaluations. Instead the whole line needs to be simulated across the whole band of interest, including loss and group delay, etc...

I was looking for simple formulas for the primary parameter variations with respect to frequency so that those could be "plugged into" a simulation program.

Thanks for publishing those results on loss of ladder line, neat stuff.

--Peter K1PO

"Wes Stewart" <n7ws@yahoo.com> wrote in message
news:3c84de51.35280764@news.triconet.org...
> On Tue, 05 Mar 2002 08:31:14 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:
>
> |Reg Edwards wrote:
> |> As Cecil will confirm, advertised 450-ohm line is a misnomer. If Cecil
used
> |> truly 450-ohm line he might have to change his recommended line lengths
as a
> |> replacement for tuners.
> |
> |My 450 ohm ladder-line measurements have averaged about 400 ohms with a
VF
> |of about 0.9. That's what I presently use for estimations. 300 ohm
ladder-
> |line came in about 265 ohms with a VF of about 0.8.
>

> QSL. The results of my measurements on the "Wireman" lines seen at:
>
> http://users.triconet.org/wesandlinda/ladder.htm
>
> pretty much agree.
>
> Wes N7WS

4602. Re: Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 20:11:16 UTC
From: Ravi R <krravi@yahoo.com>
Message-ID: <ED9h8.45977$pN4.4088706@bin8.nnrp.aus1.giganews.com>
Source record: 147190

ROTFL !
"Bob Schreibmaier" <k3ph@dxis.monroe.pa.us> wrote in message
news:GsGrIz.BzJ@dxis.monroe.pa.us...
> In article <3C82D074.D2EA2CC1@att.net>, George, W5YR <w5yr@att.net> wrote:
> >How does one "turn off" an antenna?
>
> Hmmm... I don't know about turning off an antenna.
> I used to show it erotic pictures, but that had the
> opposite effect. 8^)
>
> 73,
> Bob
>
> --
> +------------------- \-\-\-\ ----------------------------+
> | Bob Schreibmaier K3PH | E-mail: k3ph@dxis.monroe.pa.us |
> | Kresgeville, PA 18333 | http://www.qsl.net/k3ph |
> +---+
>

4603. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 20:24:47 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <jQ9h8.16798$gK2.1203582@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147191

"J. Harvey" <JM001.Harvey@sympatico.ca> wrote in message
news:pAhg8.30085$q47.4518622@news20.bellglobal.com...
>
> I know that you can get extra points for 'showing your work', but that
sure
> is the long way round ! Of course, you got the right answer and I didn't.
> :-)

Polarization mismatch loss (dB) between two linearly polarized antennas is
20 Log(cos(T)), where T is the alignment angle. 0 degrees = aligned,
mismatch loss = 0 dB. 45 degree alignment, mismatch loss = 3 dB.

4604. Re: Long square antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 20:53:31 UTC
From: "news.jonged.myweb.nl" <ed@jonged.myweb.nl>
Message-ID: <a65m65$90o$1@cyan.nl.gxn.net>
Source record: 147144

Thanks Doc, great idea...

Is the assumption correct that the alu-strips serve as a kind of
groundplane, blocking some of the interference from the house and
computers,lights and other electrical things in the rooms below the strips?
Maybe also reflecting the signals to receive to the wire?

Thnx again.
--
Ed de Jong
Balk. The Netherlands
URL: http://beam.to/galact
E-mail: ed@jonged.myweb.nl <mailto:ed@jonged.myweb.nl> (default)

_____
{The night hides a world but unveils a universe}

"'Doc" <w5lz@icok.net> wrote in message news:3C8513C0.E5728D92@icok.net...
> Ed,
> It should work. Another alternative would be to
> have the wire follow the rafter lines instead of the
> floor. It would more than double the area of the loop,
> which should improve things.
> 'Doc

4605. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 20:54:07 UTC
From: mzenier@eskimo.com
Message-ID: <a65qc3asv1@eskinews.eskimo.com>
Source record: 147152
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <FPtkl4Bid9g8Ew5O@jmwa.demon.co.uk>,
John Woodgate <jmw@jmwa.demon.co.uk> wrote:
>I read in sci.electronics.design that Spehro Pefhany
><speff@interlog.com> wrote (in <lnOg8.204$YtJ.145@news2.bloor.is>) about
>'HELP needed in understanding Bode Plots', on Mon, 4 Mar 2002:
>>The UK has lots of places that the natives pronounce strangely in order to
>>more easily identify outsiders- Reading (redding) and Leister (lester),
>>for example. What do you expect from a people who pronounce "Infanta
>>de Castile" as "Elephant and Castle"?
>
>Leominster ('Leinster'), Happisburgh ('Hayesbury'), Cirencester
>('Cissister'), Teston ('Teeson'), Wrotham ('Root-um'), 'Trottiscliffe
>('Trosley'). The three latter are close together in Kent. Then there's
>'Ruyton of the XI Towns', where 'XI' means 'eleven', not the Greek
>letter.
>
>The English Tourist Board would like to keep these 'delights' quiet.(;-)

My parents were perplexed by a cockney behind the information
counter at a London train station who insisted on pronouncing
Wolverhampton as "Woof-tun".

Mark Zenier mzenier@eskimo.com Washington State resident

4606. FA - Harris RF3281 ATU

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 21:20:30 UTC
From: Martin John Hallsworth <Martin@NOSPAMg1gyc.demon.co.uk>
Message-ID: <1015363218.24508.0.nnrp-07.9e98acde@news.demon.co.uk>
Source record: 147192
Cross-posted to: alt.radio.amateur,misc.industry.electronics.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Have a look at this auction.

http://page.auctions.shopping.yahoo.com/uk/auction/62026904

4607. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 22:28:51 UTC
From: Fred Hambrecht <w4jle@charter.net>
Message-ID: <u8ahl55lsk0u38@corp.supernews.com>
Source record: 147193

I assume that was tongue in cheek, LAN or local apparent noon is the same regardless. A source of real problems to the railroads years ago. The answer was time zones.

In the real world, on HF, either is close enough for "guvment" work. The reality is once your in contact, if your like me, you rock the rotor back and forth to maximize the signal. Getting exact true north is best left to those that enjoy picking fly crap out of pepper. A number in this group eschew the picking...

Fred W4JLE

l"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C850D1C.606A4E41@IEEE.org...
> AB2HR wrote:
> > When the shadow is at it's
> > shortest, you'll have an indication of when solar noon occurred, and
> > the shadow will be pointing to the true north pole...
>
> But, but, but, that doesn't account for Daylight Savings Time. :-)
> --
> cheers, CAM http://www.qsl.net/w5dxp

4608. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 22:34:36 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C854308.B94578D2@worldnet.att.net>
Source record: 147194

Bill Turner wrote:

> On Tue, 05 Mar 2002 13:41:54 GMT, "Jerry" <jerryaa@prodigy.net> wrote:
>
> >I have some ground rods in the ground that I don t need now. Is there a way
> >to extract them, other than excavation? This is copper clad steel 8 foot.
> >
>
> _____
>
> What ever method you use for pulling it out, if you have time to
> thoroughly water the ground around it, that will help. Ideally, put a
> slow-running hose on it and let it run a long time. Days, if possible.
>
> Bill, W7TI

Best way I have found to extract anything of this nature is to use an old automobile
bumper jack and a chain. You'll have to clamp something to the ground rod, such as a pair of vice grip pliers, to have something for the chain to grab, but

just wind a turn of chain around the rod below the vice grips, hook it up to the bumper jack and jack the rod out of the ground. It will take a few reattachments of the vice grips and chain to finish the job, but it works. You'll have to rig the chain to the jack, as they vary in their construction. This
may be the most timeconsuming part. I chose a jack that had a tab on its head end that fit exactly into a link of the chain I used. I use a bolt and nut to close the chain end below the vice grips.

Works even better at removing steel fence posts.

Dick W0EX

4609. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 22:44:24 UTC
From: Sylvan Butler <Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna8aik2.rti.Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 147215

On Tue, 05 Mar 2002 16:49:56 GMT, AB2HR <ab2hr@arrl.net> wrote:
> noon... This is not the case... The best way or fixing solar noon is
> to put a stake in the ground... at about 11am, start plotting the
> shadow of the stake every few minutes... You should see the shadows
> growing shorter, then longer again... When the shadow is at it's
> shortest, you'll have an indication of when solar noon occurred, and
> the shadow will be pointing to the true north pole...

that works. But it pretty much requires you to sit out there in the
sun for an hour or two watching the shadows move.

A similar, but easier for me, method is to mark the tip of the
shadow at 11am, then draw an arc (use a string tied to the center
point) around the north side of the stake starting at the mark.
When the tip of the shadow touches the east side of the arc, mark
that point. Draw a straight line between the two points on the arc.
Draw a line square from the first line to the stake.

That last line runs true north and south.

sdb
--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

4610. Re: Indoor antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 22:49:10 UTC
From: Sylvan Butler <Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna8ait0.rti.Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 147216

On 02 Mar 2002 22:52:46 GMT, SIgnots <signots@aol.comnospam> wrote:
> I don't want an antenna on my roof and my attic trusses prevent me from putting
> it up there (and aiming it at Chicago) so I am left with a set top antenna.

Hmm. I've installed several attic antennas in confined attics. Did
you consider taking the antenna up before you unfold it? Usually
that way you can align the boom, then fold out the elements so the
trusses and elements end up interleaved. Then hang it with some
poly rope or use a short mast either up or down. Wire and be done.

> Could/would someone recommend something good? I have a RS set now that is great

I don't think any set top is good. Some are adequate for some
people, but that's the best I can give them.

> at 9 and up but is very weak on 2, 5 and 7. Any help would be appreciated?

That is interesting break. Channel 7 and 9 are much closer in
frequency than are 7 and 5. I wonder if the stations are weaker or
if you have some interference that coincidentally doesn't bother 9+.

sdb
--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

4611. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 22:55:42 UTC
From: Fred Hambrecht <w4jle@charter.net>
Message-ID: <u8aj7ft2u6rn9d@corp.supernews.com>
Source record: 147195
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Years ago I was sent to linkoping Sweaden on business.

Link o ping - right?
Nope - lynn chirping, go figure...

"M.J.Powell" <mike@pickmere.demon.co.uk> wrote in message
news:ToFWQ+AgnNh8EwwP@pickmere.demon.co.uk...
> In article <ble98uohs57pu5qm981i24mn51ei88rcvd@4ax.com>, Rex
> <notreally@hotmail.invalid> writes
> >On Mon, 4 Mar 2002 20:21:54 +0000, John Woodgate
> ><jmw@jmwa.demon.co.uk> wrote:
> >
> >>Leominster ('Leinster'),
> >
> 'Lemster'
>
> Mike
> --
> M.J.Powell

4612. Vertical plane dual band 80/40 loop kicks butt from a small lot.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 22:59:15 UTC
From: tongaloa <tongaloa@alltel.net>
Message-ID: <a63inimel1@iac5.navix.net>
Source record: 147196

Have a look.
Build one.
Try it.
Let me know what you think.

http://www.edebris.com/catalog2/browse/63

Model says it gets better as ground gets better.
That, I need to look into some more.
However, it works great!

-bob

4613. Re: Vertical plane dual band 80/40 loop kicks butt from a small lot.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 23:00:51 UTC
From: tongaloa <tongaloa@alltel.net>
Message-ID: <a63iqhmjr1@iac5.navix.net>
Source record: 147197

WHOOPS, bad URL.
Here it is:
http://www.edebris.com/catalog2/item/18

4614. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 23:16:32 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <klch8.7175$802.1893590@news20.bellglobal.com>
Source record: 147198

"-Your Friend Bill-"
> I think Zone Alarm ought to be REQUIRED on
> online computers. It would put a screeching
> halt to the burgeoning spyware industry.

Not necessarily...

I wonder what nefarious activity goes on during that fairly long period of time between when you first turn on the PC and when the Zone Alarm software firewall is finally up and running...

One could imagine that a smart and nasty programmer could arrange things such that your PC would upload its secret spyware messages (your personal financial data of course) while Zone Alarm is still waking up, yawning and scratching its little binary armpits. The spyware app might have to access the Ethernet HW directly (perhaps bypassing the OS and its restrictions), but that ain't exactly rocket science.

Let's see, perhaps up to a 10 second window of opportunity at 1.3 Mbits per second... hmmm. Frightening isn't it.

:-)

4615. Re: Broadband matching using Smith chart

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 23:23:40 UTC
From: n7ws@yahoo.com
Message-ID: <3c855101.22415173@news.triconet.org>
Source record: 147199

On Tue, 5 Mar 2002 18:22:29 +0100, "rafael" <rafahol@hotmail.com> wrote:

|Hello Peter,
|
|In reality I have to design for my thesis two equilateral triangular patch
|antennas resonating at 2.14 GHz and 1.95 GHz respectively. The bandwidth at
|each of these frequencies has to be
|60 MHz. Thus 2.11-2.17 GHz and 1.92-1.98 GHz. Because the antennas will be
|used for mobile communication, the structure has to be planair and easy to
|made. Therefore I excited them with
|microstrip line feeding. Because one section of microstrip line feeding the
|antennas at one of the edges seems to achieve narrow band behavior my tutor
|suggested me to design a broadband matching network
|with different microstrip line sections of characteristic impedance.
|
|Do you know other tools that are able to do that quickly using
|optimization??

You should take a look at Ensemble SV available at:

http://www.ansoft.com/about/academics/ensemble_sv/index.cfm

This might do everything you need. I have not used this program at all and it
is a 30M download, so good luck.

I have used Serenade SV, also available at the same site and it might be useful
too. I had trouble downloading it, but an email to the right person got me a
copy on cd. I won't give the address here as I don't want to ruin my welcome.

You should also have you professor(s) look at contacting Ansoft about getting
support and possible free software for your university. There is a link for
that at the same address above.

BTW, I wouldn't call your 3% BW problem "broadband."

Regards,

Wes Stewart N7WS

4616. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 23:25:46 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c85588f$1_4@news1.prserv.net>
Source record: 147202

If Daylight Savings Time is all it's cracked up to be, how come we don't have Greenwich Daylight Savings Time, or Zulu Daylight Savings Time worldwide? Luddites!
--
Crazy George
Remove NO and SPAM from return address
CAM <Cecil.A.Moore@IEEE.org> wrote in message news:3C850D1C.606A4E41@IEEE.org...
> AB2HR wrote:
> > When the shadow is at it's
> > shortest, you'll have an indication of when solar noon occurred, and
> > the shadow will be pointing to the true north pole...
>
> But, but, but, that doesn't account for Daylight Savings Time. :-)
> --
> cheers, CAM http://www.qsl.net/w5dxp

4617. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 23:26:22 UTC
From: CJ <chas@hotmail.com>
Message-ID: <u8al15glc04t1a@corp.supernews.com>
Source record: 147200

Hello J Harvey,
You bring up a very valid point and that period of time can be a few moments of vulnerability with some firewalls. I recently switched from Zone Alarm Pro over to Sygate Pro v5 for that very reason you cited. With Sygate Pro 5 this "vulnerable time" is blocked by a component of Sygate Pro 5 that loads before anything else including any network access.

Here is a URL for the new Sygate Pro 5...
http://www.sygate.com/swat/default.htm

--
Thanks for the nice Usenet message...

Charles Johnston
AB7SL - Ham Radio Pages
www.ab7sl.com

4618. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-05 23:28:13 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <hwch8.7179$802.1902074@news20.bellglobal.com>
Source record: 147201

"VE9SRB"
> Polarization mismatch loss (dB) between two linearly
> polarized antennas is 20 Log(cos(T)), where T is the
> alignment angle.
> 0 degrees = aligned, mismatch loss = 0 dB.
> 45 degree alignment, mismatch loss = 3 dB.

Or, 45 degrees is symmetrical between H and V, half & half, thus 3dB down. Blindingly obvious once I thought about it. I didn't really like my first answer ("1.5dB") and that why I suffixed it with a "(?)" - it just didn't seem right.

Thanks.

4619. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 00:20:53 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C8560E5.ACE527C8@coqui.net>
Source record: 147203

"J. Harvey" wrote:
>
> "-Your Friend Bill-"
> > I think Zone Alarm ought to be REQUIRED on
> > online computers. It would put a screeching
> > halt to the burgeoning spyware industry.
>
> Not necessarily...
>
> I wonder what nefarious activity goes on during that fairly long period of
> time between when you first turn on the PC and when the Zone Alarm software
> firewall is finally up and running...

Well, I can't dialup the internet until the thing boots and Zone is
already loaded so I guess I was thinking in terms of dialup.
>
> One could imagine that a smart and nasty programmer could arrange things
> such that your PC would upload its secret spyware messages

I suppose so. IF the pranksters and cons thought it was
worthwhile...but thats the argument (one, anyway) Mac users use for
protection :-)

In any case, I think if the majority of online people had some sort of
firewall, the interest and ease of hacking, browser tracing habits and
other nasties would fall by the wayside.

-Bill

4620. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 00:21:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C8560F3.E6550C4E@eznec.com>
Source record: 147204

One other thing to keep in mind --

In coax, where all the field is immersed in the dielectric, and with good quality dielectric material such as PE or PTFE, the dielectric loss is very low and increases in direct proportion to frequency. Because it increases more rapidly than conductor skin effect loss, it eventually catches up with the latter as frequency increases. Consequently, the dielectric loss begins becoming dominant at somewhere between about 1 and 10 GHz in typical cable.

One would expect, though, that if the impedance were higher, the dielectric loss would be proportionally greater, and the skin effect loss proportionally less. (Higher impedance causing less skin effect loss is the sole reason that open wire line has lower loss than coax at HF.) This would mean that, all else being equal, the dielectric loss would begin showing up at a lower frequency than we see in coax. Also, if the insulation is something like PVC instead of PE or PTFE, the dielectric loss will be much greater, again leading to a lower frequency crossover. On the other hand, some of the field of twinlead line is in air, which will reduce the overall dielectric loss. (The fraction of the total field in the air can be determined by comparing the velocity factor to the inverse square root of the insulation dielectric constant.) So the bottom line of what I'm saying is that before making the assumption that the dielectric loss is negligible, you should take a look at the salient properties of the transmission line to see if it's a valid assumption. Or, if you have measurements over the frequency range of interest, make sure the loss is increasing only as the square root of frequency at the high end of the range. If it's steeper than that, dielectric loss could be significant.

Roy Lewallen, W7EL

4621. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 00:30:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C856334.5985D4C7@eznec.com>
Source record: 147205

There's something else to think about. Some implanted programs are smart enough to give themselves Zone Alarm permission to send outgoing messages. Zone Alarm pro requires that you enter a password each time you give permission, just to foil this. I don't know if the password feature is included in the free version. If not, it's worth the price to me just to have it. Of course, Zone Alarm or another firewall will go a long way in preventing pernicious software from being implanted in the first place.

The hackers are always at work, so you have to stay up to date to keep ahead of them -- or at least, not too far behind them. But keep in mind that any firewall is a whole lot better than none.

Roy Lewallen, W7EL

CJ wrote:
>
> Hello J Harvey,
> You bring up a very valid point and that period of time can be a few
> moments of vulnerability with some firewalls. I recently switched from
> Zone Alarm Pro over to Sygate Pro v5 for that very reason you cited.
> With Sygate Pro 5 this "vulnerable time" is blocked by a component of
> Sygate Pro 5 that loads before anything else including any network
> access.
>
> Here is a URL for the new Sygate Pro 5...
> http://www.sygate.com/swat/default.htm
>
> --
> Thanks for the nice Usenet message...
>
> Charles Johnston
> AB7SL - Ham Radio Pages
> www.ab7sl.com

4622. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 00:45:26 UTC
From: k1bqt@aol.com
Message-ID: <20020305194526.12935.00001943@mb-me.aol.com>
Source record: 147206

So there I was, standing on the tarmack at the G.A. FBO and pointing my dipole straight at the tower, when...up pulls this white car with a blinking yellow light on top and a really big guy with a walkie and a gun steps out and wants some ID. I told him I was a subcontracter doing some survey work for a fellow named Jim Wier.

73

Rick K1BQT

4623. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 00:48:38 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a63p15$na1$1@slb6.atl.mindspring.net>
Source record: 147207

Roy:

Thanks for that further input on the dielectric effects.

Actually ANSI T1.417 does reference two additional formulae for C and G of telephone plant twisted pair transmission lines as follows:

C(f) = Ci + Co*f**(-Ce), Where Ci is the "contact" capacitance and Co and Ce are chosen to fit experimentally measured curves.
G(f) = Go*f**Ge, Where Go is the low frequency or DC conductance and Ge is chosen to fit experimentally measured curves.

Clearly the C and G effects are almost negligible in the frequency ranges of DSL systems on plastic insulated twisted pairs, i.e. up to the double digit MHz, since the constants recommended by T1.417 for 26AWG plastic insulated copper pairs have an insignificant effect on the lines performance. The C and G parametric equation parameters recommended by the ANSI document are:

Co = 0.0, Ce = 0.0 with Go = 43nMhos/km and Ge = 0.70.

Over a few years, I have developed several "finite element" transmission line simulation programs (Fortran) for DSL system studies that incorporates a;; four of these parametric formulae for the primary parameters R(f), L(f), C(f) and G(f) of the lines. For arbitrary line lengths, arbitrary load and source impedances, and a variety of other "impairments" such as bridged taps and loading coils, the program calculates all of the secondary parameters of the lines such as loss, group delay, phase delay, return loss, return phase, reflection coefficient, power distribution, etc...

The program is also a useful element in calculating the channel capacity of such communications channels.

But in practice I have found values of the R-L-G-C determining parameters omly for a few different wireline cable types [AWG 26, 24, 22, 19, and Cat 5]. All twisted pair plastic insulated types.

I was hoping to find or develop a wider table of these parameters for other line types to use with the same programs. Program re-use was the objective. But it seems that other transmission line analysis communities do not use the same parametric equations.

Oh well...

--Peter K1PO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C8560F3.E6550C4E@eznec.com...
> One other thing to keep in mind --

>
> In coax, where all the field is immersed in the dielectric, and with
> good quality dielectric material such as PE or PTFE, the dielectric loss
> is very low and increases in direct proportion to frequency. Because it
> increases more rapidly than conductor skin effect loss, it eventually
> catches up with the latter as frequency increases. Consequently, the
> dielectric loss begins becoming dominant at somewhere between about 1
> and 10 GHz in typical cable.
>
> One would expect, though, that if the impedance were higher, the
> dielectric loss would be proportionally greater, and the skin effect
> loss proportionally less. (Higher impedance causing less skin effect
> loss is the sole reason that open wire line has lower loss than coax at
> HF.) This would mean that, all else being equal, the dielectric loss
> would begin showing up at a lower frequency than we see in coax. Also,
> if the insulation is something like PVC instead of PE or PTFE, the
> dielectric loss will be much greater, again leading to a lower frequency
> crossover. On the other hand, some of the field of twinlead line is in
> air, which will reduce the overall dielectric loss. (The fraction of the
> total field in the air can be determined by comparing the velocity
> factor to the inverse square root of the insulation dielectric
> constant.) So the bottom line of what I'm saying is that before making
> the assumption that the dielectric loss is negligible, you should take a
> look at the salient properties of the transmission line to see if it's a
> valid assumption. Or, if you have measurements over the frequency range
> of interest, make sure the loss is increasing only as the square root of
> frequency at the high end of the range. If it's steeper than that,
> dielectric loss could be significant.
>
> Roy Lewallen, W7EL

4624. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 00:57:07 UTC
From: Janet Moon <sew1@bellsouth.net>
Message-ID: <PKdh8.15780$sK.328667@e3500-atl2.usenetserver.com>
Source record: 147208
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

When the Doctor told the blonde that she was pregnant, she asked "Is it
mine?".
Later,

Moon
"Bob Wilson" <rfwilson@intergate.nospam.bc.ca> wrote in message
news:u88ett8ahdre56@corp.supernews.com...
> In article <3C832278.1F98@earthlink.net>, richgrise@earthlink.net says...
> >
> >Bob Wilson wrote:
> >>
> >> In article <Zqhg8.196086$A44.11813355@news2.calgary.shaw.ca>,
> >> dhky@peeshaw.ca says...
> >> >
> >> >I always heard Bo-deh but I am Canadian, eh?
> >>
> >> Bode's name is Germanic, and pronounced Bo-duh (with the "a" having
> >> very little emphasis, and sounding rather like the sound of the "u" at
> the
> >> start of "under").
> >>
> >> This is the same as the proper way to pronounce "Porsche" (no, it does
> NOT
> >> rhyme with "porch", you infadels!! :)). German may be a pain to learn
> >> because of its complex grammar, but at least (unlike English) it obeys
> its
> >> own rules for pronounciation. The "e" on the end of any Germanic word
is
> >> always sounded.
> >>
> >> Bob.
> >
> >I can't restrain myself.
> >
> >Two semi-retired professors were sitting on the porch having a couple
> >of brewskis. (This could also be referred to as a "verandah" or "deck")
> >- it was a fairly sizeable porch, encompassing three sides of the house,
> >and as it happened, it was badly in need of a paint job. The two old
> >fellows were discussing what a pain in the neck it would be to paint
> >it themselves, and how expensive it would be to hire pros, when
> >suddenly a young blonde shows up. "Hi! I'm LuAnne, and I'm working
> >my way through college! Got any work for me?" Well, this is too good
> >to be true. The professor says, "I'll give you fifty bucks to paint

> >my porch." She says "Sounds great!" He says, "Well, all the paint
> >and brushes and stuff are over by the garage back there." This is
> >fantastic! He's just saved over a thousand dollars! And made a
> >young bimbo happy! But after about an hour or two, they notice
> >that she hasn't come around the corner painting the porch, so
> >they (the professor and his friend) start to get a little concerned.
> >While they're discussing this, LuAnne shows up, paint-stained,
> >with a little bead of sweat at her temple, saying, "All Done!
> >And I had so much paint left over I gave it two coats!" The two
> >old guys look at each other, wondering, "What the F?" And LuAnne
> >says, "But, you made a mistake. It's not a porch, it's a Ferrari."
>
>
> GROAN!!!!
>
> Bob.
>

4625. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 00:58:21 UTC
From: Janet Moon <sew1@bellsouth.net>
Message-ID: <ZLdh8.15803$sK.328983@e3500-atl2.usenetserver.com>
Source record: 147209
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Oh, yeah, a smart blonde is also known as a Golden Retriever.
Later,

Moon

"Bob Wilson" <rfwilson@intergate.nospam.bc.ca> wrote in message
news:u88ett8ahdre56@corp.supernews.com...
> In article <3C832278.1F98@earthlink.net>, richgrise@earthlink.net says...
> >
> >Bob Wilson wrote:
> >>
> >> In article <Zqhg8.196086$A44.11813355@news2.calgary.shaw.ca>,
> >> dhky@peeshaw.ca says...
> >> >
> >> >I always heard Bo-deh but I am Canadian, eh?
> >>
> >> Bode's name is Germanic, and pronounced Bo-duh (with the "a" having
> >> very little emphasis, and sounding rather like the sound of the "u" at
> the
> >> start of "under").
> >>
> >> This is the same as the proper way to pronounce "Porsche" (no, it does
> NOT
> >> rhyme with "porch", you infadels!! :)). German may be a pain to learn
> >> because of its complex grammar, but at least (unlike English) it obeys
> its
> >> own rules for pronounciation. The "e" on the end of any Germanic word
is
> >> always sounded.
> >>
> >> Bob.
> >
> >I can't restrain myself.
> >
> >Two semi-retired professors were sitting on the porch having a couple
> >of brewskis. (This could also be referred to as a "verandah" or "deck")
> >- it was a fairly sizeable porch, encompassing three sides of the house,
> >and as it happened, it was badly in need of a paint job. The two old
> >fellows were discussing what a pain in the neck it would be to paint
> >it themselves, and how expensive it would be to hire pros, when
> >suddenly a young blonde shows up. "Hi! I'm LuAnne, and I'm working
> >my way through college! Got any work for me?" Well, this is too good
> >to be true. The professor says, "I'll give you fifty bucks to paint
> >my porch." She says "Sounds great!" He says, "Well, all the paint

> >and brushes and stuff are over by the garage back there." This is
> >fantastic! He's just saved over a thousand dollars! And made a
> >young bimbo happy! But after about an hour or two, they notice
> >that she hasn't come around the corner painting the porch, so
> >they (the professor and his friend) start to get a little concerned.
> >While they're discussing this, LuAnne shows up, paint-stained,
> >with a little bead of sweat at her temple, saying, "All Done!
> >And I had so much paint left over I gave it two coats!" The two
> >old guys look at each other, wondering, "What the F?" And LuAnne
> >says, "But, you made a mistake. It's not a porch, it's a Ferrari."
>
>
> GROAN!!!!
>
> Bob.
>

4626. Re: What is the "near field?"

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 01:01:03 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <ITdh8.7262$802.1967820@news20.bellglobal.com>
Source record: 147210

NOTE
Due to the complexity of this posting, I'm going to use 'extra punctuation marks' to (hopefully) 'aid clarity'. The alternatives were 'Excess Capitalization' or 'unwanted confusion'...
NOTE

"VE9SRB" wisely pondered:
> I don't necessarily doubt Chip, I just cannot find any reference
> to the 1/r energy or power dependence in the near-field.
>
> My opinion at this point is that defining a general rate of
> energy decline in the near field is somewhat nebulous because
> the extent and field behavior in the near field is a function of
> frequency, antenna size, antenna type, geometry, etc, etc.

I have found a very nice and highly applicable graph today, but it seems to be available only on a .mil network and I can't access it at home. I'm not going to post the link since you guys (& gals ?) wouldn't be able to access it anyway and a multitude of access attempts might be misinterpreted.

I can describe the graph in general terms. If you're willing to read carefully, I should be able to paint a fairly clear mental picture for you.

The graph title is "Antenna Near-Field On-Axis Power Density (Normalized) For Various Aperture Illuminations" (sort of nails the subject at hand, eh ?) It plots curves of 'power density' against 'near field distance' - *both* axis are normalized back to the 'far field transition point' R(ff) at:

R(ff) = 2 * (D^2) / lambda

(They have chosen this point based on phase error of 1/16 wavelength or 22.5 degrees. 'D' is the dimension of the antenna).

The origin of the graph is placed at position R(ff) and at 0 dB relative 'power density'. The position is plotted on a log scale and ranges from 1.0 = R(ff) all the way in to 0.01, or 1% of R(ff). The 'power density' scale runs from 0dB up to +30dB.

There are four curves plotted:

A: The 1/r^2 'far field' equation is brought along just for reference.
B: Typical horn antenna in the H-plane with cosine amplitude distribution.
C: Typical horn antenna in the E-plane with uniform illumination (or a line source).
D: Typical parabolic dish with the usual -10dB taper.

All four curves start at the origin, R(ff) and 0dB, and the 'power density' increases as we move closer to the source (obviously - so far, not always).

All four curves are fairly indistinguishable until we reach about R=0.2, then they start to diverge.

Curve A continues on its merry way towards infinity. It exits the graph at +30dB and R=0.03. Given its 'arrow like' straight trajectory on a log scale, by the time that it reaches the source (i.e. never !), the 'power density' would probably set fire to the very fabric of spacetime. It is obvious why God/Nature has decided not to follow this particular 1/r^2 path much closer than 0.2 of R(ff). :-) !

Curve B might be the particular case quoted by Gnat in that it follows a fairly straight line (starting at R=0.08) with about half the slope of Curve A . It also heads off towards infinity, but in less of a rush than Curve A. It exits the graph at about +26.5dB and R=0.01. Obviously, it can't be allowed to continue - there is no discussion about where it might be convinced to give up on its deadly quest. Don't forget that the position is a log scale (never reaching the source) and the line shows no sign of averting infinite 'power density'. Frightening !

Curve C is bizarre. At R=0.15 the power density drops by about 2 dB and then it wiggles its way back and forth with an amplitude of several dB heading in an overall direction similar to Curve B, but about 4dB lower. We could give Gnat half credit for this one as well if we're in a generous mood. It is also heading towards infinity, but like a drunk.

Curve D is of particular practical interest since it addresses the original question. Curve D overshoots +14dB to reach a maximum at R=0.1 and +16dB and then it follows what resembles a 'damped waveform' settling on +14dB. It does not show any tendency to increase towards infinity like the other curves. This is very reassuring.

An amusing thought is that if one follows Curve D until one reaches the reflecting surface of the parabolic dish, then one would have to turn around, recalibrate and then follow Curves B or C until one reached the feed horn that illuminates the dish. If it were a Cassegrain, then one might be bouncing around several times. And the infinity problem were rear up again.

Thank Gawd for the 'reactive field' - it takes over from the near field at some point and thereby saves us all from oblivion in a flaming Universes. The graph and webpage makes little mention of the reactive field - but it is discussed on 'adjacent' webpages.

The only curve (of A, B, C, D described above) that approximately follows the Power Density rule of thumb of I=1/r is Curve B ('horn antenna' H-plane with 'cosine amplitude distribution'), and then only starting from about 8% of R(ff) and rapidly heading towards infinity before the graphs runs out at 1% of R(ff).

Although I'll give Gnat partial credit, the best answer about the 'near field' is that 'it is complicated and it depends'. The 1/r rule of thumb is far more of an over-simplification than the far-more-dependable 1/r^2 in the

'far field'.

Given the R(ff) definition of 'near field' used by the author of this webpage, there is far more 1/r^2 in the 'near field' than there is 1/r. All the curves follow 1/r^2 over the **larger** almost-half of a log scale !

Regards,

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

4627. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 01:21:20 UTC
From: Ace_On_Par3 <pwhelton@hal-pcNOSPAM.org>
Message-ID: <a63r3r$29ns$1@news.hal-pc.org>
Source record: 147211

Jerry. You might want to try an old fashioned bumper jack to pull them out
of the ground.

--
http://u1.netgate.net/~kirby34/rsg/wheltonp.htm

"Jerry" <jerryaa@prodigy.net> wrote in message
news:CW3h8.3232$5G3.395827312@newssvr16.news.prodigy.com...
> I have some ground rods in the ground that I don t need now. Is there a
way
> to extract them, other than excavation? This is copper clad steel 8 foot.
>
>

4628. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 02:02:29 UTC
From: denton <denton@oregontrail.net>
Message-ID: <a63t2k$l91$1@news.apaynet.com>
Source record: 147212

Easy...
You need a 2 x 4, pipe wrench and pry bar
put the pipe wrench on the ground rod about and inch from the ground, set the 2 x 4 next to the pipe wrench and use the pry bar to move the rod up a couple of inches. Repeat until rod is out of the ground.
Richard Harrison <richardharrison@webtv.net> wrote in message news:24070-3C84E10D-9@storefull-112.iap.bryant.webtv.net...
> The 3-Holer wrote:
> "Why take them out?
>
> Depends on retrieved value and labor cost.
>
> I actually had big concrete encased tower anchors dug up by hand and
> replanted in new locations because labor was about one dollar per man
> day. The cost to relocate the anchors where needed was substantially
> less than the cost to place new anchors!
>
> I finally discontinued the practice because it was resented as
> demeaning.
>
> Best regards, Richard Harrison, KB5WZI
>

4629. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 03:10:04 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <fMfh8.9377$7Y4.1838773@news20.bellglobal.com>
Source record: 147213

"Rick Littlefield" wrote (more or less):
> So there I was, standing on the tarmac at
> the G.A. FBO and pointing my dipole straight
> at the tower, when....up pulls this white car with
> a blinking yellow light on top and a Really Big
> Guy with a walkie talkie and a gun steps out
> and wants to see some I.D. I told him I was
> a subcontracter doing some survey work for
> a fellow named Jim Weir...

...to which he bellowed a reply, "Damn it, I am Jim Weir !"

:-)

4630. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 03:42:02 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u8b40anbt1q17@corp.supernews.com>
Source record: 147214
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <3C844E15.6B99@earthlink.net>, richgrise@earthlink.net says...
>
>Bob Wilson wrote:
>...
>> Alright you guys, don't make me have to break out my Newfie >>
(Newfoundland,for you non-Canadians) jokes!
>>
>> Bob.
>
>Oh, please! Just one?
>--

OK, but just one! :)

A Newfie woodsman walks into a hardware store and is looking for a better saw. He complains that his saw must be getting dull because he can only cut a few trees in a day. The salesman says "Sir, I have just the thing for you", and shows him a new chainsaw. He says "This thing will cut more trees in an hour that you can cut all week with your big hand saw!"

The Woodsman thinks "Man, this thing is for me!" and buys it. After a week, he comes back and complains to the salesman "There must be something wrong with the say you sold me! It takes even LONGER to cut a tree than with my old saw!". The salesman is really puzzled, and says "Let me check it out, sir", and starts it up. The Newfie says "HEY!!! WHAT'S THAT NOISE!!!".

Bob.

4631. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 06:20:59 UTC
From: Jim Richardson <warlock@eskimo.com>
Message-ID: <bgc46a.eb3.ln@127.0.0.1>
Source record: 147217

On Tue, 05 Mar 2002 14:25:26 -0400,
-Your Friend Bill- <none@coqui.net> wrote:
> dan wrote:
>>
>> On Tue, 05 Mar 2002 09:05:07 -0600, CAM <Cecil.A.Moore@IEEE.org>
>> wrote:
>>
>> >Bob Miller wrote:
>> >> I'll do a search for Zone Alarm and check it out. I've always thought of
>> >> firewalls as something that only the pros with commercial sites put up, but
>> >> maybe there's something for a budget home user like me.
>> >
>> >I've installed Zone Alarm and it finds two or three things per hour to
>> >block.
>> Hi all,
>> I installed Zone Alarm and have been very satisfied with it. You say
>> you had 2 or 3 per hour? I had to shut off the notification of
>> attempts because of the volume of them. I had so many all I did was
>> click ok. Now I just make sure it is on and ignore it.
>> BTW, the reason I installed Zone was, when I was connected to the net,
>> and not sending or receiving actively, my computer was!
>
> I think Zone Alarm ought to be REQUIRED on online computers. It would
> put a screeching halt to the burgeoning spyware industry.
> -Bill
>

Not really. For one example of why not, see
<http://www.theregister.co.uk/content/55/22788.html>

--
Jim Richardson
Anarchist, pagan and proud of it
www.eskimo.com/~warlock
Linux, for when you need to get work done, Or you could just play UT...

4632. Re: Vertical plane dual band 80/40 loop kicks butt from a small lot.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 07:48:47 UTC
From: Neil <njn2spamspamspamspam@adelphia.net>
Message-ID: <3C85C9E8.89894AA8@adelphia.net>
Source record: 147218

Dear tongaloa,

You wrote:

> Have a look.

I tried. I looked at the largest image you stored, at the highest resolution you provided. Regardless, the picture was too small and fuzzy.

Tried opening the picture in PhotoEd, blew it up gently, but the text is not legible at any magnification.

Obviously, the smaller, lower resolution pictures are of no help.

It sounds like a simple design, should be easy to describe in your own words? Not sure, does the picture include the detail of how much distance there is between ground and the bottom wire?

Good DX,
-Neil / wb2cir-

4633. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 07:51:11 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u8biianmpmqh71@corp.supernews.com>
Source record: 147119

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20020305194526.12935.00001943@mb-me.aol.com...
> So there I was, standing on the tarmack at the G.A. FBO and pointing my
dipole
> straight at the tower, when...up pulls this white car with a blinking
yellow
> light on top and a really big guy with a walkie and a gun steps out and
wants
> some ID. I told him I was a subcontracter doing some survey work for a
fellow
> named Jim Wier.

Good. He won't be able to find me in the database with a misspelled last
name.

{;-)

Jim

4634. Antenna MADE for AO-40!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 08:39:07 UTC
From: Glenn Rollins <n3iyr@mywebsite.com>
Message-ID: <4blb8ucqvcolh4ulqkcvamkbfnulvv4a2p@4ax.com>
Source record: 147120

I have a website for the antenna I have developed for AO-40. This is NOT a BBQ grill dish, this is the real thing! Watertight HELICAL feed, NO aperture blockage,2' dish is 20.5 dBi gain, 3' dish is 25 dBi gain. 2" crossboom mount.A true performer. Signals from AO-40 at unbelievable squint angles. You should hear what you have missed! I have also posted tips you may find interesting. AMSAT has expressed intrest in my antenna to be sold at Dayton, but I have a limited supply. Drop by my site and just tell me what you think if you like.

http://www.n3iyr.com

4635. Simple antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 09:59:37 UTC
From: Neil <njn2spamspamspamspam@adelphia.net>
Message-ID: <3C85E890.6277ED2@adelphia.net>
Source record: 147121

Dear YL's and OM's,

I want to put up a random length (120 foot) center fed wire, and feed it with 300 or 450 ohm twin lead. I want to run the twin lead through the window and into the shack. Mounted inside the shack is a Palomar 1 KW 4:1 balun, to convert the twin lead to coax.

A short piece of coax to jump from the Palomar to a standard, commercial antenna tuner, using it's standard "coax" position. (I will not be using the internal 4:1 balun of the tuner.) I'll be running 100 watts or less, 10 through 80 Meters, with a 300 watt tuner (preferably not MFJ). I will not confess here that I intend to try it on 160 Meters.

Happy to gather your feedback on the above, although it's a pretty straightforward arrangement, no?

My real question: Is there any advantage to using two wires in parallel for the center-fed wire, "folded dipole style?" Or would that be a waste of copper?

To clarify, I do not mean like "parallel dipoles," but rather like a "folded dipole." Should I KISS (Keep It Simply Simple), and make it a single wire?

Gud DX,
-Neil / wb2cir-

4636. Re: Blonde Joke

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 10:38:14 UTC
From: ed price <edprice@cox.net>
Message-ID: <qkmh8.1784$1c3.97415@news2.west.cox.net>
Source record: 147122
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Rich Grise" <richgrise@earthlink.net> wrote in message
news:3C8354C6.9B3@earthlink.net...
> Don Pearce wrote:
> ...
> > Would they be related to the two Indian chaps on a bus in Bradford?
> > They were discussing spelling. One said "It is Woom, spelled W O O M".
> > "No, no", said the other. It is "Woomp - W O O M P".
> > At this point the Englishman in the seat behind leaned forward and
> > said, "Excuse me for interrupting, but it is actually Womb, spelled "W
> > O M B".
> > One of the Indians turned round to him and said, "Sir, I doubt whether
> > you have even seen an elephant, let alone heard one fart".
>
> What is it about some jokes that, even though they're 20 years old,
> and you've heard them three times, and you can see it coming a mile
> away, they still make one LOL? :-) (maybe seeing it coming contributes
> to the laugh. :-))

Taking a brunette to lunch is brown-bagging it!

Ed

4637. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 12:06:18 UTC
From: rstanton2@stny.rr.com
Message-ID: <67ef4d54.0203060406.112673be@posting.google.com>
Source record: 147123
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

rfwilson@intergate.nospam.bc.ca (Bob Wilson) wrote in message
> ..
>
> You might want to download the very simple (yet quite effective) program
> called "PC-Ecap" from:
> http://ourworld.compuserve.com/homepages/circuitsys/PCECAP.HTM
>
> This is a circuit analysis program, rather like a poor man's SPICE. Yes, it
> runs in a DOS shell, and you have to manually create a text-based input, but
> for simple networks like you are asking about, it is amazingly effective. It
> creates a Bode plot as an output, for defined input conditions.
>
> Bob.

Hi:

There is another circuit analysis program called "NOVA-686".

NOVA-686 is more powerful, and faster than Ecap.

Ecap is shareware. I think Ecap costs $69.00. "NOVA-686" is freeware.

You can download NOVA-686 from:
http://nova2002.com/

Bob Stanton

4638. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 12:10:12 UTC
From: k1bqt@aol.com
Message-ID: <20020306071012.16999.00002422@mb-bg.aol.com>
Source record: 147124

>Good. He won't be able to find me in the database with a misspelled last name.<

See, I'm looking out for you! Are you responsible for the venerable RST-721 test set and those neat little 2-channel Com radios I used to see advertised (always wanted to find one of those)?

Rick K1BQT

4639. Re: Butternut HF6vx

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 12:20:04 UTC
From: Jerry <jerryaa@prodigy.net>
Message-ID: <UPnh8.22413$XP4.3329097908@newssvr15.news.prodigy.com>
Source record: 147125

I have adjusted 80 meter coil and 40 and 30 meter coil.. I get decent SWR on all except 30 meter. I don t use 30 meter so all is well now. I put up guying so I don't get wild swings in SWR. I had to adjust the 80 meter literally by the millimeter for acceptable readings on my most used frequency.

4640. information needed on beam

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 12:21:38 UTC
From: wb4una@aol.com
Message-ID: <20020306072138.06467.00002017@mb-ms.aol.com>
Source record: 147126

I have a 2 element 40 meter beam that I think is a Hornet or a Swain. think it was called a SHORTY. If you would happen to have some information on either please drop me a line. will pay for any coping and mailing...

Thanks Randy

ARS: WB4UNA
Randy Chavis
247 Goff Court
West Columbia
S.C. 29172

4641. Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 13:09:24 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-0603020809240001@jbw-mac.itd.nrl.navy.mil>
Source record: 147127

Hello, everyone. Does anyone have any experience with antennas from Gap Antenna Products (www.gapantenna.com)? Are we looking at vendor claims here ala the Crossed-Field Antenna? Thanks for your commment. Sincerely & 73s,

John Wood (Code 5551) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

4642. Re: Vertical plane dual band 80/40 loop kicks butt from a small lot.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 13:50:33 UTC
From: k7mem@myrealbox.com
Message-ID: <270a577d.0203060550.6cc3218c@posting.google.com>
Source record: 147128

Neil <njn2spamspamspamspam@adelphia.net> wrote in message
news:<3C85C9E8.89894AA8@adelphia.net>...
> Dear tongaloa,
>
> You wrote:
>
> > Have a look.
>
> I tried. I looked at the largest image you stored, at the highest
> resolution you provided. Regardless, the picture was too small and fuzzy.
>
> Tried opening the picture in PhotoEd, blew it up gently, but the text is
> not legible at any magnification.
>
> Obviously, the smaller, lower resolution pictures are of no help.
>
> It sounds like a simple design, should be easy to describe in your own
> words? Not sure, does the picture include the detail of how much distance
> there is between ground and the bottom wire?
>
> Good DX,
> -Neil / wb2cir-

The resolution marked "1024" is not the highest resolution picture.
Use the selection marked "Original". I found this one to be perfectly
readable. Everything is crystal clear.

--
Martin E. Meserve, K7MEM

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

4643. Re: Simple antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 14:10:21 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C86234D.291A0B5B@dialpoint.net>
Source record: 147129

Just use the simple dipole and do not try to make it the folded diople
style. The folded dipole will not work very well over the frequency
range of 80 to 10 meters. If you can make the antenna wire around 130
feet long overall.

Neil wrote:
>
> Dear YL's and OM's,
>
> I want to put up a random length (120 foot) center fed wire, and feed it
> with 300 or 450 ohm twin lead. I want to run the twin lead through the
> window and into the shack. Mounted inside the shack is a Palomar 1 KW 4:1
> balun, to convert the twin lead to coax.
>
> A short piece of coax to jump from the Palomar to a standard, commercial
> antenna tuner, using it's standard "coax" position. (I will not be using
> the internal 4:1 balun of the tuner.) I'll be running 100 watts or less,
> 10 through 80 Meters, with a 300 watt tuner (preferably not MFJ). I will
> not confess here that I intend to try it on 160 Meters.
>
> Happy to gather your feedback on the above, although it's a pretty
> straightforward arrangement, no?
>
> My real question: Is there any advantage to using two wires in parallel for
> the center-fed wire, "folded dipole style?" Or would that be a waste of
> copper?
>
> To clarify, I do not mean like "parallel dipoles," but rather like a
> "folded dipole." Should I KISS (Keep It Simply Simple), and make it a
> single wire?
>
> Gud DX,
> -Neil / wb2cir-

4644. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 14:37:57 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3C8629C5.42AC58D9@sympatico.ca>
Source record: 147130

Maybe someone should tell Rockwell-Collins to stop advertising their
8.33 kHz spacing product line?

Dave

Jim Weir wrote:
>
> No sir. The idiots that proposed this scheme in Europe are trying to impose
> it on the rest of the world. The rest of the world ain't interested. If
> there is going to be a division of frequencies, it is going to be a binary
> split like the one that split the 100 kHz. channels to 50, then 50 to 25,
> and then if we need them, 25 to 12.5.
>
> In actuality, the top of the band is really 136.99999999999999999..., but
> for those of us with reason and sanity in our band plans, it is 136.975.
>
> Jim
>
> "Dave Holford" <holford@sympatico.ca> wrote in message
> news:3C843F71.DE6DC073@sympatico.ca...
> >
> >
> > The spacing is 8.33 kHz, although the transition is going to be a slow
> > process, and as a consequence the top of the band is even higher.

4645. Re: Simple antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 15:06:05 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C863058.DF331EEB@icok.net>
Source record: 147131

Neil,
Why not try both of them? Start with which ever one
would be easiest to put up. Give it a fair chance to see
how it performs. Then try another one.
Especially if you plan to try 160 meters, longer is
better, and so is higher, but you know that...
'Doc

4646. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 15:17:58 UTC
From: AB2HR <ab2hr@arrl.net>
Message-ID: <fq8c8u8htbrf0d7pho647o9dbmi6hbs88p@4ax.com>
Source record: 147132

On Tue, 5 Mar 2002 19:08:19 +0100, "Pieï¿½ï¿½ IK2VTJ"
<picarusoNONVOGLIOSPAM@writeme.com> wrote:

>
>
>
>
>"AB2HR" <ab2hr@arrl.net> ha scritto nel messaggio
>news:m7k98uoh703phjdqflu4nlmtshkkh3c91a@4ax.com...
>> On Tue, 5 Mar 2002 01:44:46 +0100, "Pieï¿½ï¿½ IK2VTJ"
>> <picarusoNONVOGLIOSPAM@writeme.com> wrote:
>>
>> >What about using the sun as a compass?
>> >I set my rotator control box to south and, at midday, I turned the mast
>on
>> >to the rotator, aiming the antennas to the sun.
>> >Was I right?
>>
>> No....
>>
>> You're assuming that noon in your time zone coorelates to solar
>> noon... This is not the case... The best way or fixing solar noon is
>> to put a stake in the ground... at about 11am, start plotting the
>> shadow of the stake every few minutes... You should see the shadows
>> growing shorter, then longer again... When the shadow is at it's
>> shortest, you'll have an indication of when solar noon occurred, and
>> the shadow will be pointing to the true north pole...
>>
>> You MAY want to plot this out on a few different days, just to smooth
>> out any errors in timing/marking...
>>
>
>Hi Raymond,
>many thanks for the explanation. Honestly I'd never tought about solar noon,
>but just local noon.
>Next time I'll follow your indications and will also see the difference
>between the two methods.
>I had to do the job again, because the wind has rotated the mast almost
>90ï¿½!!

And a correction to my earlier post... What I meant was that LOCAL
noon WITHIN your timezone may not coorelate to solar noon...
SOMEWHERE within your timezone, local noon and solar noon may be the
same, but only at a single longitude within your timezone.. I
mistyped in my rush to get the message out...

Raymond Sirois AB2HR
SysOp: The Lost Chord BBS
607-733-5745
telnet:\\thelostchord.dns2go.com:6000

4647. Re: EZNEC modeling of GAP Voyager DX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 15:31:05 UTC
From: jdicso@aol.com
Message-ID: <20020306103105.03349.00000160@mb-fz.aol.com>
Source record: 147133

John,
Thanks for your reply. I've contacted GAP to verify resistance readings I made on the coax and the GAP:
1. coax center conductor IS NOT connected at the GAP as I'd originally thought
2. capacitor connected between center conductor and top of vertical will look different at the coax input (an inductor as you noted)
3. verify where the source is connected in the model

Regards, Jim

4648. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 15:46:05 UTC
From: richardharrison@webtv.net
Message-ID: <16145-3C8639BD-30@storefull-113.iap.bryant.webtv.net>
Source record: 147135

I wrote:
"The feedpoint of Arnold B. Bailey`s 1/4-wave folded dipole is 35.6 ohms." Wromg!

Arnold B. Bailey`s 1/4-wave folded dipole has a radiation resistance of 35.6 ohms.

I slipped out of gear at that point. Maximum current is opposite the feedpoint in a 1/4-wave folded dipole, not at the feedpoint. Radiation resistance is determined at an antenna`s maximum current point. So, radiation resistance and feedpoint resistance don`t coincide in this 1/4-wave folded dipole.

Since the 1/4-wave folded dipole has a lot in common with a 1/4-wave short-circuit stub, the impedance at the feedpoint is very high. It is not an open circuit because the antenna has a radiation resistance, even though its ends are shorted. Actual feedpoint resistance is said to exceed 1000 ohms.

50 ohms would be transformed by a Q-section of 300-ohm line to 1800 ohms.

In the MULTEE antenna, 70 feet of twinlead was used as a 1/4-wave at 80-meters.

52 feet of twinlead was used as a feedline between the 50-ohm radio and the high-impedance antenna. That should be going in the right direction.

A 1/2-wave feedline could be used to measure the antenna`s feedpoint impedance. A matching section length could then be calculated. The arrangement found in "The Radio Handbook" probably worked in the circumstances in which it was installed.

I used the wrong feedpoint impedance for the 1/4-wave folded dipole. Mea culpa!

Best regards, Richard Harrison, KB5WZI

4649. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 16:09:02 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <3C863F14.D71926EB@earthlink.net>
Source record: 147134

"Peter O. Brackett" wrote:

> Question for the NG: ...T1.417...

I'm just catching up on my r.r.a.a reading and was _very_ interested
to find this thread. It's been yet another education in reading through
it, even if somehow the first four notes came in last here and
had me wondering for a while about where and when it started .

I'm the original coordinator of the T1E1.4 spectrum
compatibility/management project and original author/editor
of what became T1.417. My 1995 ramblings survived
word-for-word (to my surprise) as the first, descriptive
half of Annex B. I was the T1E1.4 Secretary until
I retired from Bell Labs last July.

Charles Cook of BT Labs (British Telecom) developed the
formulas that are the subject of Peter's original question.
Before that tables of R, L, G & C versus frequency were
(and still are) used most of the time. (Bell Labs sometimes
used equivalent curve-fitted formulas for internal work.)

If I recall correctly Charles did some _highly_ educated
guessing and trial and error to find formulas that match
closely with cable measurements. These measurements
were/are done with extreme care on _representative_
samples of common cables and at a reference temperature.
Then he runs a curve-fitting routine to calculate the parameters.
He ran the 24 AWG and 26 AWG data on small chunks
of cable supplied by BellSouth.

Cable parameters vary during a production run, though
not as much in these days with laser-drilled diamond dies
as they did with hardened steel dies. Cable parameters
vary from one run to another for a given manufacturer,
and then of course for different manufacturers.
Note that the formulas are for the temperature of measurement,
typically 70degF, and do not account for the -40 to +140F
experienced by real life cables. [Feel free to convert to Celsius. :)]
They do serve as a common reference point for many
different people doing comparative performance calculations
on competing transmission schemes.

Other, older, software code used by Bell Labs
and other telephone labs does compensate for the changes
with temperature, mainly in resistance.

This can result in several dB change in loss at high
frequencies from dark to daylight for a cable
hanging on poles in the desert.

I don't know of anyone but telephone people who have
adopted this particular set of formulas.
ETSI TM6, the European counterpart to North American T1E1.4,
and ITU-T Q4/SG15 have adopted Charles's formulas.
ETSI TM6 has a document with more coverage of the
various metric telephone cables used by various countries.

I believe I have Charles's original paper.
Drop me a note and I will dig it out.
I _think_ John Cioffi, Stanford U., has a set of software code (C?)
developed by his graduate students that is available.

Ken Kerpez, of Telcordia, has implemented the Annex B
DSL performance code at his web site.

http://net3.argreenhouse.com:8080/dsl-test/index.htm

Telephone cable loss vs. frequency is one output of Ken's code.
but not impedance, and only for standard terminations.
I've been meaning to talk to him about adding some more
general options. Use of the site is free, just drop him a note at
kkerpez@telecordia to register for an ID.

Anyone can download one free copy of T1.417
and other T1 telephone standards by searching down
through the menus/buttons at
http://www.t1.org

Work on T1.417 Issue 2 is proceeding with inclusion of VDSL
and mutual interference among remotely located, outside plant
systems being the main additions. I believe the target to submit
the new issue to ballot is the end of the year.

Peter says, "... I have developed several "finite element"
transmission line simulation programs (Fortran)..."
Could I talk you out of a copy of them?
I only have a compiled version of a similar,
but more limited, program and I can't make
any changes - frustrating.

By the way, speaking of VDSL,
VDSL spectra runs 138kHz to 12 MHz.
Originally it was going to be up to 20MHz.
It may be extended down to 25kHz.
RFI ingress/egress has been of interest/concern,
particularly among the hams involved.
I arranged for Ed Hare, W1RFI, to run ham radio interference
tests in the Phoenix area where Qwest has some 50,000
pre-standard VDSL systems deployed. USWest/Qwest

had been very careful in installing these systems
with attention to cable balance, replacing old cable, etc.
Ed had to lay his antenna on top of the VDSL box
to pick up much. I think he has a report in his RFI
area on the ARRL web page.

Cheers, 73,

Ron McConnell
w2iol
ARRL RFITG
http://www.vdslcoalition.net

4650. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 16:47:15 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a65h73$bqm0b$1@ID-124126.news.dfncis.de>
Source record: 147136

```
Actual feedpoint resistance is said to
> exceed 1000 ohms.
=========================

Who said ?
```

4651. Re: Simple antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 16:50:55 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203060850.7e62b2dc@posting.google.com>
Source record: 147137

Neil <njn2spamspamspamspam@adelphia.net> wrote in message
news:<3C85E890.6277ED2@adelphia.net>...
> Dear YL's and OM's,
>
> I want to put up a random length (120 foot) center fed wire, and feed it
> with 300 or 450 ohm twin lead. I want to run the twin lead through the
> window and into the shack.

ok, so far.

Mounted inside the shack is a Palomar 1 KW 4:1
> balun, to convert the twin lead to coax.

Why the coax?
>
> A short piece of coax to jump from the Palomar to a standard, commercial
> antenna tuner, using it's standard "coax" position. (I will not be using
> the internal 4:1 balun of the tuner.)

Again, why not?
I'll be running 100 watts or less,
> 10 through 80 Meters, with a 300 watt tuner (preferably not MFJ). I will
> not confess here that I intend to try it on 160 Meters.
>
> Happy to gather your feedback on the above, although it's a pretty
> straightforward arrangement, no?

I think ladder line all the way from the antenna to the tuner using
the built in 4:1 balun if needed is more straightforward. I'm not a
great fan of throwing coax between a ladder line feedline and a tuner.
>
> My real question: Is there any advantage to using two wires in parallel for
> the center-fed wire, "folded dipole style?" Or would that be a waste of
> copper?

Waste of copper, and it will transform the impedance, which may or may
not cause problems.
>
> To clarify, I do not mean like "parallel dipoles," but rather like a
> "folded dipole." Should I KISS (Keep It Simply Simple), and make it a
> single wire?

Yep. MK

4652. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 17:03:52 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <wUrh8.4747$Yd.168659@e3500-atl1.usenetserver.com>
Source record: 147138

I had a Texas Bugcatcher that wouldn't resonate at ALL on 17 meters unless
the turns
below were literally shorted out/jumpered together. I recognized this
as--for lack of a better
term--what I call "backlash" and define as the inability to resonate on
certain frequencies or
bands due to extranous loading on unused coil turns.

Jerry
K4KWH

K7JEB <k7jeb@arrl.no_spam.net> wrote in message
news:P18h8.16498$106.1296597@bgtnsc05-news.ops.worldnet.att.net...
>
> >> Doc, W5LZ, wrote:
> >> Jerry,
> >> I don't 'see' how a 'shorting lead' and the unused
> >> coil turns of a 'Bug Catcher' antenna are any different,
> >> other than mechanical, than the unused coil turns inside
> >> the tube of a screw driver antenna....
> >
> > > Jerry, K4KWH, replied:
> > > It may be just an opinion, but I do believe it does
> > > affect, at least, the efficiency of the antenna
> > > as opposed to the coil turns down inside the mast
> > > of a SD. Those turns that are down inside the mast
> > > are decoupled at the fingerstock and become, in effect,
> > > a part of the lower mast. I believe, from some admittedly
> > > very unscientific experiments I have done, that those
> > > turns that are by-passed still have *some* RF on them,
> > > but, because of the jumper, can't "do" anything resulting
> > > in wasted power--kinda like back pressure in a car muffler.
> > >.......
> >
> > Just a few observations: (1) My bugcatcher does exhibit
> > undesirable resonances on the upper bands (eg: 17 meters)
> > when I use a single jumper wire. By leaving the 40 m
> > and 20 m jumpers in place in addition to the one for 17 m,
> > the undesirable resonances are suppressed. (2) The mast
> > of the ScrewDriver (SD), in addition to shorting out
> > the coil with the fingerstock, also acts as a huge
> > shorted turn closely coupled to the unused portion of
> > the coil. This further "shorts out" the unused
> > portion of the SD coil and suppresses any resonances
> > excited by flux linkage from the top (active) portion

> of the coil. (3) The length of the SD mast is crucial
> to its operation and, as correctly surmised, actually
> carries most of the radiative current. The longer
> (higher) this is, the better.
>
>
>
> --
> Jim Bromley, K7JEB k7jeb @ arrl.net
> Glendale, Arizona
>
>
>
>

4653. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 17:08:17 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a65ie0$6v2$1@slb2.atl.mindspring.net>
Source record: 147139

Wes:

[snip]
> |My 450 ohm ladder-line measurements have averaged about 400 ohms with a
VF
> |of about 0.9. That's what I presently use for estimations. 300 ohm
ladder-
> |line came in about 265 ohms with a VF of about 0.8.
> QSL. The results of my measurements on the "Wireman" lines seen at:
> http://users.triconet.org/wesandlinda/ladder.htm
> pretty much agree.
> Wes N7WS
[snip]

You might be interested, FYI only...

Since in the DSL application the transmission lines used are very long and operated over a very broadband frequency range, there are no regions over which the primary R-L-C-G paramaeters of the transmission lines can be considered zero or even near zero. i.e. the "lossless line" approximation, the "distortionless" line approximation, etc... simply don't hold for this application of technology, and neither do any of the usual approximation used in narrow band methods, for example the methods of calculating excess loss due to non-unity VSWR etc...

In fact the charateristic impedance Zo of these lines is not constant for the frequencies of interest and varies all over the map with both frequency and of course length which is usually unknown in the telco loop plant. The typical total DC resistance of these lines runs up to 1500 Ohms, resulting in huge losses by ham radio standards and the VSWR takes on a huge range of values. Yet the new advanced modulation DSL technologies are able to communicate over such lines at very high bit rates.

And so the measurement techniques and methodology used by the ANSI T1E1 group in developing the ANSI T1.417 characterization of various twisted pair transmission lines for "broadband" DSL use over the frequency range of zero to 30 MHz might be of interest to this rraa newsgroup. The ANSI and ASTM D 4566 transmission line characterization methodology was as follows:

They used two carefully measured samples of each line of length x meters, where: x = 10 meters length for measurements below 2 MHz, and x = 1 meters length for measurements between 2 and 30 MHz to determine the (frequency dependent) primary parameters of the lines.

Using high quality HP/Agilent Vector Network Analyzers, they measured the complex short circuit impedance Zsc and open circuit impedance Zoc of the

two line samples at each frequency. They tested at many equally spaced frequencies throughout the range zero to 30 MHz. Subsequently these experimentally measured quatntities were used to calculate the characteristic impedance Zo and propagation constant "gamma" at each frequency as follows:

1.) Zo = sqrt(Zoc*Zsc)
2.) gamma = (1/x)*arctanh(sqrt(Zsc/Zoc))

Then at each frequency using relatively very small steps from zero to 30 MHz they calculated the (frequency dependent) primary transmission line parameters R, L, C, G as:

3.) R = Re[gamma*Zo]
4.) L = (1/w) Im[gamma*Zo], w = 2*Pi*f
5.) C = (1/w) Im[gamma/Zo], w = 2*Pi*f
6.) G = Re[gamma/Zo]

Finally to "smooth" the tabulated results and to obtain simple equations for later computer simulations they "fit" the whole range of tabulated results to the following four heuristic "model" equations for the frequency dependent primary parameters R(f), L(f), C(f) and G(f). (I presume that they did a mean square fit, but they don't say how they did it in the T1.417 document.)

7.) R(f) = (Ro**4 + a*f**2)**(1/4)
8.) L(f) = (Lo + Li*(f/fm)**b)/(1 + (f/fm)**b)
9.) C(f) = Ci + Co*f**(-Ce)
10.) G(f) = Go*f**(Ge)

Where: Ro is the DC resistance, and "a" is a constant "fit" to characterize the rise of resistance R(f) with f due to the skin effect. Lo is the "DC" or low frequency inductance obtained at frequencies near zero, Li is the high frequency inductance obtained at frequencies near 30 MHz. "fm" and "b" are parameters chosen to best "fit" the tabulated measured data for L(f). Ci is the "contact" capacitance or DC static capacitance, and "Co" and "Ce" are chosen to "fit" the tabulated measured data for C(f). Go and Ge are chosen to fit the tabulated measured data for G(f).

The ANSI/ASTM groups measured and characterized a lot of different twisted pair cable types and published the results in T1.417.

Repeating just two of the examples that I gave further up the thread:

AWG 26 Plastic Insulated Cable:
Ro = 286.2 Ohms/km, a = 0.14770
Lo = 675.4 uHy/km, Li = 489.0 uHy/km, b = 0.929, fm = 806.3 kHz.
Ci = 49 nFd/km, Co = 0.0, Ce = 0.0
Go = 43 nMho/km, Ge = 0.70

ANSI Category 5, LAN cable ("Cat 5")
Ro = 176.6 Ohms/km, a = 0.0500
Lo = 1090.8 uHy/km, Li = 504.5 uHy/km, b = 0.705, fm = 32.570 kHz.

Ci = 48.55 nFd/km, Co = 0.0, Ce = 0.0
Go = 1.477 nHoh/km, Ge = 0.91

Using such data I had developed some finite element transmission line simulations (Fortran) which are quite flexible and useful for calculating transmission line performance under different complex source and load impedances such as the seconday parameters of: loss, phase delay, group delay, return loss, return phase, etc... using the four equations and their parameters as inputs to the program algorithms.

And so again...my interest is/was to determine if any of this body of work be applied to amateur radio transmission line work? And if any work on amanteur style HF transmission lines used a similar methodology resulting in values for the heuristic model parameters.

It might be possible to extract some of the heuristic model parameters from your ladder line measurements. I'll have a look see.

BTW... the T1.417document should be available from ANSI's New York office, or perhaps from Global Engineering Documents.
I hope this summary of information on the recent ANSI ASTM transmission line testing was of interest to our rraa newsgroup.

Best,

--Peter K1PO

4654. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 17:43:37 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <2vkc8u4a67s94mlv2jlbpf8tuov99iiodt@4ax.com>
Source record: 147140

On Wed, 6 Mar 2002 12:08:17 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Go = 1.477 nHoh/km, Ge = 0.91

nano Hoh's? Small hookers per km of street? ;-)

>
>And so again...my interest is/was to determine if any of this body of work
>be applied to amateur radio transmission line work? And if any work on
>amanteur style HF transmission lines used a similar methodology resulting in
>values for the heuristic model parameters.

Hi Peter,

Hmm, a fractal transmission line specification. I can see how it
might be useful for my swept frequency amateur radar.

73's
Richard Clark, KB7QHC

4655. Re: Simple antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 17:54:08 UTC
From: richardharrison@webtv.net
Message-ID: <5648-3C8657C0-22@storefull-112.iap.bryant.webtv.net>
Source record: 147145

Neil, WB2CIR wrote:
"Should I KISS (Keep It Simply Simple), and make it a single wire?"

The ARRL 19th edition of the "Antenna Book" says on page 7-2:

"The simplest and most flexible (and also least expensive) all band antennas are those using open-wire, parallel-conductor feeders to the center of the antenna as in Fig 4."

What`s to argue with?

Best regards, Richard Harrison, KB5WZI

4656. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 18:06:04 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u8cmjaakqtjg4f@corp.supernews.com>
Source record: 147141

Tha's me {;-)

The ham call is WX6RST (Weather 6 RST Engineering) and the C-182A is N73CQ

Jim

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20020306071012.16999.00002422@mb-bg.aol.com...
> >Good. He won't be able to find me in the database with a misspelled last
> name.<
>
> See, I'm looking out for you! Are you responsible for the venerable
RST-721
> test set and those neat little 2-channel Com radios I used to see
advertised
> (always wanted to find one of those)?
>
> Rick K1BQT

4657. Re: Indoor antennae

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 18:06:27 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C865AA3.CCD253B1@crosslink.net>
Source record: 147143

Electric fence insulators are designed to be nailed to a post and hold the hi-V wire a couple inches from it. The same insulaters nailed to a roof could let one have a near invisible outdoor dipole. Not the greatest antenna but I gotta believe it'd be better than the same wire *under* the roof inside the attic.
73 KA3DWW

4658. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 18:10:16 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u8cmr2j6td07d3@corp.supernews.com>
Source record: 147142

No, of course not. Somebody has to supply the aircraft that are flying across the pond. It might as well be Collins. I just think 8.33 kHz. spacing is the lousiest engineering decision I've ever seen. The error bandwidth for aircraft AM is about +/- 10 kHz and the adjacent channel is then within this error band. Sucks, doesn't it?

Jim

"Dave Holford" <holford@sympatico.ca> wrote in message news:3C8629C5.42AC58D9@sympatico.ca...

Maybe someone should tell Rockwell-Collins to stop advertising their
> 8.33 kHz spacing product line?

4659. Re: Simple antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 18:20:55 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C865E07.320B2D8D@IEEE.org>
Source record: 147146

Neil wrote:
>
> Dear YL's and OM's,
>
> I want to put up a random length (120 foot) center fed wire, and feed it
> with 300 or 450 ohm twin lead. I want to run the twin lead through the
> window and into the shack. Mounted inside the shack is a Palomar 1 KW 4:1
> balun, to convert the twin lead to coax.
>
> A short piece of coax to jump from the Palomar to a standard, commercial
> antenna tuner, using it's standard "coax" position. (I will not be using
> the internal 4:1 balun of the tuner.) I'll be running 100 watts or less,
> 10 through 80 Meters, with a 300 watt tuner (preferably not MFJ). I will
> not confess here that I intend to try it on 160 Meters.
>
> Happy to gather your feedback on the above, although it's a pretty
> straightforward arrangement, no?

You 120 ft dipole is 1/2WL on 3.9 MHz. It is probably not resonant on any
other HF ham frequency. Your 4:1 balun, designed to see 200 ohms will probably
never see 200 ohms. IMO, a 1:1 choke would be a much better choice. Check
out my web page. My All-HF-Band dipole is 130 ft, very close to your 120 ft.
Check out the optimum lengths for feedlines for all the HF bands.

> My real question: Is there any advantage to using two wires in parallel for
> the center-fed wire, "folded dipole style?" Or would that be a waste of
> copper?

Folded dipoles do NOT make good 10m-80m antennas. Simple dipoles do.
--
cheers, CAM http://www.qsl.net/w5dxp

4660. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 18:20:56 UTC
From: richardharrison@webtv.net
Message-ID: <14785-3C865E08-30@storefull-118.iap.bryant.webtv.net>
Source record: 147149

Reg wrote:
"Who said?"

Bailey gives a table of resistances at the terminals of a folded dipole for differing wavelengths end-to-end:

1/4 > 1000 ohms
1/2 = 300 ohms
3/4 = 1000 ohms
one = very low
1 1/4 = high
1 1/2 = low
1 3/4 = high
2 = very low

The relative sizes of the two (or more) conductors is involved as is the spacing between conductors, but these data fit some folded dipole and give an idea of how the resistance varies as the size or frequency of the folded dipole varies.

Best regards, Richard Harrison, KB5WZI

4661. Re: Simple antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 18:42:00 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203061041.da41994@posting.google.com>
Source record: 147147

...and put the balun outside the window (waterproofed of course).

That way you have only 1 hole to worry about.

The coax will also be sheilded so you will not have to worry about the spacing between the twin lead and the window frame. Remember that anything that comes in contact with the twin lead will affect its performance.

Jim
N8EE

'Doc <w5lz@icok.net> wrote in message news:<3C863058.DF331EEB@icok.net>...
> Neil,
> Why not try both of them? Start with which ever one
> would be easiest to put up. Give it a fair chance to see
> how it performs. Then try another one.
> Especially if you plan to try 160 meters, longer is
> better, and so is higher, but you know that...
> 'Doc

4662. Uniden Bearcat 350A Scanner BRAND NEW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 18:42:27 UTC
From: S Ecurity Unlimited <securit1951@earthlink.net>
Message-ID: <nqth8.41115$0C1.3297061@newsread1.prod.itd.earthlink.net>
Source record: 147148
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner,rec.radio.swap

Hello all I have about 5 of these scanners left brand new i am asking $90.00 each i will ship next day air.

4663. Re: Uniden Bearcat 350A Scanner BRAND NEW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 18:52:48 UTC
From: S Ecurity Unlimited <securit1951@earthlink.net>
Message-ID: <4Ath8.41134$0C1.3297624@newsread1.prod.itd.earthlink.net>
Source record: 147150
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner,rec.radio.swap

I will also do trades as well.

4664. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 18:59:50 UTC
From: Chaos <chaos@no.spam.com>
Message-ID: <pCth8.41$Yr4.63757@news.uswest.net>
Source record: 147151

J. Harvey <JM001.Harvey@sympatico.ca> wrote in message
news:klch8.7175$802.1893590@news20.bellglobal.com...
> "-Your Friend Bill-"
> > I think Zone Alarm ought to be REQUIRED on
> > online computers. It would put a screeching
> > halt to the burgeoning spyware industry.
>
> Not necessarily...
>
> I wonder what nefarious activity goes on during that fairly long period of
> time between when you first turn on the PC and when the Zone Alarm software
> firewall is finally up and running...
>
> One could imagine that a smart and nasty programmer could arrange things
> such that your PC would upload its secret spyware messages (your personal
> financial data of course) while Zone Alarm is still waking up, yawning and
> scratching its little binary armpits. The spyware app might have to access
> the Ethernet HW directly (perhaps bypassing the OS and its restrictions),
> but that ain't exactly rocket science.
>
> Let's see, perhaps up to a 10 second window of opportunity at 1.3 Mbits per
> second... hmmm. Frightening isn't it.
>
> :-)

My solution for this problem was to install a 3 ft. extension with coupler between my Ethernet card and the data line. This extension is routed around my monitor in such a way that the coupler is located below and in front of my monitor. It is a simple task to disconnect the line at the coupler before boot-up, then re-connect it after Zone Alarm is up and running.

Also, I use a little proggie from Computer Associates called Mail Watcher v1.0 (don't know if its still available) to detect anything in an email or news article that is trying to execute. Yes, Zone alarm (Pro) catches most of the nasties, but some can slip by, and are nailed by Mail Watcher.

BTW, most of you would be surprised at how many emails try to "call home" when they are opened - and I'm not talking about opening email attachments. Yes, some emails are SPAM that have managed to slip through my filters, and it's the spammer's way of verifying receipt. I love thwarting the scum bags...

Just my 2¢ worth...

4665. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 19:32:21 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <QT8mOABF7mh8EwCE@pickmere.demon.co.uk>
Source record: 147157

In article <u8cmr2j6td07d3@corp.supernews.com>, Jim Weir <jim@rst-engr.com> writes
>No, of course not. Somebody has to supply the aircraft that are flying
>across the pond. It might as well be Collins. I just think 8.33 kHz.
>spacing is the lousiest engineering decision I've ever seen. The error
>bandwidth for aircraft AM is about +/- 10 kHz and the adjacent channel is
>then within this error band. Sucks, doesn't it?

Um..Are you suggesting that the tolerance is +- 10kHz for the Aviation band transmitters?

Mike
--
M.J.Powell

4666. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 19:41:40 UTC
From: tdonaly@cs.com
Message-ID: <20020306144140.05231.00000018@mb-mj.news.cs.com>
Source record: 147153

Richard Clark wrote,
>
>On Wed, 6 Mar 2002 12:08:17 -0500, "Peter O. Brackett"
><ab4bc@ix.netcom.com> wrote:
>
>>Go = 1.477 nHoh/km, Ge = 0.91
>
>nano Hoh's? Small hookers per km of street? ;-)
>
>>
>>And so again...my interest is/was to determine if any of this body of work
>>be applied to amateur radio transmission line work? And if any work on
>>amanteur style HF transmission lines used a similar methodology resulting in
>>values for the heuristic model parameters.
>
>Hi Peter,
>
>Hmm, a fractal transmission line specification. I can see how it
>might be useful for my swept frequency amateur radar.
>
>73's
>Richard Clark, KB7QHC
>

I like the word "heuristic." It has a nice
academic ring to it. Adding "model
parameters" is just icing on the cake.

Tom Donaly KA6RUH

4667. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 20:24:39 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <nFFMn2AHsnh8Ew0f@jmwa.demon.co.uk>
Source record: 147155
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Mark Zenier <mzenier@eskimo.com>
wrote (in <a65qc3asv1@eskinews.eskimo.com>) about 'HELP needed in
understanding Bode Plots', on Tue, 5 Mar 2002:
>My parents were perplexed by a cockney behind the information
>counter at a London train station who insisted on pronouncing
>Wolverhampton as "Woof-tun".

False teeth or a weak joke? OTOH, I was approached once by a French girl
on Paddington Station, asking the way to the place she had written down
on a note - Boughton-on-the-Water. No, I didn't know how to pronounce it
either.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4668. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 20:34:38 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <y3vh8.18282$gK2.1370358@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147154

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:16145-3C8639BD-30@storefull-113.iap.bryant.webtv.net...
> I wrote:
> "The feedpoint of Arnold B. Bailey`s 1/4-wave folded dipole is 35.6
> ohms." Wromg!
>
> Arnold B. Bailey`s 1/4-wave folded dipole has a radiation resistance of
> 35.6 ohms.
>
> I slipped out of gear at that point. Maximum current is opposite the
> feedpoint in a 1/4-wave folded dipole, not at the feedpoint. Radiation
> resistance is determined at an antenna`s maximum current point. So,
> radiation resistance and feedpoint resistance don`t coincide in this
> 1/4-wave folded dipole.
>
> Since the 1/4-wave folded dipole has a lot in common with a 1/4-wave
> short-circuit stub, the impedance at the feedpoint is very high. It is
> not an open circuit because the antenna has a radiation resistance, even
> though its ends are shorted. Actual feedpoint resistance is said to
> exceed 1000 ohms.
>

Hi Richard:

The folded dipole is really a loop antenna with the dimension in one direction generally being much greater than the dimension in the other. Being a loop, its impedance at very low frequencies, where the antenna is small wrt the operating wavelength, will be very low - very low resistance and very low +reactance (like most other antennas that operate in a "loop mode").

As the operating frequency increases, the folded dipole will first exhibit a parallel resonance where the reactance will very quickly change from a large +X value to a very large -X value. This occurs at a frequency where the folded dipole has a length *somewhere (?)* near 1/4 wavelength. At this parallel resonance, the feedpoint resistance will be very high - most likely in the order of several thousand ohms. Recognize that in a parallel resonance, the actual resonant frequency and antenna impedance is very sensitive to minor changes in the antenna structure. The antenna will essentially have no usable bandwidth.

I'm not certain what significance there is to Bailey stating that the "radiation resistance" is about 36 ohms. From a practical perspective, it does not have much significance because we are left to match and feed the antenna at its feedpoint. Efficiency can be determined once the loss

resistance referenced to the feedpoint is known. From my perspective, knowing the feedpoint impedance is more important than knowing the radiation resistance at the current max.

Anyway, as the frequency increases, the folded dipole will exhibit a more well behaved series resonance at a frequency where the dipole length is somewhere near 1/2 wavelength. Being a loop, its resonant resistance will be higher than that of the regular dipole. The well know 300 ohms.

Steve VE9SRB

4669. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 20:58:29 UTC
From: "Sir Charles W. Shults III" <aichip@cfl.rr.com>
Message-ID: <Vpvh8.16809$Dl4.1806914@typhoon.tampabay.rr.com>
Source record: 147156
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Here in Orlando, we hear of "Clear mount" (sic) which is really
Clermont. And, we get "chilly ota" from Chuluota somehow.

Cheers!

Chip Shults
My robotics, space and CGI web page - http://home.cfl.rr.com/aichip

4670. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:20:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6616u$c06gg$1@ID-124126.news.dfncis.de>
Source record: 147158

Unless some numbers are put to it you are wasting everybody's tim.
==========
VE9SRB <srbest@att.net> wrote in message
news:y3vh8.18282$gK2.1370358@bgtnsc04-news.ops.worldnet.att.net...
>
> "Richard Harrison" <richardharrison@webtv.net> wrote in message
> news:16145-3C8639BD-30@storefull-113.iap.bryant.webtv.net...
> > I wrote:
> > "The feedpoint of Arnold B. Bailey`s 1/4-wave folded dipole is 35.6
> > ohms." Wromg!
> >
> > Arnold B. Bailey`s 1/4-wave folded dipole has a radiation resistance of
> > 35.6 ohms.
> >
> > I slipped out of gear at that point. Maximum current is opposite the
> > feedpoint in a 1/4-wave folded dipole, not at the feedpoint. Radiation
> > resistance is determined at an antenna`s maximum current point. So,
> > radiation resistance and feedpoint resistance don`t coincide in this
> > 1/4-wave folded dipole.
> >
> > Since the 1/4-wave folded dipole has a lot in common with a 1/4-wave
> > short-circuit stub, the impedance at the feedpoint is very high. It is
> > not an open circuit because the antenna has a radiation resistance, even
> > though its ends are shorted. Actual feedpoint resistance is said to
> > exceed 1000 ohms.
> >
>
> Hi Richard:
>
> The folded dipole is really a loop antenna with the dimension in one
> direction generally being much greater than the dimension in the other.
> Being a loop, its impedance at very low frequencies, where the antenna is
> small wrt the operating wavelength, will be very low - very low resistance
> and very low +reactance (like most other antennas that operate in a "loop
> mode").
>
> As the operating frequency increases, the folded dipole will first exhibit
a
> parallel resonance where the reactance will very quickly change from a
large
> +X value to a very large -X value. This occurs at a frequency where the
> folded dipole has a length *somewhere (?)* near 1/4 wavelength. At this
> parallel resonance, the feedpoint resistance will be very high - most
likely

> in the order of several thousand ohms. Recognize that in a parallel
> resonance, the actual resonant frequency and antenna impedance is very
> sensitive to minor changes in the antenna structure. The antenna will
> essentially have no usable bandwidth.
>
> I'm not certain what significance there is to Bailey stating that the
> "radiation resistance" is about 36 ohms. From a practical perspective, it
> does not have much significance because we are left to match and feed the
> antenna at its feedpoint. Efficiency can be determined once the loss
> resistance referenced to the feedpoint is known. From my perspective,
> knowing the feedpoint impedance is more important than knowing the
radiation
> resistance at the current max.
>
> Anyway, as the frequency increases, the folded dipole will exhibit a more
> well behaved series resonance at a frequency where the dipole length is
> somewhere near 1/2 wavelength. Being a loop, its resonant resistance will
> be higher than that of the regular dipole. The well know 300 ohms.
>
> Steve VE9SRB
>
>

4671. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:21:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a661ab$bolub$1@ID-124126.news.dfncis.de>
Source record: 147159

From where does Bailly obtain his numbers - whoever he is.

==========

Richard Harrison <richardharrison@webtv.net> wrote in message
news:14785-3C865E08-30@storefull-118.iap.bryant.webtv.net...
> Reg wrote:
> "Who said?"
>
> Bailey gives a table of resistances at the terminals of a folded dipole
> for differing wavelengths end-to-end:
>
> 1/4 > 1000 ohms
> 1/2 = 300 ohms
> 3/4 = 1000 ohms
> one = very low
> 1 1/4 = high
> 1 1/2 = low
> 1 3/4 = high
> 2 = very low
>
> The relative sizes of the two (or more) conductors is involved as is the
> spacing between conductors, but these data fit some folded dipole and
> give an idea of how the resistance varies as the size or frequency of
> the folded dipole varies.
>
> Best regards, Richard Harrison, KB5WZI
>

4672. Helical Antenna (Rubber Ducky) Nomograph

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:24:04 UTC
From: aa1ll@email.com
Message-ID: <e85be400.0203061324.153499a1@posting.google.com>
Source record: 147160

At http://www.qsl.net/aa1ll there is a nomograph relating number of turns, resonant frequency, and helix diameter, from an equation found in Yusof and Hassan, "Regression Analysis of Resonant Frequency... of Normal Mode Helical Antenna," TENCON 2000 Proceedings, Vol.2, pp228-231.

The equation (converted from metric and rearranged) is:

N=(905/(f*D))^1.25 with

N=number of turns
f=MHz
D=diameter, inches.

It seems to match experience and published designs fairly closely. Note the lack of dependence on helix length and winding pitch for practical dimensions.

I'd like to know if anybody uses it, even to compare with other designs.

73, Paul, AA1LL
Mason, NH
http://www.qsl.net/aa1ll

4673. Re: Simple antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:26:55 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a661jk$bqpah$1@ID-124126.news.dfncis.de>
Source record: 147162

Is the ARRL Antenna Book the authority on the subject ?

Richard Harrison <richardharrison@webtv.net> wrote in message
news:5648-3C8657C0-22@storefull-112.iap.bryant.webtv.net...
> Neil, WB2CIR wrote:
> "Should I KISS (Keep It Simply Simple), and make it a single wire?"
>
> The ARRL 19th edition of the "Antenna Book" says on page 7-2:
>
> "The simplest and most flexible (and also least expensive) all band
> antennas are those using open-wire, parallel-conductor feeders to the
> center of the antenna as in Fig 4."
>
> What`s to argue with?
>
> Best regards, Richard Harrison, KB5WZI
>

4674. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:30:03 UTC
From: John Devereux <john@devereux.demon.co.uk>
Message-ID: <7c2d8u84v5k46ao7g0shs1n2nml88nqi7r@4ax.com>
Source record: 147161
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Wed, 6 Mar 2002 20:24:39 +0000, John Woodgate
<jmw@jmwa.demon.co.uk> wrote:

>I read in sci.electronics.design that Mark Zenier <mzenier@eskimo.com>
>wrote (in <a65qc3asv1@eskinews.eskimo.com>) about 'HELP needed in
>understanding Bode Plots', on Tue, 5 Mar 2002:
>>My parents were perplexed by a cockney behind the information
>>counter at a London train station who insisted on pronouncing
>>Wolverhampton as "Woof-tun".
>
>False teeth or a weak joke? OTOH, I was approached once by a French girl
>on Paddington Station, asking the way to the place she had written down
>on a note - Boughton-on-the-Water. No, I didn't know how to pronounce it
>either.

I have a customer in Bourton-on-the-water, in the Cotswolds,
I go there all the time. It's pronounced just as you would
think.

--
John Devereux
Gloucestershire :)

john@devereux.demon.co.uk

4675. Re: Simple antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:31:25 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C868AAD.31CFF9C3@IEEE.org>
Source record: 147165

Reg Edwards wrote:
>
> Is the ARRL Antenna Book the authority on the subject ?

The dipole described in Fig 4 costs about $20 and works on all HF bands.
That's pretty simple and flexible and inexpensive. And I *am* an
authority on *cheap* antennas. :-)

> > The ARRL 19th edition of the "Antenna Book" says on page 7-2:
> > "The simplest and most flexible (and also least expensive) all band
> > antennas are those using open-wire, parallel-conductor feeders to the
> > center of the antenna as in Fig 4."
--
cheers, CAM http://www.qsl.net/w5dxp

4676. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:31:37 UTC
From: AB7RS <ab7rs@arrl.net>
Message-ID: <u8d2mcplkte656@corp.supernews.com>
Source record: 147163

A friend of mine has a CRAP vertical and I am very unimpressed.TG

"J. B. Wood" <wood@itd.nrl.navy.mil> wrote in message
news:wood-0603020809240001@jbw-mac.itd.nrl.navy.mil...
> Hello, everyone. Does anyone have any experience with antennas from Gap
> Antenna Products (www.gapantenna.com)? Are we looking at vendor claims
> here ala the Crossed-Field Antenna? Thanks for your commment. Sincerely
> & 73s,
>
> John Wood (Code 5551) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

4677. Re: Vertical plane dual band 80/40 loop kicks butt from a small lot.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:32:30 UTC
From: tongaloa <tongaloa@alltel.net>
Message-ID: <a6621jjsp1@iac5.navix.net>
Source record: 147164

Neil-
I do not know the problem.
It looks fine to me.
Click on the thumbnail.
Select 'original'
this will take you to
http://www.edebris.com/catalog2/browse/63/0/0/0
It's a 700 pixel wide JPEG image and looks great.
If you don't want to wait as long for the load use this URL
http://www.edebris.com/catalog2/browse/63/0/0/50/

I've described this before and you may have looked
already.
It's a full wave loop. 80m around. 10m tall sides.
Feed is at center of a side.
Bottom wire is 3m off the ground.
Top wire is 13m off the ground.

It's a copy of an old 10m broadside radiator
from a pre WW2 handbook that is turned on it's side
and scaled for 80/40 use.

-bob
wb4mnf

"Neil" <address removed> wrote in message
news:3C85C9E8.89894AA8@adelphia.net...
> Dear tongaloa,
>
> You wrote:
>
> > Have a look.
>
> I tried. I looked at the largest image you stored, at the highest
> resolution you provided. Regardless, the picture was too small and fuzzy.
>
> Tried opening the picture in PhotoEd, blew it up gently, but the text is
> not legible at any magnification.
>
> Obviously, the smaller, lower resolution pictures are of no help.
>
> It sounds like a simple design, should be easy to describe in your own
> words? Not sure, does the picture include the detail of how much distance
> there is between ground and the bottom wire?
>

> Good DX,
> -Neil / wb2cir-
>

4678. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:32:30 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C868AEE.38B373BD@IEEE.org>
Source record: 147166

AB7RS wrote:
> A friend of mine has a CRAP vertical and I am very unimpressed.TG

What is the permeability of CRAP?
--
cheers, CAM http://www.qsl.net/w5dxp

4679. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:38:39 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a6628tfqn1@slb3.atl.mindspring.net>
Source record: 147167

Tom:

Heuristic... heh, heh... I love it.

What was it that great Engineer Oliver Heaviside said around the turn of the 19th century or thereabouts when the "Mathematicans" told him that his p-transform was not right, and other "Engineers" said his transmission line theories were a crock of jelly jam, he said, "I know they are right... because they give me the correct answers!"

Heh, heh... Who cares if the method has no basis in Science if it gives the correct answer? Ever wonder how your calculator or computer come up with values for the sine function? Heh, heh... that would make you wonder!

In any case, those heuristic model transmission line equations for the transmission line primary parameters produce answers that "exactly" match measurements of actual systems in the field, over and over again.

I don't know where/who/or what came up with those simple equations, or if they have any basis in Physics, but they seem to work.

Best,

--Peter K1PO

"Tdonaly" <tdonaly@cs.com> wrote in message
news:20020306144140.05231.00000018@mb-mj.news.cs.com...
>
> Richard Clark wrote,
> >
> >On Wed, 6 Mar 2002 12:08:17 -0500, "Peter O. Brackett"
> ><ab4bc@ix.netcom.com> wrote:
> >
> >>Go = 1.477 nHoh/km, Ge = 0.91
> >
> >nano Hoh's? Small hookers per km of street? ;-)
> >
> >>
> >>And so again...my interest is/was to determine if any of this body of
work
> >>be applied to amateur radio transmission line work? And if any work on
> >>amanteur style HF transmission lines used a similar methodology
resulting in
> >>values for the heuristic model parameters.
> >
> >Hi Peter,
> >

> >Hmm, a fractal transmission line specification. I can see how it
> >might be useful for my swept frequency amateur radar.
> >
> >73's
> >Richard Clark, KB7QHC
> >
>
> I like the word "heuristic." It has a nice
> academic ring to it. Adding "model
> parameters" is just icing on the cake.
>
> Tom Donaly KA6RUH
>
>
>

4680. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:41:39 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a662ej$u4a$1@slb2.atl.mindspring.net>
Source record: 147168

Hi Ron:

How ya doin? Thanks for all that information below. I'll send you some information on my programs by email.

So, I see you are (consulting?) with the Coalition, eh? What chance do you think the Alliance has?

BTW... I've got some ideas for something completely different! I'd like to talk with you about it a little sometime.

Send me your telephone number.

Best,

--Peter K1PO

"Ron McConnell" <rcmcc@earthlink.net> wrote in message news:3C863F14.D71926EB@earthlink.net...
>
> "Peter O. Brackett" wrote:
>
> > Question for the NG: ...T1.417...
>
> I'm just catching up on my r.r.a.a reading and was _very_ interested
> to find this thread. It's been yet another education in reading through
> it, even if somehow the first four notes came in last here and
> had me wondering for a while about where and when it started .
>
> I'm the original coordinator of the T1E1.4 spectrum
> compatibility/management project and original author/editor
> of what became T1.417. My 1995 ramblings survived
> word-for-word (to my surprise) as the first, descriptive
> half of Annex B. I was the T1E1.4 Secretary until
> I retired from Bell Labs last July.
>
> Charles Cook of BT Labs (British Telecom) developed the
> formulas that are the subject of Peter's original question.
> Before that tables of R, L, G & C versus frequency were
> (and still are) used most of the time. (Bell Labs sometimes
> used equivalent curve-fitted formulas for internal work.)
>
> If I recall correctly Charles did some _highly_ educated
> guessing and trial and error to find formulas that match
> closely with cable measurements. These measurements
> were/are done with extreme care on _representative_

> samples of common cables and at a reference temperature.
> Then he runs a curve-fitting routine to calculate the parameters.
> He ran the 24 AWG and 26 AWG data on small chunks
> of cable supplied by BellSouth.
>
> Cable parameters vary during a production run, though
> not as much in these days with laser-drilled diamond dies
> as they did with hardened steel dies. Cable parameters
> vary from one run to another for a given manufacturer,
> and then of course for different manufacturers.
> Note that the formulas are for the temperature of measurement,
> typically 70degF, and do not account for the -40 to +140F
> experienced by real life cables. [Feel free to convert to Celsius. :)]
> They do serve as a common reference point for many
> different people doing comparative performance calculations
> on competing transmission schemes.
>
> Other, older, software code used by Bell Labs
> and other telephone labs does compensate for the changes
> with temperature, mainly in resistance.
> This can result in several dB change in loss at high
> frequencies from dark to daylight for a cable
> hanging on poles in the desert.
>
> I don't know of anyone but telephone people who have
> adopted this particular set of formulas.
> ETSI TM6, the European counterpart to North American T1E1.4,
> and ITU-T Q4/SG15 have adopted Charles's formulas.
> ETSI TM6 has a document with more coverage of the
> various metric telephone cables used by various countries.
>
> I believe I have Charles's original paper.
> Drop me a note and I will dig it out.
> I _think_ John Cioffi, Stanford U., has a set of software code (C?)
> developed by his graduate students that is available.
>
> Ken Kerpez, of Telcordia, has implemented the Annex B
> DSL performance code at his web site.
>
> http://net3.argreenhouse.com:8080/dsl-test/index.htm
>
> Telephone cable loss vs. frequency is one output of Ken's code.
> but not impedance, and only for standard terminations.
> I've been meaning to talk to him about adding some more
> general options. Use of the site is free, just drop him a note at
> kkerpez@telecordia to register for an ID.
>
> _Anyone_ can download one free copy of T1.417
> and other T1 telephone standards by searching down
> through the menus/buttons at

> http://www.t1.org
>
> Work on T1.417 Issue 2 is proceeding with inclusion of VDSL
> and mutual interference among remotely located, outside plant
> systems being the main additions. I believe the target to submit
> the new issue to ballot is the end of the year.
>
> Peter says, "... I have developed several "finite element"
> transmission line simulation programs (Fortran)..."
> Could I talk you out of a copy of them?
> I only have a compiled version of a similar,
> but more limited, program and I can't make
> any changes - frustrating.
>
> By the way, speaking of VDSL,
> VDSL spectra runs 138kHz to 12 MHz.
> Originally it was going to be up to 20MHz.
> It may be extended down to 25kHz.
> RFI ingress/egress has been of interest/concern,
> particularly among the hams involved.
> I arranged for Ed Hare, W1RFI, to run ham radio interference
> tests in the Phoenix area where Qwest has some 50,000
> pre-standard VDSL systems deployed. USWest/Qwest
> had been very careful in installing these systems
> with attention to cable balance, replacing old cable, etc.
> Ed had to lay his antenna on top of the VDSL box
> to pick up much. I think he has a report in his RFI
> area on the ARRL web page.
>
> Cheers, 73,
>
> Ron McConnell
> w2iol
> ARRL RFITG
> http://www.vdslcoalition.net
>
>

4681. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:44:25 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a662jo$5fi$1@slb1.atl.mindspring.net>
Source record: 147070
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Anyone ever been to Tronna, Ontario?

-Peter K1PO

"John Devereux" <john@devereux.demon.co.uk> wrote in message
news:7c2d8u84v5k46ao7g0shs1n2nml88nqi7r@4ax.com...
> On Wed, 6 Mar 2002 20:24:39 +0000, John Woodgate
> <jmw@jmwa.demon.co.uk> wrote:
>
> >I read in sci.electronics.design that Mark Zenier <mzenier@eskimo.com>
> >wrote (in <a65qc3asv1@eskinews.eskimo.com>) about 'HELP needed in
> >understanding Bode Plots', on Tue, 5 Mar 2002:
> >>My parents were perplexed by a cockney behind the information
> >>counter at a London train station who insisted on pronouncing
> >>Wolverhampton as "Woof-tun".
> >
> >False teeth or a weak joke? OTOH, I was approached once by a French girl
> >on Paddington Station, asking the way to the place she had written down
> >on a note - Boughton-on-the-Water. No, I didn't know how to pronounce it
> >either.
>
> I have a customer in Bourton-on-the-water, in the Cotswolds,
> I go there all the time. It's pronounced just as you would
> think.
>
> --
> John Devereux
> Gloucestershire :)
>
> john@devereux.demon.co.uk

4682. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:45:06 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <C5wh8.18362$gK2.1375373@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147069

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a6616u$c06gg$1@ID-124126.news.dfncis.de...

> Unless some numbers are put to it you are wasting everybody's tim.
> ==========

Geez Reg, sorry to waste your tim. What numbers would you like?

Steve

4683. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:47:15 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u8d3i3f2jn3aa6@corp.supernews.com>
Source record: 147071

Um, no sir, I'm suggesting that the tolerance is between 3 and 4 kHz, depending on whether you are at the bottom end of the band (3.5 kHz.) or the top end of the band (4.1 kHz.).

If you have a transmitter that is off with a positive max tolerance and a receiver that is off with a negative max tolerance, you have to allow 8 kHz on one side and 8 kHz. on the other side for your receiver error budget. If you then factor in a 3 kHz. audio sideband outside of THAT, you've got to allow 11 kHz. each side of center for the error plus modulation. If you go further and figure in the tolerance for your IF filter, it comes out more like 15 kHz. a side. Now tell me how in the hell I'm supposed to discriminate against something that could be as close as 4 kHz. (including THEIR tolerance) to band center when I've got a 15 khz. wide IF bandwidth each side of center?

Jim

"M.J.Powell" <mike@pickmere.demon.co.uk> wrote in message news:QT8mOABF7mh8EwCE@pickmere.demon.co.uk...
> In article <u8cmr2j6td07d3@corp.supernews.com>, Jim Weir <jim@rst-
> engr.com> writes
> >No, of course not. Somebody has to supply the aircraft that are flying
> >across the pond. It might as well be Collins. I just think 8.33 kHz.
> >spacing is the lousiest engineering decision I've ever seen. The error
> >bandwidth for aircraft AM is about +/- 10 kHz and the adjacent channel is
> >then within this error band. Sucks, doesn't it?
>
> Um..Are you suggesting that the tolerance is +- 10kHz for the Aviation
> band transmitters?

4684. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 21:49:10 UTC
From: tmacinty@ns.sympatico.ca
Message-ID: <3c868eee.1833546@news.wolf>
Source record: 147072
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On Wed, 6 Mar 2002 16:44:25 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Anyone ever been to Tronna, Ontario?
>
>-Peter K1PO

September, 1977, first and only times. Lots of beer and jazz music
live. :-)

Tom

>
>"John Devereux" <john@devereux.demon.co.uk> wrote in message
>news:7c2d8u84v5k46ao7g0shs1n2nml88nqi7r@4ax.com...
>> On Wed, 6 Mar 2002 20:24:39 +0000, John Woodgate
>> <jmw@jmwa.demon.co.uk> wrote:
>>
>> >I read in sci.electronics.design that Mark Zenier <mzenier@eskimo.com>
>> >wrote (in <a65qc3asv1@eskinews.eskimo.com>) about 'HELP needed in
>> >understanding Bode Plots', on Tue, 5 Mar 2002:
>> >>My parents were perplexed by a cockney behind the information
>> >>counter at a London train station who insisted on pronouncing
>> >>Wolverhampton as "Woof-tun".
>> >
>> >False teeth or a weak joke? OTOH, I was approached once by a French girl
>> >on Paddington Station, asking the way to the place she had written down
>> >on a note - Boughton-on-the-Water. No, I didn't know how to pronounce it
>> >either.
>>
>> I have a customer in Bourton-on-the-water, in the Cotswolds,
>> I go there all the time. It's pronounced just as you would
>> think.
>>
>> --
>> John Devereux
>> Gloucestershire :)
>>
>> john@devereux.demon.co.uk
>
>

4685. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 22:02:34 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3C8691FA.1125502E@sympatico.ca>
Source record: 147073

Makes you wonder how those airborne UHF AM sets manage to work at 3
times the frequency with only 25 kHz spacing don't it? And, then there
are all the other tight tolerance satellite systems sandwiched in
between.

Dave

Jim Weir wrote:
>
> Um, no sir, I'm suggesting that the tolerance is between 3 and 4 kHz,
> depending on whether you are at the bottom end of the band (3.5 kHz.) or
> the top end of the band (4.1 kHz.).
>
> If you have a transmitter that is off with a positive max tolerance and a
> receiver that is off with a negative max tolerance, you have to allow 8 kHz
> on one side and 8 kHz. on the other side for your receiver error budget. If
> you then factor in a 3 kHz. audio sideband outside of THAT, you've got to
> allow 11 kHz. each side of center for the error plus modulation. If you go
> further and figure in the tolerance for your IF filter, it comes out more
> like 15 kHz. a side. Now tell me how in the hell I'm supposed to
> discriminate against something that could be as close as 4 kHz. (including
> THEIR tolerance) to band center when I've got a 15 khz. wide IF bandwidth
> each side of center?
>
> Jim
>
> "M.J.Powell" <mike@pickmere.demon.co.uk> wrote in message
> news:QT8mOABF7mh8EwCE@pickmere.demon.co.uk...
> > In article <u8cmr2j6td07d3@corp.supernews.com>, Jim Weir <jim@rst-
> > engr.com> writes
> > >No, of course not. Somebody has to supply the aircraft that are flying
> > >across the pond. It might as well be Collins. I just think 8.33 kHz.
> > >spacing is the lousiest engineering decision I've ever seen. The error
> > >bandwidth for aircraft AM is about +/- 10 kHz and the adjacent channel is
> > >then within this error band. Sucks, doesn't it?
> >
> > Um..Are you suggesting that the tolerance is +- 10kHz for the Aviation
> > band transmitters?

4686. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 22:14:34 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <fxwh8.12960$4E4.2338218@news20.bellglobal.com>
Source record: 147074

"Jim Weir"
> I just think 8.33 kHz spacing is the lousiest
> engineering decision I've ever seen.

The Europeans have now figured out that they have to either hire air traffic controllers with six arms, or three times as many of the usual two-armed variety. :-)

More fairly, they had a problem to solve 'Right Now' - they couldn't wait for another decade or more for VDL to be fully implemented. The rest of the world has more time than Europe.

4687. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 22:32:22 UTC
From: tongaloa <tongaloa@alltel.net>
Message-ID: <a665hrlju1@iac5.navix.net>
Source record: 147075

John-

Looks like E X H, "what's a reactive field?", to me.

The short answer.

Poynting's math only describes the physics, it doesn't define it!

The medium sized answer.

How does an antenna work?
Current changes direction in a wire and some of the energy is radiated.
How much is radiated?
It's proportional to the current times the length(vector) over which the
current
travels. This means an amp of RF in a 30' piece of perfectly conducting
wire gives the same radiation as 30 amps 1 foot piece of the wire.
This is all you need to compare antennas.

If the goal is maximum radiated energy, in the desired direction,
for the lowest cost, the entire system should be examined, not
just the antenna.

Work up a budget.
db/dollar for signal processing
db/dollar for antenna
db/dollar for rf generation

-bob

"J. B. Wood" <wood@itd.nrl.navy.mil> wrote in message
news:wood-0603020809240001@jbw-mac.itd.nrl.navy.mil...
> Hello, everyone. Does anyone have any experience with antennas from Gap
> Antenna Products (www.gapantenna.com)? Are we looking at vendor claims
> here ala the Crossed-Field Antenna? Thanks for your commment. Sincerely
> & 73s,
>
> John Wood (Code 5551) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

4688. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 23:08:51 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a667io$c0qmn$1@ID-124126.news.dfncis.de>
Source record: 147076

Steve, if you don't know any numbers you confirm what I said. But don't worry about it. ;o)

==========
Reg

4689. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 23:19:52 UTC
From: k1bqt@aol.com
Message-ID: <20020306181952.01765.00000053@mb-me.aol.com>
Source record: 147077

>Tha's me {;-) The ham call is WX6RST (Weather 6 RST Engineering) and the C-182A is N73CQ<

I tip my hat.

Rick K1BQT

4690. Re: Simple antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-06 23:25:29 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a668hu$bhavn$1@ID-124126.news.dfncis.de>
Source record: 147078

Cecil, I agree with you. In my opinion, for what it's worth, your judgement is excellent. It is what the ARRL handbook, the bible, did NOT say is what matters. ;o)

When will your definitive article on the subject be published, finally laying the G5RV to rest ?

Reg.

4691. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 00:35:42 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna8ddeu.epj.QSB@animas.frontier.net>
Source record: 147079
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

```
>> >
>> >Two semi-retired professors were sitting on the porch having a couple
>> >of brewskis. (This could also be referred to as a "verandah" or "deck")

Or, patio ("paw-tea-ooo"), or lanai.

[The atribution(s) were impossible to decode with the ]
[combo of proper posting/quoting and jeopardy posting...]

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK
```

4692. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 00:54:03 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u8deg65a90kk11@corp.supernews.com>
Source record: 147080

"Rick Littlefield" <k1bqt@aol.com> wrote in message
news:20020306181952.01765.00000053@mb-me.aol.com...

> >Tha's me {;-) The ham call is WX6RST (Weather 6 RST Engineering) and the
> C-182A is N73CQ<

> I tip my hat.

Did anything fall out? {;-)

Jim

4693. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 01:00:42 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u8det7s1qoalc4@corp.supernews.com>
Source record: 147081

Doesn't make me wonder in the least. The airborne UHF sets are military, and if you tell me that I've got to hold 0.001% tolerance, I'll simply tack the crystal heater onto your military bill and send you on your way. We know how to hold a frequency to 0.0001% (150 Hz. or so in the civilian air band) over temperature if we wish, but the cost to a civilian purchaser would be out of sight. Of course, the civilian **is** the purchaser of the military equipment, but since they have no say as to how their taxes are spent...what can I say?

Jim

"Dave Holford" <holford@sympatico.ca> wrote in message news:3C8691FA.1125502E@sympatico.ca...

> Makes you wonder how those airborne UHF AM sets manage to work at 3
> times the frequency with only 25 kHz spacing don't it? And, then there
> are all the other tight tolerance satellite systems sandwiched in
> between.
>?

4694. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 01:17:53 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <3C86BFBE.2533CABB@earthlink.net>
Source record: 147082

"Peter O. Brackett" wrote:

> Hi Ron:
> How ya doin? Thanks for all that information below.

There should be a copy, at in least hard form
in one of my boxes, of Charles Cook's paper.
In those days (1996?) , very few T1E1.4 documents
were submitted in soft form. Now everything is soft.

For lack of a formal title, I have been called the "chief facilator"
for the VDSL Coalition, sometimes "coordinator,"
and sometimes, "cat herder." I answer the email "phone."
Other than our webmasters, there is no formal structure,
even though we have about 70 members
of all sizes from around the world.
On the VDSL Alliance: one can show that equally well
designed and equally well built systems using
either DMT or CAP/QAM linecodes have equal theoretical
performance for data rate, loop range, interference
and loop impairments.
We (naturally) disagree on which is more practical for VDSL. :)

"...ideas for something completely different!" Hmmm...?

I'll send you my phone number.

Cheers,

Ron
w2iol

4695. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 01:18:33 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3C86BFE4.108A7173@att.net>
Source record: 147083

How about doing as I do: turn on the computer and let it boot, during which time ZA is loaded and "awakens."

THEN, I go online after ZA is alert and doing its thing. Also before going online, Norton's Anti-Virus has been loaded and is watching every incoming and outgoing file.

Seems to me like there is little or no problem for we poor dial-up access guys, but even with 24/7 access, I see no reason why one's defenses cannot be up and running before actually going online.

Wonder what I am missing here?

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

"J. Harvey" wrote:
>
> "-Your Friend Bill-"
> > I think Zone Alarm ought to be REQUIRED on
> > online computers. It would put a screeching
> > halt to the burgeoning spyware industry.
>
> Not necessarily...
>
> I wonder what nefarious activity goes on during that fairly long period of
> time between when you first turn on the PC and when the Zone Alarm software
> firewall is finally up and running...
>
> One could imagine that a smart and nasty programmer could arrange things
> such that your PC would upload its secret spyware messages (your personal
> financial data of course) while Zone Alarm is still waking up, yawning and
> scratching its little binary armpits. The spyware app might have to access
> the Ethernet HW directly (perhaps bypassing the OS and its restrictions),
> but that ain't exactly rocket science.
>
> Let's see, perhaps up to a 10 second window of opportunity at 1.3 Mbits per
> second... hmmm. Frightening isn't it.

4696. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 01:35:48 UTC
From: Jason <jr_4226@yahoo.com>
Message-ID: <3c86c3c7_1@news.iprimus.com.au>
Source record: 147084
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In QLD Australia, there is a place called Indooroopily. The locals say it as In-dro-pilly and if you call it in-door-oo-pilly (as it is spelt) all you get is a blank glazed stare, or blatant laughter! And Goondiwindi - said 'Gun'diwindi. Plenty more where these came from, too!

BTW - calling all US citizens - please say Aluminium for me (remember - there is two 'i's in Alumin'i'um) :-) [had to get that one in!]

I remember a thread in sci.physics on this subject of pronunciation and there was some wierd example of how the word fish should be spelt, based on the sounds in fish compared with other words with similar sounds. Can anyone rermember this?

Jase.

"John Woodgate" <jmw@jmwa.demon.co.uk> wrote in message news:nFFMn2AHsnh8Ew0f@jmwa.demon.co.uk...
> I read in sci.electronics.design that Mark Zenier <mzenier@eskimo.com>
> wrote (in <a65qc3asv1@eskinews.eskimo.com>) about 'HELP needed in
> understanding Bode Plots', on Tue, 5 Mar 2002:
> >My parents were perplexed by a cockney behind the information
> >counter at a London train station who insisted on pronouncing
> >Wolverhampton as "Woof-tun".
>
> False teeth or a weak joke? OTOH, I was approached once by a French girl
> on Paddington Station, asking the way to the place she had written down
> on a note - Boughton-on-the-Water. No, I didn't know how to pronounce it
> either.
> --
> Regards, John Woodgate, OOO - Own Opinions Only.
http://www.jmwa.demon.co.uk
> Interested in professional sound reinforcement and distribution? Then go
to
> http://www.isce.org.uk
> PLEASE do NOT copy news posts to me by E-MAIL!

4697. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 01:37:09 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <3C86C43A.3401C8E2@earthlink.net>
Source record: 147085

"Peter O. Brackett" wrote:
"Is that Charles, or John Cook?
John Cook of BT Labs of the "cook pulse" fame?"

ARRRRGGGGGGHHHH!!!!
Brain cells have _really_ faded out here.

It is indeed The JOHN Cook of Cook Pulse fame.

CHARLES Cook is another friend in the business.
I've been swapping notes with Charles lately.
Please don't tell either of them. :)
Boy, once I got in the "Charles gear," I just stayed there.
Wrong, but at least consistently wrong.

(sheesh)

73,
Ron
w2iol

4698. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 01:51:05 UTC
From: "Sir Charles W. Shults III" <aichip@cfl.rr.com>
Message-ID: <dIzh8.61072$TV4.10493075@typhoon.tampabay.rr.com>
Source record: 147086
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Ghoti. Gh as in "tough", o as in "women", ti as in "action".

Cheers!

Chip Shults
My robotics, space and CGI web page - http://home.cfl.rr.com/aichip

4699. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 02:21:30 UTC
From: k1bqt@aol.com
Message-ID: <20020306212130.25097.00000117@mb-fe.aol.com>
Source record: 147087

>> I tip my hat.<<

>Did anything fall out? {;-)<

I'm talented, but I'm no Peewee Herman.

73

Rick K1BQT

4700. Re: Long square antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 03:13:26 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C86DAD0.79806471@icok.net>
Source record: 147088

Ed,
I doubt if the metal strips block any interference from
your house. Unless they are gronded, and much closer together
than I think they are, they wouldn't act as any kind of
shielding. Neither would they act as a reflecter. if anything,
I would suspect that they would 'detune' the antenna. You won't
know till you try it out, and you probably won't be able to
tell they make any difference at all.
'Doc

4701. Re: Two things for your attention

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 03:23:13 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <B4Bh8.3168$Nn6.336979@e3500-atl2.usenetserver.com>
Source record: 147089

For reviews on the Carolina Cyclone, visit www.eham.net

Tnx

Jerry

Jerry Oxendine <joxendi@bellsouth.net> wrote in message
news:Vg8h8.4379$tg2.265785@e3500-atl1.usenetserver.com...
> I know that this subject has come up in the past, but I thought you might
> want to hear my most recent experience with UPS. I decided to try them
> again to see how they handled the
> shipments of my Carolina Cyclone antennas. Two of the shipments were
> damaged by virtue
> of slamming the packages down on one end SO HARD that they managed to ruin
> the decoupling collars. Now listen to (read) this one: The final
shipment
> was packaged in 3" PVC pipe with plastic caps on each end. The ends were
> fastened with reinforced AND clear tape. The package was slammed down so
> HARD at some point that they lost the
> screwdriver component out of the package. Then the stupid idiots just
> re-taped the end
> that had been breached with the tube empty and shipped it on to its
> destination. DUH!
> HOW do I know they slam shipments around so. HA! The Lexan coil cover
was
> jammed
> down in the other end so tightly that it literally STUCK and can't be
> retreived--and that is with wads of newspapers on that end. The rest of
the
> packing--and there was a lot--was
> missing along with the antenna unit. Now. To my mind, if a package
weighs
> 10 lbs at point
> of departure, and it is 4' long, it arrives at some station along the way
> suddenly weighing less
> that 3 lbs. I would think something was wrong. It takes a blithering
stupe
> to tape up an empty tube and ship it on. Never again will I ship UPS--I
> can't afford the b******s.
>
>
> For those of you who are looking at HF mobile antennas, I would like to
> invite you to take a
> look at the Carolina Cyclone series of mobile antennas. Slightly larger
> than the generic units

> sold on the 'net and at hamfests, these antennas also put out a BIG signal
> because they do not use PVC anywhere, they use #14 wire (instead of that
> skinny #16 stuff), and they can
> be configured with lengths of lower masts to conform to the distance from
> your mount and
> the top of the vehicle. That is so that your coil can "peek" over the top
> of the car. Normally
> the masts are 3' unless otherwise specified. Additionally, I betcha some
of
> you have bought
> the "other" brands only to have your weather cover crack and split after a
> year--or even a few months. I use 1/8" wall Lexan and I have several
sizes
> to fit your particular unit whether
> it be "skinny" or "fat". Just measure and let me know via my website.
>
> Thanks for reading==and letting me vent about UPS.
>
>
> 73 all,
>
> Jerry
> K4KWH
>
>
>

4702. Touching an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 03:36:48 UTC
From: Jack Emm <jackabella@lyonl.com>
Message-ID: <kfBh8.32$_M.849@paloalto-snr2.gtei.net>
Source record: 147090

My component audio system has an FM antenna. It is a short length of wire connected to a terminal at the rer of the tuner/amplifier. On a certain station the reception is mediocre. It improves greatly when I simply hold the wire. Is there something I can attach to the wire that will replicate whatever my body is doing to improve reception?

4703. Re: Multi Turn Quad?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 04:20:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C86EA78.F1C3BD3D@eznec.com>
Source record: 147092

I stand corrected. Thanks for the comment.

Roy Lewallen, W7EL

Robert Haviland wrote:
>
> Roy, not quite. The radiation resistance of small loops increases as square
> of the number of turns in the loop. The resistance increases directly as the
> number of turns, assuming the same wire size. The overall efficiency can
> increase as the number of turns as a limit. See Kraus, 2nd ed, page 250 ff.
> The full increase is seldom realized because of such effects as change in
> loop area, change in current distribution on th wire, etc. It's one reason
> Litz wire was used in the old loops. In large loops the radiation resistance
> doesn't change but the drive resistance does, so the efficiency is
> essentially
> the same.
>
> bob w4mb

4704. Re: Touching an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 04:21:47 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C86EADB.14B1748D@coqui.net>
Source record: 147091

Jack Emm wrote:
>
> My component audio system has an FM antenna. It is a short length of wire
> connected to a terminal at the rer of the tuner/amplifier. On a certain
> station the reception is mediocre. It improves greatly when I simply hold
> the wire. Is there something I can attach to the wire that will replicate
> whatever my body is doing to improve reception?

The magic length for the antenna wire is around 2.5 feet for best efficiency. About all you can do indoors is to orient it for best reception and tack it into place somehow, maybe under the shelf. With an outdoor antenna, even a simple one, you can avoid the problem altogether.
-Bill

4705. Re: Touching an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 04:43:18 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <GdCh8.25302$e07.5244@sccrnsc01>
Source record: 147093

Your wife? :)
"Jack Emm" <jackabella@lyonl.com> wrote in message
news:kfBh8.32$_M.849@paloalto-snr2.gtei.net...
> My component audio system has an FM antenna. It is a short length of wire
> connected to a terminal at the rer of the tuner/amplifier. On a certain
> station the reception is mediocre. It improves greatly when I simply hold
> the wire. Is there something I can attach to the wire that will replicate
> whatever my body is doing to improve reception?
>
>

4706. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 06:00:11 UTC
From: Don Kelly <dhky@peeshaw.ca>
Message-ID: <LIDh8.37807$eb.1506320@news3.calgary.shaw.ca>
Source record: 147094
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Jason" <jr_4226@yahoo.com> wrote in message
news:3c86c3c7_1@news.iprimus.com.au...
> In QLD Australia, there is a place called Indooroopily. The locals say it
> as In-dro-pilly and if you call it in-door-oo-pilly (as it is spelt) all
you
> get is a blank glazed stare, or blatant laughter! And Goondiwindi - said
> 'Gun'diwindi. Plenty more where these came from, too!
>
> BTW - calling all US citizens - please say Aluminium for me (remember -
> there is two 'i's in Alumin'i'um) :-) [had to get that one in!]

Ah, but----In the US it is spelled without the second "i" so their
pronunciation matches the spelling. In Canada, we have a split personality,
eh -tend to use either form for this and many other words. However we do
have our own names such as Tsawassen or Iqaluit and the ever famous
Saskatoon, Saskatchewan. I like Newfoundland place names such as Dildo and
Conception Bay, but other provinces have their own such as Alberta's Moose
Wallow, etc.
--
Don Kelly
dhky@peeshaw.ca
remove the urine to answer

>
> I remember a thread in sci.physics on this subject of pronunciation and
> there was some wierd example of how the word fish should be spelt, based
on
> the sounds in fish compared with other words with similar sounds. Can
> anyone rermember this?
>
> Jase.
>
> "John Woodgate" <jmw@jmwa.demon.co.uk> wrote in message
> news:nFFMn2AHsnh8Ew0f@jmwa.demon.co.uk...
> > I read in sci.electronics.design that Mark Zenier <mzenier@eskimo.com>
> > wrote (in <a65qc3asv1@eskinews.eskimo.com>) about 'HELP needed in
> > understanding Bode Plots', on Tue, 5 Mar 2002:
> > >My parents were perplexed by a cockney behind the information
> > >counter at a London train station who insisted on pronouncing
> > >Wolverhampton as "Woof-tun".
> >
> > False teeth or a weak joke? OTOH, I was approached once by a French girl
> > on Paddington Station, asking the way to the place she had written down

> > on a note - Boughton-on-the-Water. No, I didn't know how to pronounce it
> > either.
> > --
> > Regards, John Woodgate, OOO - Own Opinions Only.
> http://www.jmwa.demon.co.uk
> > Interested in professional sound reinforcement and distribution? Then go
> to
> > http://www.isce.org.uk
> > PLEASE do NOT copy news posts to me by E-MAIL!
>
>

4707. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 06:43:35 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <ySR5iTAXwwh8EwHo@jmwa.demon.co.uk>
Source record: 147105
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that John Devereux
<john@devereux.demon.co.uk> wrote (in <7c2d8u84v5k46ao7g0shs1n2nml88nqi7
r@4ax.com>) about 'HELP needed in understanding Bode Plots', on Wed, 6
Mar 2002:
>On Wed, 6 Mar 2002 20:24:39 +0000, John Woodgate
><jmw@jmwa.demon.co.uk> wrote:
>
>>I read in sci.electronics.design that Mark Zenier <mzenier@eskimo.com>
>>wrote (in <a65qc3asv1@eskinews.eskimo.com>) about 'HELP needed in
>>understanding Bode Plots', on Tue, 5 Mar 2002:
>>>My parents were perplexed by a cockney behind the information
>>>counter at a London train station who insisted on pronouncing
>>>Wolverhampton as "Woof-tun".
>>
>>False teeth or a weak joke? OTOH, I was approached once by a French girl
>>on Paddington Station, asking the way to the place she had written down
>>on a note - Boughton-on-the-Water. No, I didn't know how to pronounce it
>>either.
>
>I have a customer in Bourton-on-the-water, in the Cotswolds,
>I go there all the time. It's pronounced just as you would
>think.
>
Clearly, I've misremembered. The place was definitely spelled
'Boughton'. Maybe I've dreamed the 'on-the-water' bit later.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4708. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 06:43:52 UTC
From: KC8PMX <kc8pmx@NOSPAMdiamondcs.net>
Message-ID: <a67pvu11htj@enews1.newsguy.com>
Source record: 147104

If it is a standard ground rod, and there is nothing on the top of it to prevent what I am suggesting, why not use the Hydro method. Most garden hoses I have ever used have a larger inner diameter than a ground rod outer diameter. Just use water! If the garden hose won't fit over, then you can fashion a piece of pipe to the end of the garden hose and "hydro-drill" around whatever it is you need to remove. One of the two ways may work.

Ryan KC8PMX

"Ace_On_Par3" <pwhelton@hal-pcNOSPAM.org> wrote in message
news:a63r3r$29ns$1@news.hal-pc.org...
> Jerry. You might want to try an old fashioned bumper jack to pull them
out
> of the ground.
>
> --
> http://u1.netgate.net/~kirby34/rsg/wheltonp.htm
>
>
> "Jerry" <jerryaa@prodigy.net> wrote in message
> news:CW3h8.3232$5G3.395827312@newssvr16.news.prodigy.com...
> > I have some ground rods in the ground that I don t need now. Is there a
> way
> > to extract them, other than excavation? This is copper clad steel 8
foot.
> >
> >
>
>

4709. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 06:46:23 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <xSr5CVA$ywh8EwGZ@jmwa.demon.co.uk>
Source record: 147106
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Sir Charles W. Shults III
<aichip@cfl.rr.com> wrote (in <dIzh8.61072$TV4.10493075@typhoon.tampabay
.rr.com>) about 'HELP needed in understanding Bode Plots', on Thu, 7 Mar
2002:
> Ghoti. Gh as in "tough", o as in "women", ti as in "action".
>
Someone topped George Bernard Shaw's 'ghoti' with 'phthognerrh' -
'turner'.

--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4710. Re: Touching an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 08:09:04 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203070009.71014b23@posting.google.com>
Source record: 147095

"Jack Emm" <jackabella@lyonl.com> wrote in message
news:<kfBh8.32$_M.849@paloalto-snr2.gtei.net>...
> My component audio system has an FM antenna. It is a short length of wire
> connected to a terminal at the rer of the tuner/amplifier. On a certain
> station the reception is mediocre. It improves greatly when I simply hold
> the wire. Is there something I can attach to the wire that will replicate
> whatever my body is doing to improve reception?

Yep, add a longer wire to it, or use a real FM antenna hooked to those
terminals. IE: dipole, etc. Radio shack has fm antennas. A TV antenna
will work fine. Indoor rabbit ears could work. MK

4711. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 08:33:37 UTC
From: ab528@FreeNet.Carleton.CA
Message-ID: <a678l1$5v7$1@freenet9.carleton.ca>
Source record: 147096

Mel Martin (ve2dc@rac.ca) writes:
> JLB wrote:
>>
>> Anyone who has any training in navigation, such as pilots, knows this.

And astronomers, amatuer or pro.
>>
> Not likely! The Mag pole is in Northern Canada, not Vermont....

The painting of the guy who searched for it in the 1800's sold for
about 6 megabucks recently. (That's loonies, not greenbacks.)

4712. Re: Touching an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 08:45:58 UTC
From: ab528@FreeNet.Carleton.CA
Message-ID: <a679c6$6pm$1@freenet9.carleton.ca>
Source record: 147097

"Jack Emm" (jackabella@lyonl.com) writes:
> My component audio system has an FM antenna. It is a short length of wire
> connected to a terminal at the rer of the tuner/amplifier. On a certain
> station the reception is mediocre. It improves greatly when I simply hold
> the wire. Is there something I can attach to the wire that will replicate
> whatever my body is doing to improve reception?

You don't watch the Mr. Bean stuff, starring R. Atkinson?

4713. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 09:07:19 UTC
From: Danny Hendrickx <daniel.hendrickx@alcatel.be>
Message-ID: <3C872DC7.BEC4A0E1@alcatel.be>
Source record: 147098
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Sorry, couldn't restrain myself.

This blonde has a business that goes broke.
That night she prays to God: "please God, help me, I'm out of business,
out of money. Let me win the lottery."
That night the lottery results show that someone else wins the lottery.
So the blonde prays again to God with the same request, but the next
night, again someone else wins the lottery.
When she sits down to pray for the third time, the sky bursts open with
a loud bang, and a heavy voice drones: "Listen, girl, you gotta help me
a little bit here, buy a lottery ticket !!"

Allodoxaphobia wrote:
>
> >> >
> >> >Two semi-retired professors were sitting on the porch having a couple
> >> >of brewskis. (This could also be referred to as a "verandah" or "deck")
>
> Or, patio ("paw-tea-ooo"), or lanai.
>

--
Regards,
_____
_____\ /_____
Feature Development Team Leader WR2A team 7 Services and SAD /
SW-Engineering - Routing - VJ33 Hendrickx Danny
phone : +32-3-240 3916 ALCATEL TELECOM
fax : +32-3-240 9899 Fr.Wellesplein 1
mailto:daniel.hendrickx@alcatel.be 2018 Antwerp Belgium
_____\ /_____
URL: http://www.se.bel.alcatel.be/CH_sector1/SS31/ \/
****
An expert is someone who takes a subject you understand and makes it
sound confusing.
****

4714. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 09:56:04 UTC
From: Rex <notreally@hotmail.invalid>
Message-ID: <27ee8uknaaljk4fpo5v1t4lftrd5flq9eb@4ax.com>
Source record: 147099
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

On 07 Mar 2002 00:35:42 GMT, Allodoxaphobia <QSB@QRM-QRN.net> wrote:

>Or, patio ("paw-tea-ooo"), or lanai.
>

St. Patrick's day is coming up. I was reminded of the Irishman,
Paddy O'Furnachure.

-Rex
[rexa -TheAtSign- Next4dnaiLetters -period- (UsualComEnd)]< my_eemale_addy

4715. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 09:59:41 UTC
From: 2aa7ya@remove4spam.nemontel.net
Message-ID: <3c873a0c.18877912@isp-west.usenetserver.com>
Source record: 147100

Used to have a Gap Titan (80-10) vertical in the backyard mounted on the tripod mount of an old C-Band TV dish. Worked great until an ice storm snapped it in half about 3 years ago. Very low noise on 40 and 80 meters.

73 de Stacey, AA7YA

On Wed, 06 Mar 2002 08:09:24 -0500, wood@itd.nrl.navy.mil (J. B. Wood) wrote:

>Hello, everyone. Does anyone have any experience with antennas from Gap
>Antenna Products (www.gapantenna.com)? Are we looking at vendor claims
>here ala the Crossed-Field Antenna? Thanks for your commment. Sincerely
>& 73s,
>
>John Wood (Code 5551) e-mail: wood@itd.nrl.navy.mil
>Naval Research Laboratory
>4555 Overlook Avenue, SW
>Washington, DC 20375-5337

4716. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 10:00:34 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a67do0$9j$1@slb7.atl.mindspring.net>
Source record: 147101
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I believe it was George Bernard Shaw who spelled fish "ghoti" - gh as in enough, o as in women, ti as in action.

So much for the rules of English pronunciation! Of course George was not an Englishman.

--Peter K1PO

"Jason" <jr_4226@yahoo.com> wrote in message news:3c86c3c7_1@news.iprimus.com.au...
> In QLD Australia, there is a place called Indooroopily. The locals say it
> as In-dro-pilly and if you call it in-door-oo-pilly (as it is spelt) all you
> get is a blank glazed stare, or blatant laughter! And Goondiwindi - said
> 'Gun'diwindi. Plenty more where these came from, too!
>
> BTW - calling all US citizens - please say Aluminium for me (remember -
> there is two 'i's in Alumin'i'um) :-) [had to get that one in!]
>
> I remember a thread in sci.physics on this subject of pronunciation and
> there was some wierd example of how the word fish should be spelt, based on
> the sounds in fish compared with other words with similar sounds. Can
> anyone rermember this?
>
> Jase.
>
> "John Woodgate" <jmw@jmwa.demon.co.uk> wrote in message
> news:nFFMn2AHsnh8Ew0f@jmwa.demon.co.uk...
> > I read in sci.electronics.design that Mark Zenier <mzenier@eskimo.com>
> > wrote (in <a65qc3asv1@eskinews.eskimo.com>) about 'HELP needed in
> > understanding Bode Plots', on Tue, 5 Mar 2002:
> > >My parents were perplexed by a cockney behind the information
> > >counter at a London train station who insisted on pronouncing
> > >Wolverhampton as "Woof-tun".
> >
> > False teeth or a weak joke? OTOH, I was approached once by a French girl
> > on Paddington Station, asking the way to the place she had written down
> > on a note - Boughton-on-the-Water. No, I didn't know how to pronounce it
> > either.
> > --
> > Regards, John Woodgate, OOO - Own Opinions Only.
> http://www.jmwa.demon.co.uk
> > Interested in professional sound reinforcement and distribution? Then go

> to
> > http://www.isce.org.uk
> > PLEASE do NOT copy news posts to me by E-MAIL!
>
>

4717. do's and don'ts of twin lead

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 10:47:19 UTC
From: IronHead <slipkid@kwiknet.net>
Message-ID: <WyHh8.190$21h2.7340112@news2.randori.com>
Source record: 147102

Can anyone tell me the do' s and don'ts of using twin lead. I hear it shouldn't touch anything of performance will suffer, when to use 300 ohm or 450 ohm, how long of a run can I use, etc...

any web pages i can research?
any help?

kc2fyp

4718. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 13:36:39 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <H1Kh8.19740$gK2.1488323@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147103

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:a667io$c0qmn$1@ID-124126.news.dfncis.de...
> Steve, if you don't know any numbers you confirm what I said. But don't
> worry about it. ;o)
>
> ==========
> Reg
>

Reg,

If my generalized posts or statements waste your time, don't read them. If you want concrete or exact numbers then ask a direct question with specifics rather than criticizing the general discussion.

The problem with your concern over an exact number is the following. Let's presume that I model or calculate (based on some derived formula) the resonant resistance of a folded dipole at its first parallel resonance (somewhere near 1/4 wavelength) and the number I get is 4,532 ohms. Does that help you understand the behavior of this antenna more than saying that the resonant resistance is greater than 1000 ohms or that it is several thousand ohms. I can guarantee that when you and 4 other people build the antenna and measure its resonant resistance there will be 5 new numbers that may range from 2,000 ohms to 8,000 ohms depending on a great number of factors the model and formula did not account for. There will also be 6 different numbers for the exact resonant frequency.

I don't see the real problem with generalized statements or range of numbers in a discussion of this type.

Steve VE9SRB

4719. Re: Monoband mobile coils vs multiband?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 14:39:47 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <TYKh8.19933$gK2.1494863@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147107

> Jerry Oxendine, K4KWH, wrote:
> I had a Texas Bugcatcher that wouldn't resonate at
> ALL on 17 meters unless the turns below were
> literally shorted out/jumpered together. I
> recognized this as--for lack of a better
> term--what I call "backlash" and define as
> the inability to resonate on certain frequencies or
> bands due to extranous loading on unused coil turns.

I attributed it to distributed capacitance between
the coil turns, but... whatever. It's not a hugely
serious problem because the rest of the antenna is
beginning to act as an 'antenna' at those higher
frequencies which tends to swamp out the power
absorbed by the unused-coil resonance. And I have
to confess that I don't look for a 50-ohm match
but rather something I can handle with a tuner
back inside the vehicle. Seems to work, though.
I talked to a JA on 17 while waiting to get on
I-10 here in Phoenix.

--
Jim Bromley, K7JEB k7jeb @ arrl.net
Glendale, Arizona

4720. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 14:39:48 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <UYKh8.19934$gK2.1494033@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147108

Jim Weir, WX6RST, wrote:

> > I just think 8.33 kHz spacing is the lousiest
> > engineering decision I've ever seen.

J. Harvey wrote:

> The Europeans have now figured out that they have
> to either hire air traffic controllers with six arms,
> or three times as many of the usual two-armed variety.
> :-)

Yeah, or with two mouths -- to be able to spit out:

"Call Albuquerque Center on 1-2-8 point 4-5-8-3-3"

--
Jim Bromley, K7JEB k7jeb @ arrl.net
Glendale, Arizona

4721. FS: Arrow Satellite Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 15:11:51 UTC
From: Bobby <bobbyr66@mindspring.com>
Message-ID: <Xns91CA66A99BF6bobbyr66mindspringcom@198.99.146.10>
Source record: 147109
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

For Sale:

Arrow Satellite Antenna

Work satellites with your HT

Model: 146/437-10WBP
(with Duplexer and split boom)
BNC connector
10 Watts max (for built-in duplexer)
Made for AO-27 and UO-14
3 elements for VHF, 7 for UHF

http://www.arrowantennas.com/146-437.html

Original Price $139
Excellent condition - used about three times

Email bobbyr66@mindspring.com

Bobby
KG4FJM
Atlanta

4722. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 16:59:34 UTC
From: richardharrison@webtv.net
Message-ID: <25794-3C879C76-1@storefull-116.iap.bryant.webtv.net>
Source record: 147111

Reg wrote:
"From where does Bailey obtain his numbers - whoever he is."

Arnold B. Bailey was a consulting engineer who also shared what he knew in lectures and seminars. There have been testimonials in this newsgroup from attendees of his seminars a half century ago. I am sorry I never met him but I prize my copy of his book "TV and Other Receiving Antennas".

Bailey says in part, of the folded dipole:
"We can class the folded dipole from a circuit standpoint as a closed loop having a total electrical length equal to approximately twice its over-all length. From this viewpoint, it is clear that FIRST RESONANCE will occur when the total circuit or conductor length is one half-wavelength, or a nominal over-all length of one quarter-wavelength.

At first resonance we can expect the resistance at the antenna terminals RA to be high and equal to ZA^2/RR. If we can assign proper values to ZA and RR (as we will do shortly), the resistance at the antenna terminals is easily computed. Bailey shows his work for the next 6 pages in producing the values I posted after going back and reading what Bailey had done.

Best regards, Richard Harrison, KB5WZI

4723. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 17:14:43 UTC
From: Larry Anderson <w6lar@cybertime.net>
Message-ID: <3C87A003.8E8BC499@cybertime.net>
Source record: 147110

Dan et all,

Hey I live here in CA, Yucaipa (Ukipa) to be exact and am a native of the state. I agree about living too close to LA. That is why I came east to Yucaipa back in '76.
I have 1/2 acre against the hills here and have never had a problem about my antennas or tower. Had two towers early on but now just the one. Yucaipa was not a city back then but now it is. We do have a tower section in the building codes but limit for the tower height is 65 ft. I'm up to 93' at the top of my VHF/UHF vertical and mast with X9 and A3WS. All they care about is the tower height. Lots of building going on with smaller lots size, etc and presume there are CC&R's all over the place.

A good radio club in town and my repeaters add to the emergency radio coverage for the local Fire dept and County RACES groups. Public service and good publicity has gone a long way to create a good image for Hams here.

Larry W6LAR

dan wrote:

> On Mon, 04 Mar 2002 13:35:56 -0800, "Al Lorona, Jr."
> <al_lorona@agilent.com> wrote:
>
> >dan wrote:
> >
> >> My question is, why move into an area that has restrictions? Is the
> >> area a status thing? Is it a wife driven thing? Is there positively
> >> no other option?
> >
> >and:
> >
> >> Maybe there are areas that span 100's of miles where CCR's are the
> >> norm, I don't know personally of any, but what the heck do I know
> >> anyway.
> >
> >
> >Dan, you've never been to California, have you?
> Yes, but it was many years ago. Still know quite a few people out
> there. None are hams. Would not live anywhere near LA. Really liked
> the high dessert areas east on Hy 10. Ukipa(sp?)/Calamesa(sp?). Did
> not care for earth that moved, came home to Milwaukee. Good earth,
> never moves, needs back hoe to move, good earth!!! :<}
> N9JBF
> >
> >Al W6LX

>
> Dan
>
> I've rambled enough, back to the rocking chair. ZZZZZZZZZ
>
> Remove left x for a direct reply.

4724. Re: do's and don'ts of twin lead

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 18:22:41 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8fbvt38s59v7b@corp.supernews.com>
Source record: 147112

A few don'ts with twinlead are:

A: Never coil it up. This will create all kinds of problems.
B: do not use foam filled twinlead for ham antennas
C: use proper standoffs made for use with twinlead.
D: Never place it next to metal, siding, roofing or whatever, as it will couple capacitively
F: do not use the clear plastic stuff, as sunlight and weather will deteriorate it very fast. It was not made for outdoor use.

I imagine there are more.
You can often use very long runs, this depends in part on the elevation of the antenna.
As for when to use 300 or 450 ohm, this depends on the need/design of what you are using it for.

"IronHead" <slipkid@kwiknet.net> wrote in message news:WyHh8.190$21h2.7340112@news2.randori.com...
> Can anyone tell me the do' s and don'ts of using twin lead. I hear it
> shouldn't touch anything of performance will suffer, when to use 300 ohm or
> 450 ohm, how long of a run can I use, etc...
>
> any web pages i can research?
> any help?
>
> kc2fyp
>
>

4725. Re: Touching an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 18:30:29 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8fce58c506a4a@corp.supernews.com>
Source record: 147113

"Heinz W. Wiggeshoff" <ab528@FreeNet.Carleton.CA> wrote in message
news:a679c6$6pm$1@freenet9.carleton.ca...
> "Jack Emm" (jackabella@lyonl.com) writes:
> > My component audio system has an FM antenna. It is a short length of
wire
> > connected to a terminal at the rer of the tuner/amplifier. On a certain
> > station the reception is mediocre. It improves greatly when I simply
hold
> > the wire. Is there something I can attach to the wire that will
replicate
> > whatever my body is doing to improve reception?
>
> You don't watch the Mr. Bean stuff, starring R. Atkinson?

Have not seen Mr. Bean since I left Rochester NY in 99.
Mildly amusing is he.

As for the antenna bit, he can add more wire, or use a longer one.
Also, changing the location of the wire may help.

4726. Re: Uniden Bearcat 350A Scanner BRAND NEW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 18:32:19 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8fchjsvrlja81@corp.supernews.com>
Source record: 147114
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner,rec.radio.swap

How about a baby fig tree?
You can grow it in a pot.

"S Ecurity Unlimited" <securit1951@earthlink.net> wrote in message
news:4Ath8.41134$0C1.3297624@newsread1.prod.itd.earthlink.net...
> I will also do trades as well.
>
>

4727. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 18:47:13 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8fddh6a7rkf93@corp.supernews.com>
Source record: 147115

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C868AEE.38B373BD@IEEE.org...
> AB7RS wrote:
> > A friend of mine has a CRAP vertical and I am very unimpressed.TG
>
> What is the permeability of CRAP?
> --
> cheers, CAM http://www.qsl.net/w5dxp

The permeability of crap is about the same as medium feces.

4728. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 18:50:27 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8fdjqjsoqrfc3@corp.supernews.com>
Source record: 147116

I took a look at the thing.
Sheesh, if I put something like that on the roof, I'd be accused of
starting a junkyard.
I had an idea of insulating the supports for one or both of our awnings,
and loading them as antennas.
Should work well on HF...

"J. B. Wood" <wood@itd.nrl.navy.mil> wrote in message
news:wood-0603020809240001@jbw-mac.itd.nrl.navy.mil...
> Hello, everyone. Does anyone have any experience with antennas from Gap
> Antenna Products (www.gapantenna.com)? Are we looking at vendor claims
> here ala the Crossed-Field Antenna? Thanks for your commment. Sincerely
> & 73s,
>
> John Wood (Code 5551) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

4729. Re: FS: Arrow Satellite Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 19:23:39 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C87BE3B.617625C5@crosslink.net>
Source record: 147117
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

Bobby wrote:
>
> For Sale:
>
> Arrow Satellite Antenna
>
> Work satellites with your HT
>
> Model: 146/437-10WBP
> (with Duplexer and split boom)....

How much???

KA3DWW

4730. Re: do's and don'ts of twin lead

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 19:53:27 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C87C518.65DECDBC@shaw.ca>
Source record: 147118

Wayne wrote:
>
> A few don'ts with twinlead are:
>

> B: do not use foam filled twinlead for ham antennas

Wayne,
I'm curious as to why you don't want foam filled
twinlead. I'm
willing to learn!

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4731. References on Half wave end fed top loaded vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 19:56:42 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a68ght$1f8c$1@news1.tribune.com>
Source record: 147019

I am planning to do some antenna work this summer, anticipating that the decline in sunspots will force me down to 30 and 40 within a couple of years. My all band doublet is only around 30 feet in the air so it's radiation angle on 30 and down is high.

I would like to try a Vertical, but elevated radials are out of the question, which eliminates a 1/4 wave Vertical.

This leads me to a half wave, end fed vertical, with a simple ground for the tank circuit.
My trees are only about 35 feet tall, but they spread out as they go up (maples).

I envision a "top hat" of 2 coil loaded radials stretched through the top of the tree, and a vertical wire hanging from that, down to the feed point.

Any body have a book or web site or article they want to recomend, as reading for this project? Getting the top hat into the tree will be difficult enough that I don't want to have to do it twice!

John
KA9CAR

4732. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 20:06:00 UTC
From: David Cook <nospam.davepc2@oz.net>
Message-ID: <HKPh8.68$uA5.322@rwcrnsc51.ops.asp.att.net>
Source record: 147020

Hi John, I believe you're asking specifically about the "Super C" antenna? From previous posts on this, it doesn't appear to be a very effective design. It's basically a resonator that significantly leaks RF (as far as I understand it).

In spite of some of the critical remarks about Gap antennas, my Titan has served me faithfully. It's an excellent all-band antenna, but you can't expect too much of a simple vertical. As for the fellow who didn't follow the suggestion to guy the antenna, I have no sympathy. I really like not having to lay out and maintain radials and with a minimal effort to attach guy ropes, the antenna is totally wind-proof. Like never washing and waxing your car, then complaining that the paint is no good.

-- Dave, WA0TTN

"J. B. Wood" <wood@itd.nrl.navy.mil> wrote in message
news:wood-0603020809240001@jbw-mac.itd.nrl.navy.mil...
> Hello, everyone. Does anyone have any experience with antennas from Gap
> Antenna Products (www.gapantenna.com)? Are we looking at vendor claims
> here ala the Crossed-Field Antenna? Thanks for your commment. Sincerely
> & 73s,
>
> John Wood (Code 5551) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

4733. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 20:09:51 UTC
From: David Cook <nospam.davepc2@oz.net>
Message-ID: <jOPh8.78$uA5.162@rwcrnsc51.ops.asp.att.net>
Source record: 147021

p.s. Stacey, I apologize. I re-read your posting and realized you were
actually saying postive things about the Titan.

-- Dave, WA0TTN

"David Cook" <nospam.davepc2@oz.net> wrote in message
news:HKPh8.68$uA5.322@rwcrnsc51.ops.asp.att.net...
> Hi John, I believe you're asking specifically about the "Super C" antenna?
> From previous posts on this, it doesn't appear to be a very effective
> design. It's basically a resonator that significantly leaks RF (as far as
I
> understand it).
>
> In spite of some of the critical remarks about Gap antennas, my Titan has
> served me faithfully. It's an excellent all-band antenna, but you can't
> expect too much of a simple vertical. As for the fellow who didn't follow
> the suggestion to guy the antenna, I have no sympathy. I really like not
> having to lay out and maintain radials and with a minimal effort to attach
> guy ropes, the antenna is totally wind-proof. Like never washing and
waxing
> your car, then complaining that the paint is no good.
>
> -- Dave, WA0TTN
>
> "J. B. Wood" <wood@itd.nrl.navy.mil> wrote in message
> news:wood-0603020809240001@jbw-mac.itd.nrl.navy.mil...
> > Hello, everyone. Does anyone have any experience with antennas from Gap
> > Antenna Products (www.gapantenna.com)? Are we looking at vendor claims
> > here ala the Crossed-Field Antenna? Thanks for your commment.
Sincerely
> > & 73s,
> >
> > John Wood (Code 5551) e-mail: wood@itd.nrl.navy.mil
> > Naval Research Laboratory
> > 4555 Overlook Avenue, SW
> > Washington, DC 20375-5337
>
>

4734. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 20:10:10 UTC
From: "Al Lorona, Jr." <al_lorona@agilent.com>
Message-ID: <3C87C922.6400D64E@agilent.com>
Source record: 147022

Larry Anderson wrote:
>
> Dan et all,
>
> Hey I live here in CA, Yucaipa (Ukipa) to be exact and am a native of the
> state. I agree about living too close to LA. That is why I came east to
> Yucaipa back in '76. I have 1/2 acre against the hills here and have never > had a problem about my antennas or tower. Had two towers early on but now
> just the one. Yucaipa was not a city back then but now it is.
>
> Larry W6LAR
>

No offense, Larry, but Yucaipa... sheesh... you may as well be in Kansas. You're certainly not where 99% of Californians are, which is in the urban or suburban zone.

But I am glad that you are essentially free to do what you like with your antennas. We all should be so fortunate. Have fun out there.

Al

4735. Re: Vertical plane dual band 80/40 loop kicks butt from a small lot.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 20:10:58 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8fiai94u4o215@corp.supernews.com>
Source record: 147023

I only saw one picture, that with the graphs, and could not see anything
legible in it.
You have, evidently, a poor design in your web page, and poor resolution in
that one picture that did show up.
So it is not just one person that has problems.
JFTR, I saved the picture and used Vue Print Pro to open it.
I run Win 2K and 800 X 600 screen resolution.
I also do a lot of work with many photos.

"Martin Meserve" <k7mem@myrealbox.com> wrote in message
news:270a577d.0203060550.6cc3218c@posting.google.com...
> Neil <njn2spamspamspamspam@adelphia.net> wrote in message
news:<3C85C9E8.89894AA8@adelphia.net>...
> > Dear tongaloa,
> >
> > You wrote:
> >
> > > Have a look.
> >
> > I tried. I looked at the largest image you stored, at the highest
> > resolution you provided. Regardless, the picture was too small and
fuzzy.
> >
> > Tried opening the picture in PhotoEd, blew it up gently, but the text is
> > not legible at any magnification.
> >
> > Obviously, the smaller, lower resolution pictures are of no help.
> >
> > It sounds like a simple design, should be easy to describe in your own
> > words? Not sure, does the picture include the detail of how much
distance
> > there is between ground and the bottom wire?
> >
> > Good DX,
> > -Neil / wb2cir-
>
> The resolution marked "1024" is not the highest resolution picture.
> Use the selection marked "Original". I found this one to be perfectly
> readable. Everything is crystal clear.
>
> --
> Martin E. Meserve, K7MEM
>
> I respond to news groups and E-Mail on my own time and therefore

> my responses may not be as timely as you, or I, would like them to
> be. If I seem to be ignoring you, send me another E-Mail to jog my
> memory. Opinions are my own and do not reflect the opinions of my
> employer.

4736. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 20:48:46 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <3C87D230.8A5F9581@earthlink.net>
Source record: 147024

For anyone interested, I did find JOHN Cook's
(not Charles Cook, another friend) papers on cable modeling
in Adobe Acrobat pdf. The main paper is 555kb.
A short typo correction addendum is 62kb.

John describes the measurements, skin effect,
sensitivity to errors for each parameter, curve fitting, etc.

Temperature was not included since the goal
was to have an agreed reference cable model at one
temperature for parties to compare competing systems.
I don't know whether he has since added the well-known
copper resistance vs. temperature relation to his model.
Other telephone cable simulation routines
do include temperature. I may have to drop him a note.

There are 4 more papers by John and others
(about 600kb total) of interest that show measured data
and the derived Cook parameters. The parameters
are in T1.417, but not the measured data
or any discussion.

There is nothing special about the model to
unshielded twisted pairs. It could apply
to nearly any metallic transmission line.
I am not aware of any non-telephone use so far.

Just drop me note off-line if you want copies.

Cheers, 73,

Ron McConnell
w2iol@arrl.net

4737. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 21:06:09 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8fli2hd5ku411@corp.supernews.com>
Source record: 147025

I salvaged one by using an automobile bumper jack.
They have a very good lifting ability.
Main thing is to have a good quality one that does not slip, and good support under its base, as well as something that will get a good grip on the rod.
The one I yanked was in sandstone, so was not easy to get started, but once I did, it came out with relative ease.
I've also used this type of jack to pull posts and to break the bead loose on a tire.
Mine has a piece that fits into the slot in some bumpers, but I use a piece of chain that will fit onto that bit.
And always be prepared for something breaking.
Wear safety glasses to protect your eyes.

"Jerry" <jerryaa@prodigy.net> wrote in message news:CW3h8.3232$5G3.395827312@newssvr16.news.prodigy.com...
> I have some ground rods in the ground that I don t need now. Is there a way
> to extract them, other than excavation? This is copper clad steel 8 foot.
>
>

4738. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 21:07:33 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8flkqlqbt7k34@corp.supernews.com>
Source record: 147026

That's what I did, but I used my bumper jack.
Handy item to have...
I also use the base plates as wheel chocks.

"K7SAM" <2smoore@nemontel.net> wrote in message
news:X74h8.12017$hK4.4340443@e420r-atl1.usenetserver.com...
> I've had luck by wrapping a chain around the ground rod, and attaching the
> chain to my handy man jack and just jacking it right out of the ground.
>
>
>

4739. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 21:12:10 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <3C87D7AA.2BE6D20F@earthlink.net>
Source record: 147027

I forgot to mention that the T1.417 twisted pair telephone
cable models are usually good to 30MHz.
They are used for VDSL system data capacity calculations
for >= 26Mb/s of digital data using up to 12MHz
of analog spectrum through 3000 ft (~ 1000m) of 24 AWG
or about 64dB at 12MHz.
Since xDSL signals start at about 14dBm total spread across
the 12MHz, that gets to be qrp in a hurry.

For xDSL purposes, there is little usable data capacity
and useful outside telephone loop plant range above 12MHz.

Cheers, 73,

Ron McC.
w2iol

4740. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 21:33:13 UTC
From: Larry Anderson <w6lar@cybertime.net>
Message-ID: <3C87DC99.F368DD62@cybertime.net>
Source record: 147028

No offense AL, we are almost among the urban/suburban areas you refer too. Maybe you don't know how close those urban/suburban areas are to me now. Our town
went form less than 20K in '76 to almost 45K now and other towns near by are 100K to 200K strong. So we are on the short path to joining all the rest of the
Southern California. The interstate, I-10, corrodore from Redlands all the way to Banning to the east is building out with housing for the masses. I will be
retiring in a few years and may look elsewhere, not Kansas as I prefer shaking ground over a vacuum to the stars, and will leave this area and try to
remember when it was "Way Out There!"

I am sure I'll have a heck of a time finding a place to play with antennas at my leasure as I can now.

BTW, there are quite a few of us here and lots of towers showing on the skyline.

73, Larry W6LAR

"Al Lorona, Jr." wrote:

> Larry Anderson wrote:
> >
> > Dan et all,
> >
> > Hey I live here in CA, Yucaipa (Ukipa) to be exact and am a native of the
> > state. I agree about living too close to LA. That is why I came east to
> > Yucaipa back in '76. I have 1/2 acre against the hills here and have never > had a problem about my antennas or tower. Had two towers early on but now
> > just the one. Yucaipa was not a city back then but now it is.
> >
> > Larry W6LAR
> >
>
> No offense, Larry, but Yucaipa... sheesh... you may as well be in
> Kansas. You're certainly not where 99% of Californians are, which is in
> the urban or suburban zone.
>
> But I am glad that you are essentially free to do what you like with
> your antennas. We all should be so fortunate. Have fun out there.
>
> Al

4741. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 21:51:44 UTC
From: VE1BLL@rac.ca
Message-ID: <8a615218.0203071351.20717046@posting.google.com>
Source record: 147029

"K7JEB" wrote:
> "Call Albuquerque Center on 1-2-8 point 4-5-8-3-3"

My information regarding the new bandplan is as follows:

... (for example)
Channel "121.000" is actually 121.0000 MHz (wide BW)
Channel "121.005" is actually 121.0000 MHz (narrow BW)
Channel "121.010" is actually 121.0083 MHz (narrow BW)
Channel "121.015" is actually 121.0167 MHz (narrow BW)
Channel "121.020" is skipped !
Channel "121.025" is actually 121.0250 MHz (wide BW)
... (etc.)

I'm not sure if they bother with the tens of hertz or not. Probably
doesn't matter eiher way given the tolerances.

So they don't really have any more digits to worry about than before -
still just six digits. And they never have to explain 'bandwidth' to
the pilots.

:-)

4742. PARTING OUT BASS BOAT - TRADE FOR HAM GEAR

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 22:18:18 UTC
From: nedrog@aol.comNOSPAM
Message-ID: <20020307171818.18272.00000020@mb-fx.aol.com>
Source record: 147030

65hp Mercury outboard motor, w/console controls, $ 500.00
12v Fore & anchor lights, $10.00 each
2 anchor mates w/12lb anchors, $10.00 each
16 gal gas can, $25.00
2 seats, 1 has bicicyle pole $20.00 each
16' fiberglass boat $500.
or obo on all.

Only interested in local deals in the Baltimore, MD to Richmond, VA area.

Wanted:
Shorty Tri-Bander for 10m-20m
6m 6el yagi
1/2" hard line - about 700 feet

73's Howard W3CQH
W3CQH@ARRL.NET
or
Nedrog@aol.com

4743. Re: FS: Arrow Satellite Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 23:37:21 UTC
From: Bobby <bobbyr66@mindspring.com>
Message-ID: <Xns91CABD70B22BE83283902874@155.229.126.69>
Source record: 147031
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space

[posted and mailed]

Vito <vito@crosslink.net> wrote in news:3C87BE3B.617625C5@crosslink.net:

> How much???
>
> KA3DWW
>

$120 Delivered.

4744. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 23:51:16 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a68udh$4e8$1@slb6.atl.mindspring.net>
Source record: 147032

Ron:

Thanks for the pdf files of those papers.

I had hard copies of all of those at one time, but I left them in my offices
at my previous employers when I left a few years ago.
I am still amazed at how closely those simple models can predict actual
impedance and insertion loss on real lines.

I'll share my finite element analysis Fortran programs with you when I get
them "cleaned up" for general use.

--Peter K1PO

"Ron McConnell" <rcmcc@earthlink.net> wrote in message
news:3C87D230.8A5F9581@earthlink.net...
>
> For anyone interested, I did find JOHN Cook's
> (not Charles Cook, another friend) papers on cable modeling
> in Adobe Acrobat pdf. The main paper is 555kb.
> A short typo correction addendum is 62kb.
>
> John describes the measurements, skin effect,
> sensitivity to errors for each parameter, curve fitting, etc.
>
> Temperature was not included since the goal
> was to have an agreed reference cable model at one
> temperature for parties to compare competing systems.
> I don't know whether he has since added the well-known
> copper resistance vs. temperature relation to his model.
> Other telephone cable simulation routines
> do include temperature. I may have to drop him a note.
>
> There are 4 more papers by John and others
> (about 600kb total) of interest that show measured data
> and the derived Cook parameters. The parameters
> are in T1.417, but not the measured data
> or any discussion.
>
> There is nothing special about the model to
> unshielded twisted pairs. It could apply
> to nearly any metallic transmission line.
> I am not aware of any non-telephone use so far.
>
> Just drop me note off-line if you want copies.
>

> Cheers, 73,
>
> Ron McConnell
> w2iol@arrl.net
>
>

4745. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 23:55:48 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a68uug$455$1@slb4.atl.mindspring.net>
Source record: 147033

Ron:

[snip]
"Ron McConnell" <rcmcc@earthlink.net> wrote in message
news:3C863F14.D71926EB@earthlink.net...
> I arranged for Ed Hare, W1RFI, to run ham radio interference
> tests in the Phoenix area where Qwest has some 50,000
> pre-standard VDSL systems deployed. USWest/Qwest
> had been very careful in installing these systems
> with attention to cable balance, replacing old cable, etc.
> Ed had to lay his antenna on top of the VDSL box
> to pick up much. I think he has a report in his RFI
> area on the ARRL web page.
> Cheers, 73,
> Ron McConnell
> w2iol
> ARRL RFITG
> http://www.vdslcoalition.net
[snip]

Did those Phoenix area Qwest VDSL systems that Ed Hare tested for interference have the amateur band "notches" implemented in the VDSL transmitters? Do you know whose VDSL chip sets were used in those Qwest systems? Were they Savan/Infineon or Broadcom's QAM systems or the DMT systems?

Best,

--Peter K1PO

4746. Re: Scanner Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-07 23:59:46 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8fvnhnhbs1bdb@corp.supernews.com>
Source record: 147034

Radio shack sells a scanner type Discone that also does well for 6 meters
and up transmitting.
It sells for $59.95, and should be available at a store in your area.
I'm using one at this time, and it does quite well.
This is a modified Discone, with a loading coil and whip above the top.
I have about a 1.5:1 match on mine all across the 2 meter band.

--
Wayne. <|:^)>
KG6KFE
http://www.wayneleake.net

"Bruce Nolte" <brucenol@abs.net> wrote in message
news:3C845650.DD1D7195@abs.net...
> Well, I decided it was time to drop my tower for service due mainly to a
> terminally sluggish 35 year old Ham M Rotor, but while the tower is
> down, I have several other items I would like to address. One of these
> items is a side-mounted scanner antenna, which I brought at Radio Shack
> several years ago for use with my scanner, and also found useful as an
> omnidirectional TV antenna, when mounted to a splitter. It is a cheap
> design using steel hardware and only six elements, and has corroded to
> the point of utter uselessness, except possibly as a dummy load.
>
> I would like to replace it with a more robust design. I made an attempt
> to build one this morning out of some scrap 5/8 aluminum tubing and 3/8
> thick aluminum plate, but with my current tooling I was unable to drill
> the necessary 5/8 diameter holes at the required 30 degree angle neatly
> enough to retain the tubes securely. My idea is a 12 element discone,
> with 48 inch diagonals and 32 inch horizontals, 6 of each. I may also
> decide to make it smaller and use a 54 inch whip on top to extend the
> range into the 50 Mhz range. Besides the difficulty of drilling large
> holes at an angle into Aluminum, the other problems I forsee are
> perhaps corrosion, and limited response at high frequencies (~800 Mhz)
> due to the large element diameter.
>
> I am also considering buying a new antenna, but so far the Radio Shack
> piece of junk is the only thing I can easily obtain locally. Can anyone
> point me to a suitable design that I might be able to construct fairly
> easily, or a good source for a decent, but reasonably priced (up to
> about $75.00 or so) commercially made antenna I might be able to find in
> the Baltimore area, or get on order within a couple of days.
>

4747. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 00:06:06 UTC
From: temporary59@aol.com
Message-ID: <20020307190606.21342.00000370@mb-mq.aol.com>
Source record: 147035

>o offense AL, we are almost among the urban/suburban areas you refer too.
>Maybe you don't know how close those urban/suburban areas are to me now. Our
>town
>went form less than 20K in '76 to almost 45K now and other towns near by are
>100K to 200K strong. So we are on the short path to joining all the rest of
>the
>Southern California. The interstate, I-10, corrodore from Redlands all the
>way to Banning to the east is building out with housing for the masses. I
>will be
>retiring in a few years and may look elsewhere, not Kansas as I prefer
>shaking ground over a vacuum to the stars, and will leave this area and try
>to
>remember when it was "Way Out There!"
>
>I am sure I'll have a heck of a time finding a place to play with antennas at
>my leasure as I can now.
>
>BTW, there are quite a few of us here and lots of towers showing on the
>skyline.
>
>73, Larry W6LAR
>
>"Al Lorona, Jr." wrote:
>
>> Larry Anderson wrote:
>> >
>> > Dan et all,
>> >
>> > Hey I live here in CA, Yucaipa (Ukipa) to be exact and am a native of
>the
>> > state. I agree about living too close to LA. That is why I came east to
>> > Yucaipa back in '76. I have 1/2 acre against the hills here and have
>never > had a problem about my antennas or tower. Had two towers early on but
>now
>> > just the one. Yucaipa was not a city back then but now it is.
>> >
>> > Larry W6LAR
>> >
>>
>> No offense, Larry, but Yucaipa... sheesh... you may as well be in
>> Kansas. You're certainly not where 99% of Californians are, which is in
Larry--
Come on now. Don't spill the beans. I live in Redlands, just a few miles back
toward LA. You don't want people to know about that nice golf course in

Yucaipa that I played last weekend in 70 degree weather, with a view of the 12,000 ft. snow capped Mt. San Giorgonio looking down.

Wayne
w5gie

4748. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 00:29:00 UTC
From: dan <danlx@execpc.com>
Message-ID: <3c880890$0$35578$272ea4a1@news.execpc.com>
Source record: 147036

On Thu, 07 Mar 2002 09:14:43 -0800, Larry Anderson
<w6lar@cybertime.net> wrote:

>Dan et all,
>
>Hey I live here in CA, Yucaipa (Ukipa) to be exact and am a native of the
>state. I agree about living too close to LA. That is why I came east to
>Yucaipa back in '76.
>I have 1/2 acre against the hills here and have never had a problem about my
>antennas or tower. Had two towers early on but now just the one. Yucaipa was
>not a city back then but now it is. We do have a tower section in the
>building codes but limit for the tower height is 65 ft. I'm up to 93' at the
>top of my VHF/UHF vertical and mast with X9 and A3WS. All they care about is
>the tower height. Lots of building going on with smaller lots size, etc and
>presume there are CC&R's all over the place.
>
>A good radio club in town and my repeaters add to the emergency radio
>coverage for the local Fire dept and County RACES groups. Public service and
>good publicity has gone a long way to create a good image for Hams here.
>
>
>Larry W6LAR
>
Hi Larry,
My buddy and his brother own Calmesa Glass and mirror, or did. They
were talking about selling out. They also have places in Arizona. I
almost partnered with the younger brother out there, oh well. If you
run into Bob, the younger of the 2, tell him Dan said hi. Take care
Dan

I've rambled enough, back to the rocking chair. ZZZZZZZZZ

Remove left x for a direct reply.

4749. Re: PARTING OUT BASS BOAT - TRADE FOR HAM GEAR

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 01:11:02 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <GcUh8.4938$k81.160189@news2.east.cox.net>
Source record: 147037

I think this was intended for the boatanchor group..

"NEDROG" <nedrog@aol.comNOSPAM> wrote in message
news:20020307171818.18272.00000020@mb-fx.aol.com...
> 65hp Mercury outboard motor, w/console controls, $ 500.00
> 12v Fore & anchor lights, $10.00 each
> 2 anchor mates w/12lb anchors, $10.00 each
> 16 gal gas can, $25.00
> 2 seats, 1 has bicicyle pole $20.00 each
> 16' fiberglass boat $500.
> or obo on all.
>
> Only interested in local deals in the Baltimore, MD to Richmond, VA area.
>
> Wanted:
> Shorty Tri-Bander for 10m-20m
> 6m 6el yagi
> 1/2" hard line - about 700 feet
>
> 73's Howard W3CQH
> W3CQH@ARRL.NET
> or
> Nedrog@aol.com

4750. Re: Touching an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 01:54:04 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <0RUh8.4965$k81.163348@news2.east.cox.net>
Source record: 147038

You can buy a small inexpensive "dipole" antenna at RadioShack and other stores that sell hi-fi gear. Your best solution is a small FM antenna mounted outdoors. If you have a TV antenna mounted on the house, it will work very well on FM -- you will need a special splitter so you can feed the TV and FM at the same time.

Regards

Pete

"Jack Emm" <jackabella@lyonl.com> wrote in message news:kfBh8.32$_M.849@paloalto-snr2.gtei.net...
> My component audio system has an FM antenna. It is a short length of wire
> connected to a terminal at the rer of the tuner/amplifier. On a certain
> station the reception is mediocre. It improves greatly when I simply hold
> the wire. Is there something I can attach to the wire that will replicate
> whatever my body is doing to improve reception?
>
>

4751. Re: 5 dollar emails

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 02:06:10 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C881C87.463ADEE6@icok.net>
Source record: 147039

I for one would appreciate it if you would take this
garbage somewhere else. Do you have any idea what else
'they' do when you run that program? I do, and you
couldn't pay me enough to run it. You know all those
pass-words you ~thought~ were secret? Guess what...
'Doc

4752. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 02:34:40 UTC
From: GenderBender <alterego@msnn.com>
Message-ID: <4rVh8.370148$eS3.27847717@bin3.nnrp.aus1.giganews.com>
Source record: 147040

I guess you guys use your brains, and I use my brawn? I use a pipe wrench to loosen them up by spinning the rod around then pulling it out depending on the soil and the length of the rod, on occasion some persuasion is need in the form of a lever.

"Wayne" <wayneleake@wayneleake.net> wrote in message
news:u8fli2hd5ku411@corp.supernews.com...
> I salvaged one by using an automobile bumper jack.
> They have a very good lifting ability.
> Main thing is to have a good quality one that does not slip, and good
> support under its base, as well as something that will get a good grip on
> the rod.
> The one I yanked was in sandstone, so was not easy to get started, but
once
> I did, it came out with relative ease.
> I've also used this type of jack to pull posts and to break the bead
loose
> on a tire.
> Mine has a piece that fits into the slot in some bumpers, but I use a
piece
> of chain that will fit onto that bit.
> And always be prepared for something breaking.
> Wear safety glasses to protect your eyes.
>
> "Jerry" <jerryaa@prodigy.net> wrote in message
> news:CW3h8.3232$5G3.395827312@newssvr16.news.prodigy.com...
> > I have some ground rods in the ground that I don t need now. Is there a
> way
> > to extract them, other than excavation? This is copper clad steel 8
foot.
> >
> >
>
>

4753. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 02:45:59 UTC
From: "Helen E. Hansen" <jmhansen@erols.com>
Message-ID: <a698km$b2v$1@bob.news.rcn.net>
Source record: 147041
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Rex" <notreally@hotmail.invalid> wrote in message
news:27ee8uknaaljk4fpo5v1t4lftrd5flq9eb@4ax.com...
> On 07 Mar 2002 00:35:42 GMT, Allodoxaphobia <QSB@QRM-QRN.net> wrote:
>
> >Or, patio ("paw-tea-ooo"), or lanai.
> >
>
> St. Patrick's day is coming up. I was reminded of the Irishman,
> Paddy O'Furnachure.
>
> -Rex
> [rexa -TheAtSign- Next4dnaiLetters -period- (UsualComEnd)]<
my_eemale_addy

Or the Irish Law firm, O'Sure and Begorrah
Best Wishes,
John Hansen

A man's interest in women and mountains is directly proportional
to how much time he spends on top of them.

4754. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 02:51:15 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.16f1c6fc38319fb49896b7@news.onlynews.com>
Source record: 147042

In article
<slrna8aik2.rti.Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>,
Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid says...
> On Tue, 05 Mar 2002 16:49:56 GMT, AB2HR <ab2hr@arrl.net> wrote:
> > noon... This is not the case... The best way or fixing solar noon is
> > to put a stake in the ground... at about 11am, start plotting the
> > shadow of the stake every few minutes... You should see the shadows
> > growing shorter, then longer again... When the shadow is at it's
> > shortest, you'll have an indication of when solar noon occurred, and
> > the shadow will be pointing to the true north pole...
>
> that works. But it pretty much requires you to sit out there in the
> sun for an hour or two watching the shadows move.

Isn't that called "fishing"?

>
> A similar, but easier for me, method is to mark the tip of the
> shadow at 11am, then draw an arc (use a string tied to the center
> point) around the north side of the stake starting at the mark.
> When the tip of the shadow touches the east side of the arc, mark
> that point. Draw a straight line between the two points on the arc.
> Draw a line square from the first line to the stake.
>
> That last line runs true north and south.
>
> sdb
>

4755. Re: Scanner Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 03:05:47 UTC
From: "J. Harvey" <JM001.Harvey@sympatico.ca>
Message-ID: <hUVh8.14509$4E4.3121279@news20.bellglobal.com>
Source record: 147043

"Wayne"
> Radio shack sells a scanner type Discone
> It sells for $59.95, and should be available
> at a store in your area.

Cdn $49.95 (~US$30) CLEARANCE in Canada. Lots of inventory two weeks ago
when I checked the 'Find It In Store' button on www.RadioShack.ca

4756. Cushcraft A4

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 03:26:30 UTC
From: Kenneth Fattmann <na0y@worldnet.att.net>
Message-ID: <GbWh8.21376$gK2.1591932@bgtnsc04-news.ops.worldnet.att.net>
Source record: 147044

I am looking for a gent named Neil that helped me with a A4 problem last fall or any body else that can help me with a new problem.

Had a 15 meter trap on the driven element flash over and left a carbon trail. Cleaned up the trap and now workes fine but have no substance to re-coat the trap winding. Does anyone know what the product is that Cushcraft paints on there bare aluminum wire they use in these traps. It must be rather good at RF frequencies and a good high voltage insulator.

I have now idea what caused this trap to flas over unless it might have been what looked like a small peice two of what looked like grass. Any ideas?

Thanks es 73 de Ken NAna0y@worldnet.att.net or na0y@arrl.net

4757. Re: Anti-virus companies

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 04:02:15 UTC
From: 2aa7ya@remove4spam.nemontel.net
Message-ID: <3c88378f.83787252@isp-west.usenetserver.com>
Source record: 147045

On Tue, 05 Mar 2002 18:33:53 -0000, mike.luther@ziplog.com wrote:
>
>As an additional note, in OS/2 you can use the command line form all in
>lower case please:
>
> netstat -s
>
>That will tell you what's connected to your box at that particular time.
>If it has established connections to what you don't want there, you can
>sure enough start looking for who, why, when and what to do about it.
>I have no idea how any of this works at command line levels in non-OS/2
>systems, but the information, the techniques, are all pretty much the
>same for an in-depth study and learning project about all this mess.

Yes, the command also works in Win 9x/2000/XP in a DOS window.

Stacey, AA7YA

4758. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 04:26:28 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203072026.7c02fb75@posting.google.com>
Source record: 147046

VE1BLL@rac.ca (J. Harvey) wrote in message
news:<8a615218.0203071351.20717046@posting.google.com>...
> "K7JEB" wrote:
> > "Call Albuquerque Center on 1-2-8 point 4-5-8-3-3"

That should be a hoot...:(
>
> My information regarding the new bandplan is as follows:
>
> ... (for example)
> Channel "121.000" is actually 121.0000 MHz (wide BW)
> Channel "121.005" is actually 121.0000 MHz (narrow BW)
> Channel "121.010" is actually 121.0083 MHz (narrow BW)
> Channel "121.015" is actually 121.0167 MHz (narrow BW)
> Channel "121.020" is skipped !
> Channel "121.025" is actually 121.0250 MHz (wide BW)
> ... (etc.)
>
> I'm not sure if they bother with the tens of hertz or not. Probably
> doesn't matter eiher way given the tolerances.
>
> So they don't really have any more digits to worry about than before -
> still just six digits. And they never have to explain 'bandwidth' to
> the pilots.
>
> :-)

I've never heard them use more than 5 digits so far in the real world.
Many times just 4. But so far around here there are only 2 digits past
the mhz. IE: 132.27, 132.77, etc. Many times they will just spit out
32.77 as a readback.. Pilots and controllers always look for a
shortcut around here as it's busy. IE: "contact ground point niner"
They don't even bother with the mhz. Most of the ground controls are
on 121. -7,8,9. The controllers will love this new bandplan...
Not! :/ MK

4759. Re: References on Half wave end fed top loaded vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 04:33:59 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203072033.4a172021@posting.google.com>
Source record: 147047

"KA9CAR" <nospam@nospam.usa> wrote in message news:<a68ght$1f8c$1@news1.tribune.com>...
> I am planning to do some antenna work this summer, anticipating that the
> decline in sunspots will force me down to 30 and 40 within a couple of
> years. My all band doublet is only around 30 feet in the air so it's
> radiation angle on 30 and down is high.
>
> I would like to try a Vertical, but elevated radials are out of the
> question, which eliminates a 1/4 wave Vertical.
>
> This leads me to a half wave, end fed vertical, with a simple ground for the
> tank circuit.
> My trees are only about 35 feet tall, but they spread out as they go up
> (maples).
>
> I envision a "top hat" of 2 coil loaded radials stretched through the top of
> the tree, and a vertical wire hanging from that, down to the feed point.
>
> Any body have a book or web site or article they want to recomend, as
> reading for this project? Getting the top hat into the tree will be
> difficult enough that I don't want to have to do it twice!
>
> John
> KA9CAR

The halfwave will work fine. You don't need the radial thingys though.
All you need is a 1/2 wave vertical, wire or tubing, and a single turn
gamma loop match at the base. I could tell you the dia and cap needed,
but I'd need to know the freq. Actually, I could get you fairly close
by giving you the 10m specs, which are about 11 inches dia coil, and
about 50 pf worth of cap. I make the caps from coax. Just take those
specs and double for 20m, 4 times for 40m, etc. I use one of these on
10m with no radials at all, and it does quite well at only 20 ft up. I
make the coils from soft 3/8 inch copper tubing usually. MK

4760. Re: Parametric equations for skin effects in practical transmission lines?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 04:52:03 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <3C88436E.56F4EA6C@earthlink.net>
Source record: 147048

Hi, Peter,

The Qwest/USWest pre-standard VDSL systems
in Phoenix are made by NLC using Broadcom QAM chips.
I don't believe they had/have the ham band notches.

I'm looking forward to your cable programs.
I have been contemplating writing my own,
but if I can steal them...
I _really_ do miss UNICCAP. [R.I.P. :( ]
The project was in my Bell Labs organization in WH.
I dug out the 26-year old manual last week
to look some model info.

73,
Ron

4761. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 06:13:37 UTC
From: Mike <km6ab@pacbell.net>
Message-ID: <3C88568A.1BDCADFF@pacbell.net>
Source record: 147049

I had a GAP titan that went together well, had a decent match on all advertised bands and performed very poorly compared to most antennas I have used. My bad experience is from direct A-B comparisons with a Titan and several other types of antennas. There is a lot of info and postings about this topic and a google group search will flood your computer with GAP testimonials. From what I can tell most of the praises come from users who have not compared the GAP to anything else.

4762. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 06:54:20 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C886066.ABD3249A@bellatlantic.net>
Source record: 147050

Reg Edwards wrote:

> Unless some numbers are put to it you are wasting everybody's tim.
> ==========

You may have something specific in mind, but I must say I
find the posts fascinating and helpful - not a waste of time at all.

4763. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 10:41:57 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8h5blbulp6lce@corp.supernews.com>
Source record: 147051
Cross-posted to:
alt.ham-radio,alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.misc

Now I recall that particular movie.
It involved a Ham operator that the by made friends with, and after the Ham
died, I think, the boy tried using the equipment.
But it's been a number of years since I saw that one.

--
Wayne. <|:^)>
KG6KFE
http://www.wayneleake.net

<keebird@hotmail.com> wrote in message
news:s5patto26gos8jb08d2sdhh788jjsbasmq@4ax.com...
> Try here or seach the web...
>
>
http://classicfilm.about.com/gi/dynamic/offsite.htm?site=http://us.imdb.com/
Title%3FTestament%2B%281983%29
>
> 73
>
> KJ6AH
>
>
>
> On Tue, 23 Oct 2001 04:48:41 GMT, cathexis@your.haterols.com
> (Reticulum) wrote:
>
> >On Tue, 23 Oct 2001 03:15:11 GMT, "keebird@hotmail.com"
<keebird@hotmail.com>
> >wrote:
> >
> >>See if you can rent a movie called Testament. I saw it in the theater
> >>during the 1980's. It's about life in the US after a nuclear strike
> >>and the main character is a little boy that uses a ham radio to talk
> >>to people outside his city.
> >>
> >>73's,
> >>
> >>KJ6AH
> >>
> >
> > that's a new one on me. I thought I'd seen all the
> >Soyleny Green/Omega Man/ Dawn of the Dead

> >movies out there. any other facts??
> > Reticulum
> >
> >Remove "your.hat" when replying via e-mail
>

4764. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 10:55:33 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8h656ecl0u5c0@corp.supernews.com>
Source record: 147052
Cross-posted to:
alt.ham-radio,alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.misc

Let's try Mickey Rooney, not Andy Rooney...

--
Wayne. <|:^)>
KG6KFE
http://www.wayneleake.net

"Mike Silva" <mjsilva697@earthlink.net> wrote in message
news:27085883.0110292052.15515b85@posting.google.com...
> "Rabbit Music" <illcryinstead@home.com> wrote in message
news:<BBrA7.50833$YL3.12876309@news3.rdc1.on.home.com>...
> > Hello. I was wondering if anybody might be able to recommend some good
> > movies that somehow involve ham radio. I've seen Frequency. Are there
any
> > others?
> >
> > Thanks in advance!
> >
> > Nick
>
> I've heard there's a late '30s/early '40s movie titled something like
> "Here is Your Hobby: Ham Radio" or "This is Your Hobby: Ham Radio" or
> somesuch. Supposedly it's been on TCM. There's also an Andy Rooney
> movie where he's a ham (the second Boy's Town movie?), and one of the
> Nancy Drew movies has Nancy's boy friend hamming it up with a full
> rack (of radio equipment...) Not to mention that Bonita Granville was
> a cutie...
>
> 73,
> Mike, KK6GM

4765. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 10:57:40 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8h694e5agdodf@corp.supernews.com>
Source record: 147053
Cross-posted to:
alt.ham-radio,alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.misc

Actually, the HW101 was a pretty decent unit.

--
Wayne. <|:^)>
KG6KFE
http://www.wayneleake.net

"Russ Thompson" <russthom@nospam.home.com> wrote in message
news:wPZJ7.104052$pb4.58262430@news2.rdc2.tx.home.com...
> When I was a novice (circa 1971) there was a movie about an armored car
> company heist in New York. Living next to the company was a young teen
male
> in a wheel chair that called for help on his HW-101. That is all I
remember
> about the movie, and can't remember the name. Sure would like to see the
> movie again. At 15, I thought the HW-101 was the cat's meow!
>
> DE KX5G
>
>

4766. Re: Cushcraft A4

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 11:25:28 UTC
From: Neil <DontDoIt@ImNotHere.com>
Message-ID: <618h8uk2shs62ku54d94d2d4761okafjr4@4ax.com>
Source record: 147054

Hi Ken, that'd be me. Sadly, I don't know what they used to coat the
wire, perhaps someone else here can comment?

Regards;
Neil
K1VY@arrl.net

On Fri, 08 Mar 2002 03:26:30 GMT, "Kenneth Fattmann"
<na0y@worldnet.att.net> wrote:

>I am looking for a gent named Neil that helped me with a A4 problem last
>fall or any body else that can help me with a new problem.
>
>Had a 15 meter trap on the driven element flash over and left a carbon
>trail. Cleaned up the trap and now workes fine but have no substance to
>re-coat the trap winding. Does anyone know what the product is that
>Cushcraft paints on there bare aluminum wire they use in these traps. It
>must be rather good at RF frequencies and a good high voltage insulator.
>
>I have now idea what caused this trap to flas over unless it might have been
>what looked like a small peice two of what looked like grass. Any ideas?
>
>Thanks es 73 de Ken NAï¿½ na0y@worldnet.att.net or na0y@arrl.net
>

4767. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 12:09:02 UTC
From: k1bqt@aol.com
Message-ID: <20020308070902.22445.00000263@mb-mi.aol.com>
Source record: 147055

...And, of course, one week after billions of dollars in Com equipment have been swapped out and junked (remember the glut of non-TSO'd transponders and radios in the 70's), it'll go digital and we can do it all again. Should be great for the 2-meter AM buffs.

Rick K1BQT

4768. Re: References on Half wave end fed top loaded vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 13:11:28 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203080511.5854ad0a@posting.google.com>
Source record: 147056

"KA9CAR" <nospam@nospam.usa> wrote in message news:<a68ght$1f8c$1@news1.tribune.com>...
> I am planning to do some antenna work this summer, anticipating that the
> decline in sunspots will force me down to 30 and 40 within a couple of
> years. My all band doublet is only around 30 feet in the air so it's
> radiation angle on 30 and down is high.
>
> I would like to try a Vertical, but elevated radials are out of the
> question, which eliminates a 1/4 wave Vertical.
>
> This leads me to a half wave, end fed vertical, with a simple ground for the
> tank circuit.
> My trees are only about 35 feet tall, but they spread out as they go up
> (maples).
>
> I envision a "top hat" of 2 coil loaded radials stretched through the top of
> the tree, and a vertical wire hanging from that, down to the feed point.
>
> Any body have a book or web site or article they want to recomend, as
> reading for this project? Getting the top hat into the tree will be
> difficult enough that I don't want to have to do it twice!
>
> John
> KA9CAR

The March/April issue of QEX has an article on a grounded half wave
vertical antenna. You might want to take a look at it.

The article talks about the problems with the typical half wave
vertical and proposes a solution. I wouldn't mind trying it on 30 Mtr
my self.

Jim
N8EE

4769. Re: Aviation antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 13:44:19 UTC
From: richardharrison@webtv.net
Message-ID: <3843-3C88C033-3@storefull-112.iap.bryant.webtv.net>
Source record: 147057

Rick, K1BQT wrote:
"Should be great (surplus from digital aircraft-radio conversion) for
the 2-meter AM buffs."

Biggest windfall since the SCR-522 glut at the end of WW-2?

Best regards, Richard Harrison, KB5WZI

4770. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 13:55:08 UTC
From: AB8MQ <kc8jbo@alt.net>
Message-ID: <a6aj6n$p0$0@pita.alt.net>
Source record: 147064
Cross-posted to:
alt.ham-radio,alt.ham-radio.vhf-uhf,alt.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.misc

"Frequency" and "Contact" also involved amateur radio.

--
73 de Roger /AB8MQ
"Wayne" <wayneleake@wayneleake.net> wrote in message
news:u8h5blbulp6lce@corp.supernews.com...
> Now I recall that particular movie.
> It involved a Ham operator that the by made friends with, and after the
Ham
> died, I think, the boy tried using the equipment.
> But it's been a number of years since I saw that one.
>
> --
> Wayne. <|:^)>
> KG6KFE
> http://www.wayneleake.net
>
> <keebird@hotmail.com> wrote in message
> news:s5patto26gos8jb08d2sdhh788jjsbasmq@4ax.com...
> > Try here or seach the web...
> >
> >
>
http://classicfilm.about.com/gi/dynamic/offsite.htm?site=http://us.imdb.com/
> Title%3FTestament%2B%281983%29
> >
> > 73
> >
> > KJ6AH
> >
> >
> >
> > On Tue, 23 Oct 2001 04:48:41 GMT, cathexis@your.haterols.com
> > (Reticulum) wrote:
> >
> > >On Tue, 23 Oct 2001 03:15:11 GMT, "keebird@hotmail.com"
> <keebird@hotmail.com>
> > >wrote:
> > >
> > >>See if you can rent a movie called Testament. I saw it in the theater
> > >>during the 1980's. It's about life in the US after a nuclear strike
> > >>and the main character is a little boy that uses a ham radio to talk
> > >>to people outside his city.

> > >>
> > >>73's,
> > >>
> > >>KJ6AH
> > >>
> > >
> > > that's a new one on me. I thought I'd seen all the
> > >Soyleny Green/Omega Man/ Dawn of the Dead
> > >movies out there. any other facts??
> > > Reticulum
> > >
> > >Remove "your.hat" when replying via e-mail
> >
>
>

4771. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 14:14:33 UTC
From: rbmccammon@mmm.com
Message-ID: <3C88C749.DD1F92E9@mmm.com>
Source record: 147060
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Helen E. Hansen" wrote:

> A man's interest in women and mountains is directly proportional
> to how much time he spends on top of them.

I hear that some women believe its proportional to
the difficulty of getting on top.

--
Thank you for reading and or replying

If you are one in a million, there are 6000 people just like
you.

Opinions expressed herein are my own and may not represent those of my employer.

4772. Re: Touching an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 14:22:06 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c88ccbe_1@news1.prserv.net>
Source record: 147058

--
Uncle Peter <radioconnectionNO@cox.netSPAM> wrote in message
news:0RUh8.4965$k81.163348@news2.east.cox.net...

<snip>
> you will need a special splitter so you can feed the
> TV and FM at the same time.

I'm mildly curious why you typed "special splitter" instead of the more
direct and informative "FM/TV splitter", which he could buy at ratshack?

Crazy George
Remove NO and SPAM from return address

>
> Regards
>
> Pete
>

4773. Re: Blonde Joke was Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 14:26:39 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C88C9DC.431A@earthlink.net>
Source record: 147059
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Helen E. Hansen wrote:
...
> A man's interest in women and mountains is directly proportional
> to how much time he spends on top of them.

Helen, you must have very limited experience with men.
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4774. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 14:30:56 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C88CADE.12B9@earthlink.net>
Source record: 147061
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Jason wrote:
...
> BTW - calling all US citizens - please say Aluminium for me (remember -
> there is two 'i's in Alumin'i'um) :-) [had to get that one in!]

According to my dictionary, there's no such word as "aluminium."

But it does have:

aluminum

aluminum (e-l¡´me-nem) noun Symbol Al
A silvery-white, ductile metallic element, the most abundant in the
earth's crust but found only in combination, chiefly in bauxite. Having
good conductive and thermal properties, it is used to form many hard,
light, corrosion-resistant alloys. Atomic number 13; atomic weight
26.98; melting point 660.2°C; boiling point 2,467°C; specific gravity
2.69; valence 3.

[alumin(a) + -(i)um.]

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--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4775. Re: Cushcraft A4

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 14:41:33 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C88CBFF.90E9434B@worldnet.att.net>
Source record: 147063

Kenneth Fattmann wrote:

> I have now idea what caused this trap to flash over unless it might have been
> what looked like a small peice two of what looked like grass. Any ideas?

There are small spiders which migrate at certain times of the year in some areas of the country (including yours) which actually ride the wind on their own web material they spin for just that purpose. They are "intercepted" by your antenna system, and then they look for a place to make a den. What they find is the weep holes in the bottoms of your traps. They go inside, make themselves at home, spin more web material inside the trap housing and set up housekeeping. The material that looks like grass is spider web.
None of that would probably matter much, except for the humidity in the air, which will condense on the web material with lowering temperature changes, and leave the web that is nestled around your trap coils and insulators saturated with moisture. Inside the trap housing, where it is well enclosed, it will dry very slowly, and probably not completely until hot weather.
Then, before it has the necessary time to dry, contest time comes, and you fire up the amp, pump big watts into the antenna, the high voltage finds the damp web material, and -
Flash! You have seen the results.
Is there a good solution? I don't know, but if I ever rebuild another trap I think I'll try to glue some fiberglass screen over the weep holes inside the housing before reassembly to keep the lil buggars out. I'm not sure one could then fit the cover over the inner works without removing the screening- those things fit together pretty tightly.. Might be best to epoxy small pieces of aluminum screen over the holes on the outside of the housing. Looks ugly but should keep things clean inside.

I learned about all this while rebuilding an old Mosley TA33 about 30 years ago.

Dick W0EX

4776. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 14:41:34 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C88CD18.692CCEFD@worldnet.att.net>
Source record: 147062

ehsjr@bellatlantic.net wrote:

> Reg Edwards wrote:
>
> > Unless some numbers are put to it you are wasting everybody's tim.
> > ==========
>
> You may have something specific in mind, but I must say I
> find the posts fascinating and helpful - not a waste of time at all.

Exactly.
Reg seems to be hung up still on Lord Kelvin and his statement.
Sometimes less-than-complete knowledge is the objective.

4777. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 14:55:18 UTC
From: Roger Johansson <no.email@home.se>
Message-ID: <a6bfl8$d0i0m$1@ID-86336.news.dfncis.de>
Source record: 146990
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

<rodgerro@siteconnect.com> wrote in message

> What John has not made clear is that what he means by his
> approximation '"', is that the 'o' in Erdos has what looks
like the
> double quote character above the 'o', rather than two dots.
I'm
> looking at an article in "The Mathematical Intelligencer" for
Spring
> 1997 titled "A Remembrance of Paul Erdos". The diacritical
mark over
> the 'o' looks like a double quote which is leaning, as though
it were
> italicized.

The umlaut over the ö can be written in many ways, as two dots,
as a wavy line over the o, or as two leaning vertical short
lines.

The wavy line is how I write it when I write by hand.
Sometimes I write the leaning short lines, with some pens and on
some surfaces.
The two dots is the most common way to write it in printing and
in the windows character table. That is how I write in on the
computer.

But the ways to write the umlaut changes nothing in the
pronounciation, it is still the same letter and the same sound.

Roger J

4778. Re: References on Half wave end fed top loaded vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 15:31:42 UTC
From: richardharrison@webtv.net
Message-ID: <3843-3C88D95E-13@storefull-112.iap.bryant.webtv.net>
Source record: 147065

KA9CAR wrote:
"---force me down to 30 and 40 within a couple of years."

Without radials, an unbalanced antenna needs some other "ground", car body, rod, water pipes, etc.

A 40-meter dipole would need about 65 feet for resonance. It can be loaded or resonated if it must be shorter. Short vertical dipoles work as short horizontal dipoles work. But, an end-fed antenna is fed against ground.

A balanced vertical antenna is center-fed.

The ARRL "Antenna Book", 19th edition, chapter 6, on: "Low Frequency Antennas" is a good reference. Look at loop skywires in chapter 5, too.

Best regards, Richard Harrison, KB5WZI

4779. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 15:51:37 UTC
From: Roger Conroy <rogerconroy@nospam.hotmail.com>
Message-ID: <a6amte$81h$1@ctb-nnrp2.saix.net>
Source record: 147066
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.misc

I saw "Frequency" on TV last week.
Complete rubbish!
No QRN / QRM. No PTT, Full duplex, and only one throwaway mention of the need to have licence, callsign etc.
NOT a good advert for ham radio at all!

There is fairly good Australian factual drama that was on South African TV about 10 years ago called "Cyclone Tracy". The story of how the Northern Territory capital, Darwin, was practically wiped out by a cyclone that was "not supposed to be there" on Christmas day in 1974. The only ham in town managed to rig up a random wire in the wreckage and call for help.

73
Roger ZR1RC

"AB8MQ" <kc8jbo@alt.net> wrote in message news:a6aj6n$p0$0@pita.alt.net...
> "Frequency" and "Contact" also involved amateur radio.
>
>
> --
> 73 de Roger /AB8MQ
> "Wayne" <wayneleake@wayneleake.net> wrote in message
> news:u8h5blbulp6lce@corp.supernews.com...
> > Now I recall that particular movie.
> > It involved a Ham operator that the by made friends with, and after the
> Ham
> > died, I think, the boy tried using the equipment.
> > But it's been a number of years since I saw that one.
> >
> > --
> > Wayne. <|:^)>
> > KG6KFE
> > http://www.wayneleake.net
> >
> > <keebird@hotmail.com> wrote in message
> > news:s5patto26gos8jb08d2sdhh788jjsbasmq@4ax.com...
> > > Try here or seach the web...
> > >
> > >
> > >
>
http://classicfilm.about.com/gi/dynamic/offsite.htm?site=http://us.imdb.com/
> > Title%3FTestament%2B%281983%29
> > >

> > > 73
> > >
> > > KJ6AH
> > >
> > >
> > >
> > > On Tue, 23 Oct 2001 04:48:41 GMT, cathexis@your.haterols.com
> > > (Reticulum) wrote:
> > >
> > > >On Tue, 23 Oct 2001 03:15:11 GMT, "keebird@hotmail.com"
> > <keebird@hotmail.com>
> > > >wrote:
> > > >
> > > >>See if you can rent a movie called Testament. I saw it in the
theater
> > > >>during the 1980's. It's about life in the US after a nuclear strike
> > > >>and the main character is a little boy that uses a ham radio to talk
> > > >>to people outside his city.
> > > >>
> > > >>73's,
> > > >>
> > > >>KJ6AH
> > > >>
> > > >
> > > > that's a new one on me. I thought I'd seen all the
> > > >Soyleny Green/Omega Man/ Dawn of the Dead
> > > >movies out there. any other facts??
> > > > Reticulum
> > > >
> > > >Remove "your.hat" when replying via e-mail
> > >
> >
> >
>
>

4780. KLM Antenna Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 16:07:59 UTC
From: Bob Dixon <Bob_Dixon@osu.edu>
Message-ID: <Bob_Dixon-7CE979.11075908032002@nntp.service.ohio-state.edu>
Source record: 147067

Is there a source for KLM antenna parts? I know about Msquared.
Need center insulators for 40M beam.

Bob W8ERD

4781. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 16:09:08 UTC
From: Mike Yetsko <joe@user.com>
Message-ID: <u8hoja338qn6c0@corp.supernews.com>
Source record: 147068
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.misc

I was always amazed at the way some HAMs tried to hop on the
bandwagon as if Frequency was a big PR for HAM radio...

Anyway... Some time ago there was an old movie I saw, and I think
it was one of the early 'docudrama' type things. About WWII and
the bomb. Had to do with a HAM that was made suspect because
radio signals were coming from his neighborhood... The film was old
black and white, and looked to be made in the 40's, just after the war.
Didn't have that '50's feel' you get from movies starting about 51 or
so when TV was poised to start expanding.

Mike

"Roger Conroy" <rogerconroy@nospam.hotmail.com> wrote in message
news:a6amte$81h$1@ctb-nnrp2.saix.net...
> I saw "Frequency" on TV last week.
> Complete rubbish!
> No QRN / QRM. No PTT, Full duplex, and only one throwaway mention of the
> need to have licence, callsign etc.
> NOT a good advert for ham radio at all!
>
> There is fairly good Australian factual drama that was on South African TV
> about 10 years ago called "Cyclone Tracy". The story of how the Northern
> Territory capital, Darwin, was practically wiped out by a cyclone that was
> "not supposed to be there" on Christmas day in 1974. The only ham in town
> managed to rig up a random wire in the wreckage and call for help.
>
> 73
> Roger ZR1RC
>
>
>
> "AB8MQ" <kc8jbo@alt.net> wrote in message news:a6aj6n$p0$0@pita.alt.net...
> > "Frequency" and "Contact" also involved amateur radio.
> >
> >
> > --
> > 73 de Roger /AB8MQ
> > "Wayne" <wayneleake@wayneleake.net> wrote in message
> > news:u8h5blbulp6lce@corp.supernews.com...
> > > Now I recall that particular movie.
> > > It involved a Ham operator that the by made friends with, and after
the
> > Ham

> > > died, I think, the boy tried using the equipment.
> > > But it's been a number of years since I saw that one.
> > >
> > > --
> > > Wayne. <|:^)>
> > > KG6KFE
> > > http://www.wayneleake.net
> > >
> > > <keebird@hotmail.com> wrote in message
> > > news:s5patto26gos8jb08d2sdhh788jjsbasmq@4ax.com...
> > > > Try here or seach the web...
> > > >
> > > >
> > >
> >
>
http://classicfilm.about.com/gi/dynamic/offsite.htm?site=http://us.imdb.com/
> > > Title%3FTestament%2B%281983%29
> > > >
> > > > 73
> > > >
> > > > KJ6AH
> > > >
> > > >
> > > >
> > > > On Tue, 23 Oct 2001 04:48:41 GMT, cathexis@your.haterols.com
> > > > (Reticulum) wrote:
> > > >
> > > > >On Tue, 23 Oct 2001 03:15:11 GMT, "keebird@hotmail.com"
> > > <keebird@hotmail.com>
> > > > >wrote:
> > > > >
> > > > >>See if you can rent a movie called Testament. I saw it in the
> theater
> > > > >>during the 1980's. It's about life in the US after a nuclear
strike
> > > > >>and the main character is a little boy that uses a ham radio to
talk
> > > > >>to people outside his city.
> > > > >>
> > > > >>73's,
> > > > >>
> > > > >>KJ6AH
> > > > >>
> > > > >
> > > > > that's a new one on me. I thought I'd seen all the
> > > > >Soyleny Green/Omega Man/ Dawn of the Dead
> > > > >movies out there. any other facts??
> > > > > Reticulum
> > > > >

> > > > >Remove "your.hat" when replying via e-mail
> > > >
> > >
> > >
> >
> >
>
>

4782. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 16:47:55 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C88EB1A.F47CE64D@shaw.ca>
Source record: 146969

GenderBender wrote:
>
> I guess you guys use your brains, and I use my brawn? I use a pipe wrench to
> loosen them up by spinning the rod around then pulling it out depending on
> the soil and the length of the rod, on occasion some persuasion is need
> in the form of a lever.
>
>

A lever? Like a jack or something?
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4783. Re: Stacking Tri-Banders

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 18:11:00 UTC
From: Mel Martin <ve2dc@rac.ca>
Message-ID: <3C88FEB4.31E4C422@rac.ca>
Source record: 146970

It's being done with great success (not by me!) but it would be
difficult with dissimilar antennas...

Mark Hall wrote:
>
> How about comments on stacking inexpensive, used, possibly non matched
> tri-banders for a Big - Gun Signal on the cheap? Worth it?
>
> '73 KI4Z

4784. Re: do's and don'ts of twin lead

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 18:39:17 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a6b0ctqgr1@news1.tribune.com>
Source record: 146971

I am also curious as to why you reccomend staying away from foam filled twin lead. I used it for a few years, and was dissapointed when I could not find it this time. It was easier to work with, and stiffer than the simple pvc type.

I would not use the foam filled twin lead that has a foil shield, although I have not seen that product in a few years.

KA9CAR

Irv Finkleman <finkirv@shaw.ca> wrote in message news:3C87C518.65DECDBC@shaw.ca...
> Wayne wrote:
> >
> > A few don'ts with twinlead are:
> >
>
> > B: do not use foam filled twinlead for ham antennas
>
> Wayne,
> I'm curious as to why you don't want foam filled
> twinlead. I'm
> willing to learn!
>
> --
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> --------------------
> Visit my FINALLY UPDATED website at
> http://members.shaw.ca/finkirv/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

4785. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 18:43:05 UTC
From: rodgerro@siteconnect.com
Message-ID: <t81i8ug9dd05bcjrejinl6l6ie6p8809qg@4ax.com>
Source record: 146973
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

My EE advisor at the University of Washington worked at Bell Labs in
the mid 1960's when Bode was still alive. He told me that Bode
pronounced his own name "Bowdee", with the "bow" syllable pronounced
as in "bow and arrow" rather than as in "bow of a ship".

On Sat, 2 Mar 2002 14:16:56 -0500, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:

>Ratch:
>
>[snip]
>> Do you or anyone else know how to pronounce his last name, i.e., Bo-dee
>> or Bo-dah? Ratch
>[snip]
>
>I don't know how Hendrik pronounced it himself, and I have never met anyone
>with that surname to ask them. H. W. Bode was an Afrikaner from South
>Africa who immigrated to the USA. So it is probably a Dutch-like name. I
>am sure that he must have spoken with an accent.
>
>That said... in my personal experience, universally everyone that I have
>heard pronouncing his name, have pronounced it as "bow dee".
>
>--Peter K1PO
>

4786. Re: Vertical plane dual band 80/40 loop kicks butt from a small lot.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 18:44:27 UTC
From: Neil <njn2spamspamspamspam@adelphia.net>
Message-ID: <3C890695.6910406F@adelphia.net>
Source record: 146972

Dear Martin,

You wrote:

> The resolution marked "1024" is not the highest resolution picture. Use the selection marked
> "Original". I found this one to be perfectly readable. Everything is crystal clear.

Right you are. I didn't realize that "Original" was also a link. It is crystal clear, and interesting, too.

Thanks also to Tongaloa for emailing a response to me directly, to let me know that "Original" is the
link to click.

Interesting way to get such low angle radiation. An 80 dipole would have to be up a couple of hundred
feet to radiate that low. I'll bet it's quiet, too.

-Neil / wb2cir-

4787. Re: References on Half wave end fed top loaded vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 18:46:31 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a6b0qe$r2u$1@news1.tribune.com>
Source record: 146974

I would like to read that article. I checked the ARRL members only web
site, and as far as I can tell, you have to order hard copies of articles.
Is there some place they are posted on line that I missed?

John

JLB <jim.bolinger@lintek.aeroflex.com> wrote in message
news:8d5ec8a2.0203080511.5854ad0a@posting.google.com...
> "KA9CAR" <nospam@nospam.usa> wrote in message
news:<a68ght$1f8c$1@news1.tribune.com>...
> > I am planning to do some antenna work this summer, anticipating that the
> > decline in sunspots will force me down to 30 and 40 within a couple of
> > years. My all band doublet is only around 30 feet in the air so it's
> > radiation angle on 30 and down is high.
> >
> > I would like to try a Vertical, but elevated radials are out of the
> > question, which eliminates a 1/4 wave Vertical.
> >
> > This leads me to a half wave, end fed vertical, with a simple ground for
the
> > tank circuit.
> > My trees are only about 35 feet tall, but they spread out as they go up
> > (maples).
> >
> > I envision a "top hat" of 2 coil loaded radials stretched through the
top of
> > the tree, and a vertical wire hanging from that, down to the feed point.
> >
> > Any body have a book or web site or article they want to recomend, as
> > reading for this project? Getting the top hat into the tree will be
> > difficult enough that I don't want to have to do it twice!
> >
> > John
> > KA9CAR
>
>
> The March/April issue of QEX has an article on a grounded half wave
> vertical antenna. You might want to take a look at it.
>
> The article talks about the problems with the typical half wave
> vertical and proposes a solution. I wouldn't mind trying it on 30 Mtr
> my self.
>
> Jim
> N8EE

4788. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 18:52:06 UTC
From: rodgerro@siteconnect.com
Message-ID: <am1i8u4c7c54umkpavqjjp8q46mepo8mq8@4ax.com>
Source record: 146975
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

What John has not made clear is that what he means by his
approximation '"', is that the 'o' in Erdos has what looks like the
double quote character above the 'o', rather than two dots. I'm
looking at an article in "The Mathematical Intelligencer" for Spring
1997 titled "A Remembrance of Paul Erdos". The diacritical mark over
the 'o' looks like a double quote which is leaning, as though it were
italicized.

On Mon, 4 Mar 2002 20:13:54 +0000, John Woodgate
<jmw@jmwa.demon.co.uk> wrote:

>I read in sci.electronics.design that Roger Johansson <no.email@home.se>
>wrote (in <a6031d$al3jf$1@ID-86336.news.dfncis.de>) about 'HELP needed
>in understanding Bode Plots', on Mon, 4 Mar 2002:
>
>>I am pretty sure though that when stressed the ï¿½ in hungarian is
>>very much like the ï¿½ sound in other languages, otherwise it
>>would not be translated with ï¿½.
>
>IT ISN'T! Hungarian has TWO umlauts; the 'two dots' one and the '"' one.
>They affect pronunciation differently.
>
>Paul Erdo"s was a pure Hungarian, not a Hungarian-American.

4789. Re: References on Half wave end fed top loaded vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 18:55:46 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a6b1bq$rl8$1@news1.tribune.com>
Source record: 146977

I like your idea of using soft 1/4 inch copper for the base coil.

The idea with the radials at the top (often reffered to as a capacity hat) is to reduce the hieght of the antenna while keeping it resonant. As my trees have a usable hieght of only 30 feet high I need a top hat. Since the trees are less than 20 feet wide at the top, I will still be short of resonant length as the radials will be less than 10 feet each. By adding coils I should be able to bring the system in to resonance. Putting the coils near the ends of the radials instead of on the vertical wires, will keep the I^2R losses in the coils low as the coils will be as far as I can get them from the current maxima.

JD

Mark Keith <nm5k@wt.net> wrote in message
news:25eb70d7.0203072033.4a172021@posting.google.com...
> "KA9CAR" <nospam@nospam.usa> wrote in message
news:<a68ght$1f8c$1@news1.tribune.com>...
> > I am planning to do some antenna work this summer, anticipating that the
> > decline in sunspots will force me down to 30 and 40 within a couple of
> > years. My all band doublet is only around 30 feet in the air so it's
> > radiation angle on 30 and down is high.
> >
> > I would like to try a Vertical, but elevated radials are out of the
> > question, which eliminates a 1/4 wave Vertical.
> >
> > This leads me to a half wave, end fed vertical, with a simple ground for
the
> > tank circuit.
> > My trees are only about 35 feet tall, but they spread out as they go up
> > (maples).
> >
> > I envision a "top hat" of 2 coil loaded radials stretched through the
top of
> > the tree, and a vertical wire hanging from that, down to the feed point.
> >
> > Any body have a book or web site or article they want to recomend, as
> > reading for this project? Getting the top hat into the tree will be
> > difficult enough that I don't want to have to do it twice!
> >
> > John
> > KA9CAR
>
> The halfwave will work fine. You don't need the radial thingys though.
> All you need is a 1/2 wave vertical, wire or tubing, and a single turn

> gamma loop match at the base. I could tell you the dia and cap needed,
> but I'd need to know the freq. Actually, I could get you fairly close
> by giving you the 10m specs, which are about 11 inches dia coil, and
> about 50 pf worth of cap. I make the caps from coax. Just take those
> specs and double for 20m, 4 times for 40m, etc. I use one of these on
> 10m with no radials at all, and it does quite well at only 20 ft up. I
> make the coils from soft 3/8 inch copper tubing usually. MK

4790. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 18:58:35 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <3C89099C.79A3C7AC@sprintmail.com>
Source record: 146976

I've pulled a couple out this way: The top of the ground rod is usually
a bit flattened from pounding it into the ground. Put a decent sized
ground rod clamp on the rod near the top, and use an automobile jack
between the clamp and ground to raise the rod. If the rod is too short,
just dig away some soil until the jack fits. You can also wrap a heavy
chain around the rod below the clamp, and then wrap that around the
jack. They come out pretty easily that way.

Irv Finkleman wrote:
>
> GenderBender wrote:
> >
> > I guess you guys use your brains, and I use my brawn? I use a pipe wrench to
> > loosen them up by spinning the rod around then pulling it out depending on
> > the soil and the length of the rod, on occasion some persuasion is need
> > in the form of a lever.
> >
> >
>
> A lever? Like a jack or something?
> --
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> --------------------
> Visit my FINALLY UPDATED website at
> http://members.shaw.ca/finkirv/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

--
K8AC
Floyd Sense - Angier, NC

4791. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 19:16:30 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C890DFF.9FB5D8A@icok.net>
Source record: 146978

Jerry,
Being naturally lazy, I've found that burying
a 1/4 stick of dynamite at the bottom of the rod
works very well. Do NOT use electricl 'caps'!
'Doc

4792. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 19:34:12 UTC
From: Zoran Brlecic <WA7AA@attbi.com>
Message-ID: <3C891235.423B6237@attbi.com>
Source record: 146979
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.misc

Roger Conroy wrote:

> I saw "Frequency" on TV last week.
> Complete rubbish!
> No QRN / QRM. No PTT, Full duplex, and only one throwaway mention of the
> need to have licence, callsign etc.
> NOT a good advert for ham radio at all!

Uhm... the movie was meant to be a paid advertisement for ham radio just as much as Apocalypse Now is supposed to be an ad for joining the US Army.

As for full duplex - that's Hollywood for you. In their world cars start without keys, no one closes the door behind him, automatic machine gun fire misses the lead actor from five feet, people always enter dark areas when chased by a killer, spilling coffee on keyboards causes nuclear meltdowns, and so on...

73 ..... Zoran WA7AA

4793. Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 19:52:08 UTC
From: &#65533;DL7JSK <dl7jsk@darc.de>
Message-ID: <a6b4p9$f03$07$1@news.t-online.com>
Source record: 146980

Hi NG
I recently got a hamstick for the 80m band.I put it on my car roof and I was surprised about the very bad swr.I don't get it under 2,5.Could it be that the roof area is too small ?

73
Tom

4794. Re: Magnetic/True North

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 19:54:50 UTC
From: Sylvan Butler <Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna8i5q9.f4f.Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 147018

On Thu, 7 Mar 2002 18:51:15 -0800, Beach Bum <hmbdude@nospamcotse.com> wrote:
> In article
><slrna8aik2.rti.Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>,
> Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid says...
>> On Tue, 05 Mar 2002 16:49:56 GMT, AB2HR <ab2hr@arrl.net> wrote:
>> > noon... This is not the case... The best way or fixing solar noon is
>> > to put a stake in the ground... at about 11am, start plotting the
>> > shadow of the stake every few minutes... You should see the shadows

>> that works. But it pretty much requires you to sit out there in the
>> sun for an hour or two watching the shadows move.
>
> Isn't that called "fishing"?

In keeping with the charter of this group, I thought it
was "field day." :)

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

4795. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 20:01:31 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6b5bn$d70mc$1@ID-124126.news.dfncis.de>
Source record: 146981

Just leave them in the ground. Who wants them anyway?

4796. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 20:24:12 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6b6m8$cfm2k$1@ID-124126.news.dfncis.de>
Source record: 146982

You should not be surprised at anything which happens to a Hamstick. Just tune it up the best you can and it will do moderately well.

4797. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 21:07:37 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C892819.27F0507A@IEEE.org>
Source record: 146984

" DL7JSK" wrote:
> I recently got a hamstick for the 80m band.I put it on my car roof and I was
> surprised about the very bad swr.I don't get it under 2,5.Could it be that
> the roof area is too small ?

Do you have the necessary matching coil at the base? Believe it or not,
the higher the SWR on 80m mobile, the better is the mobile antenna. The
feedpoint impedance of a good 80m mobile antenna is 12.5 ohms yielding
an SWR of 4:1. The feedpoint impedance of your Hamstick appears to be
about 20 ohms. You can use a base coil, or base cap, or base UNUN to
accomplish the necessary impedance matching at the base.
--
cheers, CAM, W5DXP

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4798. vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 21:08:10 UTC
From: AB Brown <abbrown@nospammail.com>
Message-ID: <a6b96l$g2l$1@slb6.atl.mindspring.net>
Source record: 146983

I would like to install a vertical antenna for 20-80 meters. Due to space and antenna restrictions, I am going to have to construct the antenna from copper wire. Here's a description of my antenna installation plans:

My yard contains two 40-45 foot pine trees spaced about 10 feet apart. I am going to vertically attach a wire between the trees of about 35 feet in length, which I hope will serve as the vertical part of the antenna. At the 40-45 foot level, I may stretch a horizontal wire between the pines of about 10 feet in length to serve as a tophat. The vertical may only be 35 feet because I'd like to attach 4 elevated 8 foot high ground radial wires to the base. Of course, at the base of the antenna will be a variable pi network to match to 50 ohm coax to the antenna and allow all band operation.

Opinions on my plan? Is a slightly shorter vertical with elevated radials better than a longer vertical with ground radials? How about the 10 foot top hat?

Thanks, in advance.

AB

4799. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 21:08:57 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C892869.A6798619@IEEE.org>
Source record: 146985

Reg Edwards wrote:
> You should not be surprised at anything which happens to a Hamstick. Just
> tune it up the best you can and it will do moderately well.

Reg, even the 80m Hamstick requires some impedance matching at the base.
--
cheers, CAM, W5DXP

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4800. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 21:15:05 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8929D9.4D9FCE8@IEEE.org>
Source record: 146986

AB Brown wrote:
> Opinions on my plan?

Can you put up a horizontal dipole or inverted-V? I have a very nice
40m vertical with elevated radials. My 130 ft dipole almost always
beats the vertical.
--
cheers, CAM, W5DXP

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4801. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 21:36:28 UTC
From: &#65533;DL7JSK <dl7jsk@darc.de>
Message-ID: <a6basuktb07$1@news.t-online.com>
Source record: 146987

Just to make sure if I got it right: I should achieve a high swr, heating up my finals ? At the moment,I use my manual antenna tuner that my rig sees 50 ohms.When I install some radials,do you think it will work better ? An additional cap or coil at the base is a major problem since I have a magnetic antenna foot

Tom

"CAM" <Cecil.A.Moore@IEEE.org> schrieb im Newsbeitrag news:3C892819.27F0507A@IEEE.org...
> " DL7JSK" wrote:
> > I recently got a hamstick for the 80m band.I put it on my car roof and I was
> > surprised about the very bad swr.I don't get it under 2,5.Could it be that
> > the roof area is too small ?
>
> Do you have the necessary matching coil at the base? Believe it or not,
> the higher the SWR on 80m mobile, the better is the mobile antenna. The
> feedpoint impedance of a good 80m mobile antenna is 12.5 ohms yielding
> an SWR of 4:1. The feedpoint impedance of your Hamstick appears to be
> about 20 ohms. You can use a base coil, or base cap, or base UNUN to
> accomplish the necessary impedance matching at the base.
> --
> cheers, CAM, W5DXP
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
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4802. G-Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 21:58:39 UTC
From: Alan Gault <alan.r.gault@btinternet.com>
Message-ID: <a6bc6edhe1@knossos.btinternet.com>
Source record: 146988

Hi everyone

Looking for a G-Whip mobile antenna in UK. Will pay reasonable price for genuine item. Had a little accident with my own.

Many thanks

Alan GI 6 PYP

4803. Re: Touching an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 22:06:11 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <nBai8.1206$4H5.48560@news1.east.cox.net>
Source record: 146989

Hello George

I guess I used the term "special" so someone with little technical
experience
wouldn't be tempted to use a more common VHF/UHF type. It sounded like
it was using 300-ohm TV twinlead from his discription. If he is using
75-ohm
cable I would have suggested using a run-of-the-mill hybrid CATV splitter.

Pete

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:3c88ccbe_1@news1.prserv.net...
>
>
> --
> Uncle Peter <radioconnectionNO@cox.netSPAM> wrote in message
> news:0RUh8.4965$k81.163348@news2.east.cox.net...
>
> <snip>
> > you will need a special splitter so you can feed the
> > TV and FM at the same time.
>
> I'm mildly curious why you typed "special splitter" instead of the more
> direct and informative "FM/TV splitter", which he could buy at ratshack?
>
> Crazy George
> Remove NO and SPAM from return address
>
> >
> > Regards
> >
> > Pete
> >
>
>
>

4804. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 23:13:03 UTC
From: Jon G2FHF <jon.g2fhf@ntlworld.com>
Message-ID: <L5ci8.14125$Bv3.2283208@news6-win.server.ntlworld.com>
Source record: 146992

Take a look at www.eham.net for reviews on everything.

Jon G2FHF

"J. B. Wood" <wood@itd.nrl.navy.mil> wrote in message
news:wood-0603020809240001@jbw-mac.itd.nrl.navy.mil...
> Hello, everyone. Does anyone have any experience with antennas from Gap
> Antenna Products (www.gapantenna.com)? Are we looking at vendor claims
> here ala the Crossed-Field Antenna? Thanks for your commment. Sincerely
> & 73s,
>
> John Wood (Code 5551) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

Outgoing mail is certified Virus Free by AVG Anti Virus.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.330 / Virus Database: 184 - Release Date: 28/02/02

4805. vertical antenna grounds

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 23:20:16 UTC
From: me@nowwhere.com
Message-ID: <3C894730.1DBB5856@swbell.net>
Source record: 146991

hi

i live in the dallas tx metro area and the
ground around here leaves a lot to be desired
to say the least. in addition, i live on a very small
city lot where it is easier to install things vertically
so i've been playing with the idea of sinking
a vertical shaft 15 - 20 feet deep, and then inserting
a 3 - 4 inch well caseing that has had the bottom
end plugged up and then filling it with water and
using it for a ground.

intended bands of operation will be 40, 80, 160 meters
using a base loaded vertical with capacitance hats.

how good a ground would it be? good, bad, indifferent?

any help appreciated.

larry
kd5foy

4806. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 23:26:28 UTC
From: AB8MQ <kc8jbo@alt.net>
Message-ID: <a6bl7k$76c$4@pita.alt.net>
Source record: 147000
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.misc

"Roger Conroy" <rogerconroy@nospam.hotmail.com> wrote in message
news:a6amte$81h$1@ctb-nnrp2.saix.net...
> I saw "Frequency" on TV last week.
> Complete rubbish!
> No QRN / QRM. No PTT, Full duplex, and only one throwaway mention of the
> need to have licence, callsign etc.
> NOT a good advert for ham radio at all!

Great! It looks like a good movie, though. You can't really expect these
Hollywood writers to get everything right, but you'd think they'd research
the background info better, huh?

>
> There is fairly good Australian factual drama that was on South African TV
> about 10 years ago called "Cyclone Tracy". The story of how the Northern
> Territory capital, Darwin, was practically wiped out by a cyclone that was
> "not supposed to be there" on Christmas day in 1974. The only ham in town
> managed to rig up a random wire in the wreckage and call for help.
>
> 73
> Roger ZR1RC

Actually, before I got my license, I monitored a distress call from a ship
and a ham handled the emergency situation and got the appropriate help for
those people. That's when I decided to become a ham.

--
73 de Roger /AB8MQ

> "AB8MQ" <kc8jbo@alt.net> wrote in message news:a6aj6n$p0$0@pita.alt.net...
> > "Frequency" and "Contact" also involved amateur radio.
> >
> >
> > --
> > 73 de Roger /AB8MQ

4807. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 23:49:37 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203081549.30e57bb8@posting.google.com>
Source record: 146993

"?DL7JSK" <dl7jsk@darc.de> wrote in message news:<a6b4p9$f03$07$1@news.t-online.com>...
> Hi NG
> I recently got a hamstick for the 80m band.I put it on my car roof and I was
> surprised about the very bad swr.I don't get it under 2,5.Could it be that
> the roof area is too small ?
>
> 73
> Tom

Totally normal. In fact, it's a good sign. That means the coil is not overly lossy for a hamstick. NO mobile antenna for 80m will show a good SWR if it's any kind of decent antenna at all. You will need an impedance matching device. They sell them, or you could use a simple tuner. Also a tapped coil would work. IE: "dollar special" that is in the ARRL ant handbook. MK

4808. Re: vertical antenna grounds

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 23:49:57 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C894E17.E36D7DFA@icok.net>
Source record: 146994

Larry,
It won't be a very good ground considering the
trouble you'd have to go to to put it in. You'd
be much better off to put in radials, till you just
can't stand the thought of 'doing' one more! Then,
put in a few more just 'because'. 'Deep' doesn't
necessarily mean 'good' as a ground...
'Doc

4809. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 23:51:15 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <87A9776FDC3CDA0F.DC47C1D163B75069.3AD6F8D70E4E7074@lp.airnews.net>
Source record: 146996
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.misc

On Fri, 08 Mar 2002 19:34:12 GMT, Zoran Brlecic <WA7AA@attbi.com>
wrote:

>As for full duplex - that's Hollywood for you. In their world cars start without
>keys, no one closes the door behind him, automatic machine gun fire misses the
>lead actor from five feet, people always enter dark areas when chased by a
>killer, spilling coffee on keyboards causes nuclear meltdowns, and so on...

...and gcc for the Mac has a command-line option to compile for alien
motherships...

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

4810. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 23:53:38 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C894EF5.EE31F5B1@icok.net>
Source record: 146995

AB,
Will it work? Sure, depending on exactly how you
put it up and the matching system. Will it be a very
good antenna? Beats me. But if that's all that you can
manage, then go for it...
'Doc

4811. Re: Cushcraft A4

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-08 23:56:52 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203081556.3b38c33d@posting.google.com>
Source record: 146997

"Kenneth Fattmann" <na0y@worldnet.att.net> wrote in message
news:<GbWh8.21376$gK2.1591932@bgtnsc04-news.ops.worldnet.att.net>...
> I am looking for a gent named Neil that helped me with a A4 problem last
> fall or any body else that can help me with a new problem.
>
> Had a 15 meter trap on the driven element flash over and left a carbon
> trail. Cleaned up the trap and now workes fine but have no substance to
> re-coat the trap winding. Does anyone know what the product is that
> Cushcraft paints on there bare aluminum wire they use in these traps. It
> must be rather good at RF frequencies and a good high voltage insulator.
>
> I have now idea what caused this trap to flas over unless it might have been
> what looked like a small peice two of what looked like grass. Any ideas?
>
> Thanks es 73 de Ken NAï¿½ na0y@worldnet.att.net or na0y@arrl.net

I don't know about the windings, but I've used black 3m weatherstrip
adhesive to patch cracks in the black plastic covers. I don't know how
that would work over windings... MK

4812. antenna am...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 00:27:46 UTC
From: "CH. TORRE" <christophe.torre@wanadoo.fr>
Message-ID: <a6bkvs$h58$1@wanadoo.fr>
Source record: 146999

Bonsoir,
Petite question technique am : une petite asso (sans gros moyens financiers) en France veut monter une radio locale am pour couvrir le village et alentour (port&#65533; de 5 &#65533; 10Kms max). Leur but est de cr&#65533;er une radio locale d'infos de proximit&#65533;, d'expressions locales et musicale...
Questions :
- qu'elle type d'antenne utiliser : Levy, Marconi ou autres filaires pour un emetteur de 30 watts ? ou les envoyer pour trouver les plans de ces antennes ?
- ou peuvent-ils trouver une boite d'accord pour cette bande radio am (522 &#65533; 1611Khz) ?
- et enfin ou peuvent t-ils trouver un petit ampli de 100 &#65533; 500 watts am ?

CRIS
christophe.torre@wanadoo.fr

action.radio@wanadoo.fr

4813. TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 00:29:32 UTC
From: monte.carroll@nashville.com
Message-ID: <3c895366.126429278@news.nashville.com>
Source record: 146998

Greetings. Thank you all for your informative posts. I have been reading this group since getting licensed last March and have learned very much. Now I need some specific information/opinions.

I have a TH6-DXX in pieces in the garage and will be acquiring what appears to be a Rohn 20 tower (my foot barely fits in it to climb) - 30 feet. I plan on mounting the tower next to the one story garage and bracket it for support. Will the tower safely support the TH6? There is a home-brew 3-element beam on it now that looks about 1/2 to 2/3's the size of the TH6. Optimally, what height should the TH6 be? In other words, is 30 feet too low to the ground? Finally, what rotor do you recommend for the TH6?

Monte B. Carroll
WC4MBC
Nashville, Tennessee, USA

4814. antenna AM...(english)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 00:32:54 UTC
From: "CH. TORRE" <christophe.torre@wanadoo.fr>
Message-ID: <a6bl9hipf1@wanadoo.fr>
Source record: 147001

Good evening, Small technical question am: an asso girl (without big financial means) in France wants to go(take) up a regional radio am to cover the village and surrounding (carried(worn) by 5 in 10Kms max). Their purpose is to create a regional radio of information of musical and local nearness, expressions... Questions: - that she(it) typifies of antenna to use: Levy, Marconi or the other filaires for an emetteur of 30 watts? Or to send them to find the plans of these antennae? - or can they find one limps all right for this band(strip) radio am (522 in 1611Khz)? - and finally or can t-ils find an ampli small from 100 to 500 watts am? Thank you A +

--
CRIS
christophe.torre@wanadoo.fr

action.radio@wanadoo.fr

4815. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 01:01:19 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <X7di8.25438$Yd.1089634@e3500-atl1.usenetserver.com>
Source record: 147002

AH HA!

NOW ve are getting zomewhar. Seriously, you are trying to apply the portability of VHF
to HF. The two are entirely differently animals. You will need to ditch the mag mount for
80 meters. Get some sort of permanent mount that will exhibit a ground, then check the
SWR without any impedance device. If it works, or loads up, then you won't need any
further work. If not, you need to use a coil , capacitor, or toroid at the feed point. I am
not disparaging your knowledge of mobile radio, but it seems you need to avail yourself
of ARRL's handbook or antenna books to learn more about the workings of mobile in-
stallations.

One thing further about 75 meter hamsticks--they are usually "sucky" on that band. Look
at it this way: if you turn on a garden hose and let it run without a nozzle, it will run quite
freely. Stop up the end with your thumb, and the pressure increases inside the hose. This
"pressure" in an antenna is comparable to the stopped-up hose and is that SWR you are
seeing. The ham stick is a small form with small wire tightly wound around it. When those
little "electrons" of RF start trying to travel up that narrow "road" (itsy bitsy wire) and get
around those tight "curves" (coil windings). The road is so crowded and crooked, and all
those millions of RF electrons are in a traffic jam, they get "road rage", and all hot and bothered. The result is signal lost as heat. There is, of course, more to the equation than
this, but I didn't intend to write a book on the subject. You will learn much on this as you
go--that's the way I did and everybody else, too.

Just remember one thing: If you are serious about having a good 75 meter HF mobile, it
takes a BIG UGLY antenna! Along with some grounding and a few other tricks. You
can have "Pretty", or you can have "Performance"--but, unfortunately, you can't have both.

It's the way it is.

73

Jerry
K4KWH

7jsk@darc.de> wrote in message news:a6basuktb07$1@news.t-online.com...
> Just to make sure if I got it right: I should achieve a high swr, heating
up
> my finals ? At the moment,I use my manual antenna tuner that my rig sees
50
> ohms.When I install some radials,do you think it will work better ? An
> additional cap or coil at the base is a major problem since I have a
> magnetic antenna foot
>
> Tom
>
> "CAM" <Cecil.A.Moore@IEEE.org> schrieb im Newsbeitrag
> news:3C892819.27F0507A@IEEE.org...
> > " DL7JSK" wrote:
> > > I recently got a hamstick for the 80m band.I put it on my car roof and
I
> was
> > > surprised about the very bad swr.I don't get it under 2,5.Could it be
> that
> > > the roof area is too small ?
> >
> > Do you have the necessary matching coil at the base? Believe it or not,
> > the higher the SWR on 80m mobile, the better is the mobile antenna. The
> > feedpoint impedance of a good 80m mobile antenna is 12.5 ohms yielding
> > an SWR of 4:1. The feedpoint impedance of your Hamstick appears to be
> > about 20 ohms. You can use a base coil, or base cap, or base UNUN to
> > accomplish the necessary impedance matching at the base.
> > --
> > cheers, CAM, W5DXP
> >
> >
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>

4816. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 01:09:34 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <ihdi8.1243$4H5.90424@news1.east.cox.net>
Source record: 147003

Besides bracketing, you should consider guying the tower from the top
of the top section.

I could barely fit a TailTwister in my Rohn 20 flat-top top section. Have
you considered that you will not be able to mount the rotor in a Rohn 20
so it will have the benefit of a sleeve or thrust bearing to abate lateral
stresses on the rotor? I wouldn't top mount any rotor with a TH6-DXX
for a load.

30 feet is a bit low for a tribander, for 20-meters I'd go at least 50
feet,
or even 40. 30 will work, but higher is better.

IMHO, there is no bargain in a free tower that is not up to the task. I'd
go with at least Rohn 25, properly guyed and bracketed.

Pete

"Monte B. Carroll" <monte.carroll@nashville.com> wrote in message
news:3c895366.126429278@news.nashville.com...
>
> Greetings. Thank you all for your informative posts. I have been
> reading this group since getting licensed last March and have learned
> very much. Now I need some specific information/opinions.
>
> I have a TH6-DXX in pieces in the garage and will be acquiring what
> appears to be a Rohn 20 tower (my foot barely fits in it to climb) -
> 30 feet. I plan on mounting the tower next to the one story garage
> and bracket it for support. Will the tower safely support the TH6?
> There is a home-brew 3-element beam on it now that looks about 1/2 to
> 2/3's the size of the TH6. Optimally, what height should the TH6 be?
> In other words, is 30 feet too low to the ground? Finally, what rotor
> do you recommend for the TH6?
>
> Monte B. Carroll
> WC4MBC
> Nashville, Tennessee, USA

4817. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 01:21:46 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <Ksdi8.1247$4H5.93277@news1.east.cox.net>
Source record: 147004

And don't stand over it waiting the M80 to go off!

"'Doc" <w5lz@icok.net> wrote in message news:3C890DFF.9FB5D8A@icok.net...
>
>
> Jerry,
> Being naturally lazy, I've found that burying
> a 1/4 stick of dynamite at the bottom of the rod
> works very well. Do NOT use electricl 'caps'!
> 'Doc

4818. Re: vertical antenna grounds

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 01:38:01 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c896c18$1_1@news1.prserv.net>
Source record: 147005

If you seal the bottom, what's the water for?

--
Crazy George
Remove NO and SPAM from return address
<me@nowwhere.com> wrote in message news:3C894730.1DBB5856@swbell.net...
>
> hi
>
> i live in the dallas tx metro area and the
> ground around here leaves a lot to be desired
> to say the least. in addition, i live on a very small
> city lot where it is easier to install things vertically
> so i've been playing with the idea of sinking
> a vertical shaft 15 - 20 feet deep, and then inserting
> a 3 - 4 inch well caseing that has had the bottom
> end plugged up and then filling it with water and
> using it for a ground.
>
> intended bands of operation will be 40, 80, 160 meters
> using a base loaded vertical with capacitance hats.
>
> how good a ground would it be? good, bad, indifferent?
>
> any help appreciated.
>
> larry
> kd5foy
>
>
>
>

4819. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 01:54:13 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <a6bpm0$hpv@nntpa.cb.lucent.com>
Source record: 147006

Yes I do the same thing with a big mag mount and the mount has just enough capacity to the car roof to produce a good match. Before I do this I have four or five "Spatens" or "Becks" then my measurements seem OK.

" DL7JSK" <dl7jsk@darc.de> wrote in message news:a6b4p9$f03$07$1@news.t-online.com...
> Hi NG
> I recently got a hamstick for the 80m band.I put it on my car roof and I was
> surprised about the very bad swr.I don't get it under 2,5.Could it be that
> the roof area is too small ?
>
> 73
> Tom
>
>
>

4820. Re: vertical antenna grounds

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 02:09:45 UTC
From: EAG <n5nug@ix.netcom.com>
Message-ID: <a6br5n$5as$1@slb4.atl.mindspring.net>
Source record: 147007

Hello Larry (KD5FOY), I live in Dallas and have successfully operated 160m here for a number of years from a small lot just north of down town Dallas using a short top loaded vertical antenna. 73, Ed - N5NUG
--
Edward A. Goodman
214-352-4623(o), 214-505-6835(m)
http://home.ix.netcom.com/~n5nug/index.html

<me@nowwhere.com> wrote in message news:3C894730.1DBB5856@swbell.net...
>
> hi
>
> i live in the dallas tx metro area and the
> ground around here leaves a lot to be desired
> to say the least. in addition, i live on a very small
> city lot where it is easier to install things vertically
> so i've been playing with the idea of sinking
> a vertical shaft 15 - 20 feet deep, and then inserting
> a 3 - 4 inch well caseing that has had the bottom
> end plugged up and then filling it with water and
> using it for a ground.
>
> intended bands of operation will be 40, 80, 160 meters
> using a base loaded vertical with capacitance hats.
>
> how good a ground would it be? good, bad, indifferent?
>
> any help appreciated.
>
> larry
> kd5foy
>
>
>
>

4821. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 02:25:06 UTC
From: monte.carroll@nashville.com
Message-ID: <3c8970f0.133992284@news.nashville.com>
Source record: 147008

Thanks for your advice. The top is pointed instead of flat. Maybe
I'll just install a 2-meter j-pole on top of it, hoist a G5RV from it,
and keep searching for Rohn 25.

Monte

On Sat, 09 Mar 2002 01:09:34 GMT, " Uncle Peter"
<radioconnectionNO@cox.netSPAM> wrote:

>Besides bracketing, you should consider guying the tower from the top
>of the top section.
>
>I could barely fit a TailTwister in my Rohn 20 flat-top top section. Have
>you considered that you will not be able to mount the rotor in a Rohn 20
>so it will have the benefit of a sleeve or thrust bearing to abate lateral
>stresses on the rotor? I wouldn't top mount any rotor with a TH6-DXX
>for a load.
>
>30 feet is a bit low for a tribander, for 20-meters I'd go at least 50
>feet,
>or even 40. 30 will work, but higher is better.
>
>IMHO, there is no bargain in a free tower that is not up to the task. I'd
>go with at least Rohn 25, properly guyed and bracketed.
>
>Pete

4822. Re: UHF Antenna selection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 02:45:18 UTC
From: Barrett Richardson <barrett@phoenix.aye.net>
Message-ID: <Pine.BSF.4.10.10203082135210.89565-100000@phoenix.aye.net>
Source record: 147009

On Mon, 4 Mar 2002, Sam wrote:

> Hi all,
> I know this is probably off-topic, but I need help. I need a UHF ant to pick
> up local TV. Roof-top mounting is out due to neighborhood restrictions, and

Have at look at

http://www.hamradio-online.com/1996/aug/fccanten.html

In short, you should be able to have an outdoor TV antenna if
you own the property.

4823. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 03:41:12 UTC
From: Roger Johansson <no.email@home.se>
Message-ID: <a6csj3$ddskk$1@ID-86336.news.dfncis.de>
Source record: 146927
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"John Woodgate" <jmw@jmwa.demon.co.uk> wrote:

> >But the ways to write the umlaut changes nothing in the
> >pronounciation, it is still the same letter and the same
sound.

> Do yo have any more to say?

Yes. In norwegian and danish the ø is written with a diagonal slash through the o, and sometimes with a short line inside the o.

Getting excited?

Roger

4824. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 03:54:51 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u8j1sb872ssa9c@corp.supernews.com>
Source record: 147010
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <3C88CADE.12B9@earthlink.net>, richgrise@earthlink.net says...
>
>Jason wrote:
>=2E..
>> BTW - calling all US citizens - please say Aluminium for me (remember -=
>
>> there is two 'i's in Alumin'i'um) :-) [had to get that one in!]
>
>According to my dictionary, there's no such word as "aluminium."
>
>But it does have:
>
>aluminum

That's because it is an American dictionary. Other than the US and Canada, the entire world spells it aluminium, which was also what the element's original name at the time of its discovery was, and is a spelling that adheres to the traditional "ium" ending on most metals.

Our mis-spelling of it is puzzling since most metals on the periodic table end in "ium". For example there is no such thing as Thorum; it's Thorium. Similarly Uranum, Plutonum, Calcum, Strontum, Lithum, Sodum, Potassum and so on don't exist, They all end in "ium". Somehow, we in North America persist in misspelling "aluminium" as "aluminum"! No doubt this was another one of Webster's numerous spelling changes to demonstrate that the US was no longer tied to Britain.

Bob.

4825. Re: References on Half wave end fed top loaded vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 04:00:00 UTC
From: Rick Karlquist <richard@karlquist.removethis.com>
Message-ID: <4Nfi8.7092$ZR2.3794@rwcrnsc52.ops.asp.att.net>
Source record: 147011

I have a 90 foot vertical with four 30 foot top hat wires spaced
90 degrees and sloping downward at 45 degrees. It resonates
as a current fed vertical on 160 meters. It also resonates as a
voltage fed vertical on 80 meters. In that mode, you need virtually
nothing in the way of ground radials. You could scale this design
to 40 meters: 45 feet high with 15 foot top hat wires. 45 feet
of aluminum tubing is very easy to walk up.

Rick N6RK
www.n6rk.com

"KA9CAR" <nospam@nospam.usa> wrote in message
news:a68ght$1f8c$1@news1.tribune.com...
> I am planning to do some antenna work this summer, anticipating that the
> decline in sunspots will force me down to 30 and 40 within a couple of
> years. My all band doublet is only around 30 feet in the air so it's
> radiation angle on 30 and down is high.
>
> I would like to try a Vertical, but elevated radials are out of the
> question, which eliminates a 1/4 wave Vertical.
>
> This leads me to a half wave, end fed vertical, with a simple ground for
the
> tank circuit.
> My trees are only about 35 feet tall, but they spread out as they go up
> (maples).
>
> I envision a "top hat" of 2 coil loaded radials stretched through the top
of
> the tree, and a vertical wire hanging from that, down to the feed point.
>
> Any body have a book or web site or article they want to recomend, as
> reading for this project? Getting the top hat into the tree will be
> difficult enough that I don't want to have to do it twice!
>
> John
> KA9CAR
>
>
>

4826. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 04:24:21 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c899252_1@news1.prserv.net>
Source record: 147012

There's been a lot of 25 showing up here in Texas lately. A lot of small dispatch radio system operators are changing to leased trunking, or cellphones, and a lot of 50 to 200 foot towers are coming down. Find a two-way shop and inquire. Try several, and don't be surprised if some are downright obnoxious.

--
Crazy George
Remove NO and SPAM from return address
Monte B. Carroll <monte.carroll@nashville.com> wrote in message news:3c8970f0.133992284@news.nashville.com...
>
> Thanks for your advice. The top is pointed instead of flat. Maybe
> I'll just install a 2-meter j-pole on top of it, hoist a G5RV from it,
> and keep searching for Rohn 25.
>
> Monte
>
> On Sat, 09 Mar 2002 01:09:34 GMT, " Uncle Peter"
> <radioconnectionNO@cox.netSPAM> wrote:
>
> >Besides bracketing, you should consider guying the tower from the top
> >of the top section.
> >
> >I could barely fit a TailTwister in my Rohn 20 flat-top top section.
Have
> >you considered that you will not be able to mount the rotor in a Rohn 20
> >so it will have the benefit of a sleeve or thrust bearing to abate
lateral
> >stresses on the rotor? I wouldn't top mount any rotor with a TH6-DXX
> >for a load.
> >
> >30 feet is a bit low for a tribander, for 20-meters I'd go at least 50
> >feet,
> >or even 40. 30 will work, but higher is better.
> >
> >IMHO, there is no bargain in a free tower that is not up to the task.
I'd
> >go with at least Rohn 25, properly guyed and bracketed.
> >
> >Pete

4827. Re: Kert 'n' sturba

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 04:27:39 UTC
From: ik7565@erols.com
Message-ID: <3C898F3B.FB3FE778@erols.com>
Source record: 147014

Probably a combination of the two.

Michael Ardai wrote:
>
> ik7565@erols.com wrote:
> >
> > Notice Kurt's initials and try
> > http://www.qrz.com/database?callsign=k5KNS
>
> And I always thought it was a play on the "Sterba Curtain" antenna...
>
> /mike

4828. UHF PCB Antenna design questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 04:28:18 UTC
From: Doug Dougherty <minerva@mindspring.com>
Message-ID: <3C898F62.5422D168@mindspring.com>
Source record: 147013

I need a small PCB antenna for a short-range, 900 MHz ISM-band application. The design calls for a small (1.5") circuit with components at the center of the board, and an antenna trace running around its periphery. I don't know much about antennas, but I understand there are 3 types that are best suited for this application: a quarter-wave stub, a loop, and a semi-loop.

My board is too small for a straight quarter-wave stub, so if I went this route, I'd have to curl the stub around in an almost complete circle. Would such an antenna radiate well? Would it be susceptible to hand effects?

If I use a loop antenna, can I loop a quarter-wave trace around the top of the PCB, with a via connecting to a second turn looped around the bottom of the PCB? I understand that the larger the loop, the better the radiation resistance. Does this apply to multiple turns as well? Can anyone tell me what the pattern would look like for a multiple-turn, quarter-wave loop antenna? The only patterns I can find are for so-called "small loop" antennas.

Finally, I read of a "semi-loop" antenna that consists of one loop around the top of the PCB, with a via at the far end connected to a short trace on the bottom of the PCB. The short trace on the bottom of the PCB forms a series capacitance with the loop on the top, and the length of its overlap is tuned for resonance. This antenna is supposed to be very good at rejecting hand effects, but I can't find much information on it. The only thing I can find says that the circumference of the PCB needs to be well under one-quarter wavelength, but I don't understand why. Is anyone familiar with this type of antenna?

Which of these 3 antenna types would be best for this application? Any help or useful references would be greatly appreciated.

Doug Dougherty
AL7GK

4829. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 04:47:05 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8993C9.AABC8E2B@IEEE.org>
Source record: 147015

" DL7JSK" wrote:
>
> Just to make sure if I got it right: I should achieve a high swr, heating up
> my finals ? At the moment,I use my manual antenna tuner that my rig sees 50
> ohms.When I install some radials,do you think it will work better ? An
> additional cap or coil at the base is a major problem since I have a
> magnetic antenna foot

Sorry if it is a "major problem". Use an antenna tuner if you don't want
to install a coil or cap at the base. You probably should not be using
a mag mount on 80m - not enough capacitance to the body of the vehicle.
--
cheers, CAM http://www.qsl.net/w5dxp

4830. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 04:49:58 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C899476.95ADB4C5@IEEE.org>
Source record: 147016

Jerry Oxendine wrote:
> Just remember one thing: If you are serious about having a good 75 meter HF
> mobile, it
> takes a BIG UGLY antenna! Along with some grounding and a few other tricks.

I take issue with that statement, Jerry. I have a big, beautiful antenna
and it works great on 75m. The antenna is the best looking thing about
my truck.
--
cheers, CAM http://www.qsl.net/w5dxp

4831. Re: G-Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 04:52:06 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8994F6.C77BE5A0@IEEE.org>
Source record: 147017

Alan Gault wrote:
> Looking for a G-Whip mobile antenna in UK. Will pay reasonable price for
> genuine item. Had a little accident with my own.

Will a G-String work?
--
cheers, CAM http://www.qsl.net/w5dxp

4832. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 05:21:03 UTC
From: JJ <radiojim0@hotmail.com>
Message-ID: <3C898D82.2BDF2444@hotmail.com>
Source record: 146919
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.misc

Roger Conroy wrote:
>
> I saw "Frequency" on TV last week.
> Complete rubbish!
> No QRN / QRM. No PTT, Full duplex, and only one throwaway mention of the
> need to have licence, callsign etc.
> NOT a good advert for ham radio at all!
>

And did you notice that the Heathkit was a receiver only, not a
transceiver?

4833. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 05:26:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6c6fh$dadpu$1@ID-124126.news.dfncis.de>
Source record: 146920

Such an advert could appear only in the USA.

In Europe we have Laws such as the Trade Descriptions Act.

4834. Re: UHF PCB Antenna design questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 05:38:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6c752$db2ts$1@ID-124126.news.dfncis.de>
Source record: 146921

For short distances anything with a perimeter of 1/5-wavelength or longer
will work well.

But most definitely do NOT use multiple turns.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****
Doug Dougherty <minerva@mindspring.com> wrote in message
news:3C898F62.5422D168@mindspring.com...
> I need a small PCB antenna for a short-range, 900 MHz ISM-band
> application. The design calls for a small (1.5") circuit with components
at
> the center of the board, and an antenna trace running around its
periphery.
> I don't know much about antennas, but I understand there are 3 types that
are
> best suited for this application: a quarter-wave stub, a loop, and a
semi-loop.
>
> My board is too small for a straight quarter-wave stub, so if I went
this
> route, I'd have to curl the stub around in an almost complete circle.
Would
> such an antenna radiate well? Would it be susceptible to hand effects?
>
> If I use a loop antenna, can I loop a quarter-wave trace around the top
of
> the PCB, with a via connecting to a second turn looped around the bottom
of
> the PCB? I understand that the larger the loop, the better the radiation
> resistance. Does this apply to multiple turns as well? Can anyone tell
me
> what the pattern would look like for a multiple-turn, quarter-wave loop
> antenna? The only patterns I can find are for so-called "small loop"
antennas.
>
> Finally, I read of a "semi-loop" antenna that consists of one loop
around
> the top of the PCB, with a via at the far end connected to a short trace
on
> the bottom of the PCB. The short trace on the bottom of the PCB forms a

> series capacitance with the loop on the top, and the length of its overlap
is
> tuned for resonance. This antenna is supposed to be very good at
rejecting
> hand effects, but I can't find much information on it. The only thing I
can
> find says that the circumference of the PCB needs to be well under
one-quarter
> wavelength, but I don't understand why. Is anyone familiar with this type
of
> antenna?
>
> Which of these 3 antenna types would be best for this application? Any
> help or useful references would be greatly appreciated.
>
>
> Doug Dougherty
> AL7GK

4835. Re: how to extract 8 foot ground rod

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 06:26:32 UTC
From: ab528@FreeNet.Carleton.CA
Message-ID: <a6c9uo$3dt$1@freenet9.carleton.ca>
Source record: 146922

'Doc (w5lz@icok.net) writes:
> Jerry,
> Being naturally lazy, I've found that burying
> a 1/4 stick of dynamite at the bottom of the rod
> works very well. Do NOT use electricl 'caps'!
> 'Doc

Being lazy, how do you ever find the rod?
Oh - probably don't bother.

4836. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 06:44:43 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <74BboDAb9ai8EwcY@jmwa.demon.co.uk>
Source record: 146925
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

I read in sci.electronics.design that Roger Johansson <no.email@home.se>
wrote (in <a6bfl8$d0i0m$1@ID-86336.news.dfncis.de>) about 'HELP needed
in understanding Bode Plots', on Fri, 8 Mar 2002:

>But the ways to write the umlaut changes nothing in the
>pronounciation, it is still the same letter and the same sound.

How much Hungarian do you know? On 4 March I posted the following:

Hungarian has TWO umlauts; the 'two dots' one and the '"' one.
They affect pronunciation differently.

Do yo have any more to say?
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

4837. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 09:15:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a6cjqh$a9j$1@slb0.atl.mindspring.net>
Source record: 146923
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Bob:

[snip]
> That's because it is an American dictionary. Other than the US and Canada,
> the entire world spells it aluminium, which was also what the element's
> original name at the time of its discovery was, and is a spelling that
> adheres to the traditional "ium" ending on most metals.
[snip]

No! Actually the Canadians spell it the British way and say it the American
way! Really.

What else?

--Peter K1PO

4838. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 09:51:52 UTC
From: Spehro Pefhany <speff@interlog.com>
Message-ID: <YWki8.81400$aFN.67220@news1.bloor.is>
Source record: 146924
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In alt.engineering.electrical Peter O. Brackett <ab4bc@ix.netcom.com> wrote:

> No! Actually the Canadians spell it the British way and say it the American
> way! Really.

That's a good general rule (labor/labour, zee/zed, center/centre),
although it's slowly becoming less so (color, for example).

It just happens to lead to a completely incorrect conclusion in this case.

Best regards,
--
Spehro Pefhany --"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com
9-11 United we Stand

4839. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 11:20:45 UTC
From: DL7JSK <dl7jsk@darc.de>
Message-ID: <a6cr6fvja00$1@news.t-online.com>
Source record: 146926

> Just remember one thing: If you are serious about having a good 75 meter
HF
> mobile, it
> takes a BIG UGLY antenna! Along with some grounding and a few other
tricks.
> You
Ok,but "big ugly" is quite relative.What do you say to this: complete length
2,60m,the coil takes abt. 1,20m.Is this to be called big ugly ? Ok,the mag
mount is originally for 2m,but I used it succesfully for 2-20m antennas

73
Tom

4840. Re: Movies involving amateur radio

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 11:32:38 UTC
From: AB8MQ <kc8jbo@alt.net>
Message-ID: <a6cuaqmdc5@pita.alt.net>
Source record: 146929
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.misc

Taking time out from cheating other hams at hamfests like he did in Houston
"Stagger 'TexASS TURD' Lee" <SLee@houston-hunks.com> wrote in message
news:8jb08d2sdhh788jjsbas@houston-hunks.com...
>
> On Fri, 8 Mar 2002 18:26:28 -0500, AB8MQ <kc8jbo@alt.net> wrote:
>
> : ... those people.

>M \ /

Anonymous coward and all-around fuckwit
"Stagger Lee" <SLee@houston-hunks.com>
revealed what a hypocrite he is and ironically admits he has no credibility
in message
<3C36FDCC.76EC185D@houston-hunks.com> :

"Therefore, I find your story difficult to believe. Your own anonymous
status makes the story even less credible."

Beware of this Stagger Lee, and don't buy any equipment from him, he likes
to cheat hams.
--
Anonymous coward and all-around fuckwit
"Stagger Lee" <SLee@houston-hunks.com>
revealed what a hypocrite he is and ironically admits he has no credibility
in message
<3C36FDCC.76EC185D@houston-hunks.com> :

"Therefore, I find your story difficult to believe. Your own anonymous
status makes the story even less credible."

4841. Re: do's and don'ts of twin lead

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 11:58:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C89F8D9.818887A0@eznec.com>
Source record: 146928

I'd expect the foam filled twinlead to be quite a bit more tolerant of being wet than flat twinlead, since the area of strongest field is in the foam away from the water. But I haven't done any tests to confirm this.

Roy Lewallen, W7EL

KA9CAR wrote:
>
> I am also curious as to why you reccomend staying away from foam filled twin
> lead. I used it for a few years, and was dissapointed when I could not
> find it this time. It was easier to work with, and stiffer than the simple
> pvc type.
>
> I would not use the foam filled twin lead that has a foil shield, although
> I have not seen that product in a few years.
>
> KA9CAR

4842. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 12:24:15 UTC
From: monte.carroll@nashville.com
Message-ID: <3c89fe23.170145656@news.nashville.com>
Source record: 146930

What's a fair price for used 25?

Monte

On Fri, 8 Mar 2002 22:24:21 -0600, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

>There's been a lot of 25 showing up here in Texas lately. A lot of small
>dispatch radio system operators are changing to leased trunking, or
>cellphones, and a lot of 50 to 200 foot towers are coming down. Find a
>two-way shop and inquire. Try several, and don't be surprised if some are
>downright obnoxious.
>
>--
>Crazy George
>Remove NO and SPAM from return address

4843. 6 meter antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 14:51:52 UTC
From: JEEPMON <JEEPMON@HOTMAIL.COM>
Message-ID: <ckpi8.7110$702.9635@sccrnsc02>
Source record: 146931
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I need help picking the best 6 meter vertical antenna.
I think I have narrowed it down to:
Hy-Gain V-6R
Diamond DP-GH62

Has anyone ever used these two antennas and if so wich are the best in
radiation, gain, and quality.

THANX!

4844. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 14:55:40 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <Mnpi8.1746$4H5.257993@news1.east.cox.net>
Source record: 146932

Monte..

Be careful buying used tower. Examine the galvanizing, it should be
clean of rust. Use a flashlight and examine inside of the legs -- towers
can rust from the inside out, which makes used towers very dangerous
to take down.

New Rohn 25 runs around 90 bucks a section. I bought a 65 foot
25 foldover with rotor for 400 bucks. Price seems to vary by region,
condition, and the amount of tower on the ground in that area--but
it shouldn't be expensive.

Pete

"Monte B. Carroll" <monte.carroll@nashville.com> wrote in message
news:3c89fe23.170145656@news.nashville.com...
>
> What's a fair price for used 25?
>
> Monte
>
> On Fri, 8 Mar 2002 22:24:21 -0600, "Crazy George"
> <munschNO@attglobal.net.SPAM> wrote:
>
> >There's been a lot of 25 showing up here in Texas lately. A lot of small
> >dispatch radio system operators are changing to leased trunking, or
> >cellphones, and a lot of 50 to 200 foot towers are coming down. Find a
> >two-way shop and inquire. Try several, and don't be surprised if some
are
> >downright obnoxious.
> >
> >--
> >Crazy George
> >Remove NO and SPAM from return address

4845. Re: 6 meter antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 15:16:20 UTC
From: radiofun <radiofun@charter.net>
Message-ID: <u8ka29qmjncge0@corp.supernews.com>
Source record: 146933
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I tell ya what. I'm sure the Hy-Gain and the Diamond do is very nice job. I used a Lakeview Colinear several years ago on 6, with VERY good results. It is very inexpensive too! Non of these do as well as a good beam or quad, but for the money, the Lakeview did an excellent job! http://www.hamstick.com/

"JEEPMON" <JEEPMON@HOTMAIL.COM> wrote in message news:ckpi8.7110$702.9635@sccrnsc02...
> I need help picking the best 6 meter vertical antenna.
> I think I have narrowed it down to:
> Hy-Gain V-6R
> Diamond DP-GH62
>
> Has anyone ever used these two antennas and if so wich are the best in
> radiation, gain, and quality.
>
> THANX!
>
>
>
>

4846. power

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 17:25:28 UTC
From: leonard bailey <lb5565_33@hotmail.com>
Message-ID: <cAri8.49992$991.12758942@typhoon.kc.rr.com>
Source record: 146934

when installed my new antenna&adjusted the swr my transmit power drops to
2watts,is their any reason for this
my setup is 949 cb with all the bells &things on it

4847. Pull strength of 18 ga stranded or recommendations for hanging a 80 mtr dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 17:34:33 UTC
From: kf7qz@yahoo.com
Message-ID: <3c8a4703.400230@news.verizon.net>
Source record: 146935

Trying to find the tensil properties of 18ga stranded copper. I lost
my Dipole suppoer (70ft Hemlock) to root rot (had to have it cut down)
so now Im sans my 80m antenna. I bought some new 18ga stranded copper

to hang up. My idea is to use my front tree (35ft) and a 20 ft mast
in back to yank a dipole up. RG214 would tie to a center plastic
hold.

Would 18 ga yank up the coax and survive or would rope be needed
acrorss the span.

Unfortunately my meager 25ft tower wouldnt suffice for a good center
support (would only have 20ft for center hold)

Any other suggestions would be appreciated.

Rick
KF7QZ

4848. Re: Pull strength of 18 ga stranded or recommendations for hanging a 80 mtr dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 17:49:04 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C8A4B10.CFB4AAB1@coqui.net>
Source record: 146936

"R. Scott" wrote:
>
> Trying to find the tensil properties of 18ga stranded copper. I lost
> my Dipole suppoer (70ft Hemlock) to root rot (had to have it cut down)
> so now Im sans my 80m antenna. I bought some new 18ga stranded copper
>
> to hang up. My idea is to use my front tree (35ft) and a 20 ft mast
> in back to yank a dipole up. RG214 would tie to a center plastic
> hold.
>
> Would 18 ga yank up the coax and survive or would rope be needed
> acrorss the span.
>
> Unfortunately my meager 25ft tower wouldnt suffice for a good center
> support (would only have 20ft for center hold)
>
> Any other suggestions would be appreciated.
>
> Rick
> KF7QZ
>

Just based on gut feel, I don't think it would be anywhere close to
strong enough for survival. I've got some jacketed 18 stranded hookup
wire and I can tie it to something and break it by hand.
-WX4a

4849. Re: 6 meter antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 19:13:31 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C8A5EBA.D26F31E8@tampabay.rr.com>
Source record: 146937
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

hey jeep
i used a mosley diplomat for 6 meters its a 5/8s wave vertical with a
ground plane under it i had one at 60 feet and it was nearly only a DB or
so off what my 5 ele yagi was that was at 50 feet
i think they still make them but when buying from them be paitent they
take a long time to get things from
http://www.mosley-electronics.com

JEEPMON wrote:

> I need help picking the best 6 meter vertical antenna.
> I think I have narrowed it down to:
> Hy-Gain V-6R
> Diamond DP-GH62
>
> Has anyone ever used these two antennas and if so wich are the best in
> radiation, gain, and quality.
>
> THANX!

4850. Re: Pull strength of 18 ga stranded or recommendations for hanging a 80 mtr dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 19:59:31 UTC
From: Harold Burton <hwburton@swbell.net>
Message-ID: <DQti8.64392$em6.1922260141@newssvr30.news.prodigy.com>
Source record: 146938

"R. Scott" <kf7qz@yahoo.com> wrote in message
news:3c8a4703.400230@news.verizon.net...
> Would 18 ga yank up the coax and survive or would rope be needed
> acrorss the span.
>

Over time I've seen several references to electric fence conductor used for
wire
antennas. I've seen it and it's basically fiberglass or some such material
with just enough wire in it to be a conductor. It might just be that this
stuff would do what you are
trying to do. I think it's available in cord or tape form. Those advocating
its use say it's reasonably priced also. (Don't go by me, though, I'm still
waiting to take my license exam and my expertise is limited)

4851. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 21:01:07 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u8ku0j91la0m1b@corp.supernews.com>
Source record: 146939
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <a6cjqh$a9j$1@slb0.atl.mindspring.net>, ab4bc@ix.netcom.com
says...
>
>Bob:
>
>[snip]
>> That's because it is an American dictionary. Other than the US and
Canada,
>> the entire world spells it aluminium, which was also what the element's
>> original name at the time of its discovery was, and is a spelling that
>> adheres to the traditional "ium" ending on most metals.
>[snip]
>
>No! Actually the Canadians spell it the British way and say it the
American
>way! Really.
>

The hell we do! I am a Canadian, and have never seen it spelled "Aluminium"
here in Canada, and among other things I have worked with aluminum extruders
for 25 years. In Canada, we use the corrupted American spelling ("Aliminum")
and the American pronounciation as well.

Bob.

4852. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 21:05:47 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c8abfcc_3@news1.prserv.net>
Source record: 146948

I wouldn't pay more than $20 a section for it unless it is almost new.
Sometimes it is available for the removal, but follow the advice from Rohn
and others about rust, weak spots, and temporary guy wires if you want to
take some down. BTW, I have 100 feet of 25 which is in its second location
and was originally erected by me in 1962. I have replaced most of the joint
hardware due to rust, and touched up a lot of spots on other places,
especially the cable clamps on the guys before I replaced them with
preformed grips, but the tower itself shows no rust on the outside, and
sounds solid still at the point it leaves the cement base. I worry about
the anchor rods and examine them regularly, but they are holding their
galvanizing well also.

--
Crazy George
Remove NO and SPAM from return address

Monte B. Carroll <monte.carroll@nashville.com> wrote in message
news:3c89fe23.170145656@news.nashville.com...
>
> What's a fair price for used 25?
>
> Monte

4853. Re: Pull strength of 18 ga stranded or recommendations for hanging a 80 mtr dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 21:22:51 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <L2vi8.2426$4H5.344055@news1.east.cox.net>
Source record: 146940

Rick

My suggestion would be to go the WireMan and get the proper antenna
wire to use. It isn' that expensive, and why worry about using something
not intended for the task at hand?

73

Pete

"R. Scott" <kf7qz@yahoo.com> wrote in message
news:3c8a4703.400230@news.verizon.net...
> Trying to find the tensil properties of 18ga stranded copper. I lost
> my Dipole suppoer (70ft Hemlock) to root rot (had to have it cut down)
> so now Im sans my 80m antenna. I bought some new 18ga stranded copper
>
> to hang up. My idea is to use my front tree (35ft) and a 20 ft mast
> in back to yank a dipole up. RG214 would tie to a center plastic
> hold.
>
> Would 18 ga yank up the coax and survive or would rope be needed
> acrorss the span.
>
> Unfortunately my meager 25ft tower wouldnt suffice for a good center
> support (would only have 20ft for center hold)
>
> Any other suggestions would be appreciated.
>
> Rick
> KF7QZ
>

4854. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 21:23:04 UTC
From: AB7RS <ab7rs@arrl.net>
Message-ID: <u8kvabncs38of9@corp.supernews.com>
Source record: 146941

A ham 4 works fine.The tower I'm worried about,how much of the tower will be above the top bracket? I had a TH6 with a similar tower which was bracketed to 20' then the tower extended another 30' and was guyed from the top (2 guys were to the roof) using torque arms. That long boom will really want to twist things.The tH6 will work better a little higher but is a great antenna,I replaced mine with a 2element 5 band lightning bolt quad. A similar quad WOULD work on your tower FB.TG

"Monte B. Carroll" <monte.carroll@nashville.com> wrote in message news:3c895366.126429278@news.nashville.com...
>
> Greetings. Thank you all for your informative posts. I have been
> reading this group since getting licensed last March and have learned
> very much. Now I need some specific information/opinions.
>
> I have a TH6-DXX in pieces in the garage and will be acquiring what
> appears to be a Rohn 20 tower (my foot barely fits in it to climb) -
> 30 feet. I plan on mounting the tower next to the one story garage
> and bracket it for support. Will the tower safely support the TH6?
> There is a home-brew 3-element beam on it now that looks about 1/2 to
> 2/3's the size of the TH6. Optimally, what height should the TH6 be?
> In other words, is 30 feet too low to the ground? Finally, what rotor
> do you recommend for the TH6?
>
> Monte B. Carroll
> WC4MBC
> Nashville, Tennessee, USA

4855. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 22:42:15 UTC
From: rodgerro@siteconnect.com
Message-ID: <oc3l8ukfua5b9bgbei2dsu9tq40jahrt4s@4ax.com>
Source record: 146942
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

A quick search for "hungarian umlaut" with Google convinces me that
John is right. See for instance:
http://www.oakland.edu/~grossman/readme.html
where it is said:
"Most practicing mathematicians are familiar with the definition of
oneï¿½s Erdï¿½s number [that is actually a long Hungarian umlaut over the
ï¿½oï¿½ but we will represent it here by the ordinary two-dot umlaut
available in html]."

Also see:
http://www.hungary.com/hungq/no157/046.html
where we find:

Thus tï¿½r is "to break" but tï¿½r is "dagger".

It seems that there are indeed two different umlauts in Hungarian; so
different that they affect not only pronunciation, but also meaning.

On Sat, 9 Mar 2002 04:41:12 +0100, "Roger Johansson"
<no.email@home.se> wrote:

>"John Woodgate" <jmw@jmwa.demon.co.uk> wrote:
>
>> >But the ways to write the umlaut changes nothing in the
>> >pronounciation, it is still the same letter and the same
>sound.
>
>> Do yo have any more to say?
>
>Yes. In norwegian and danish the ï¿½ is written with a diagonal
>slash through the o, and sometimes with a short line inside the
>o.
>
>Getting excited?
>
>
>Roger
>
>
>

4856. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 22:42:44 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <Ndwi8.29530$Yd.1517817@e3500-atl1.usenetserver.com>
Source record: 146943

LOL!

Jerry
CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C899476.95ADB4C5@IEEE.org...
> Jerry Oxendine wrote:
> > Just remember one thing: If you are serious about having a good 75 meter
HF
> > mobile, it
> > takes a BIG UGLY antenna! Along with some grounding and a few other
tricks.
>
> I take issue with that statement, Jerry. I have a big, beautiful antenna
> and it works great on 75m. The antenna is the best looking thing about
> my truck.
> --
> cheers, CAM http://www.qsl.net/w5dxp

4857. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 23:12:19 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <AFwi8.29639$Yd.1527880@e3500-atl1.usenetserver.com>
Source record: 146944

The higher frequencies are more forgiving than 75 meters and, generally speaking, "natural"
impedances exhibited by such antennas are usually higher. For example, look at the many
mag mounted CB antennas. But as you go downwards in frequency, if the antenna is rea-
sonably efficient, the impedance tends to go downward, too, so you have to add a little
"help" to bring this figure back up to 50 ohms. Remember: on 75 meters you are trying to
squeeze 120 feet of wire into a form less than 10-12 feet, whereas, on the higher bands,
the amount of "crunching" of wire down to a manageable size is not nearly so huge.

Here is something else to remember about operating on 40 and 75: any antenna that doesn't
require some sort of impedance matching at those bands and lower is a sloppy, wasteful ra-
diator. Here's why: That signal that you are now asking to sacrifice a nice long dipole and
travel reliably and. hopefully, loudly, is now scrunched down into some sort of antenna of
9 feet or so. In doing this, the signal encounters 3 resistances; feedpoint (impedance), coil,
and radiation resistance. Remember that in our last exchange, I told you that, in small dia-
meter coils wound with skinny wire, the RF electrons get into a "traffic" jam. So, let's say
that your hamstick is exhibiting a feedpoint impedance of 17 ohms (it should), a coil resis-
tance of 20 ohms, and a radiation resistance of 13 ohms (tho I doubt it would be exactly
those figures--I'm just using them to prove a point) Guess what! The total adds up to 50
ohms--just what the radio wants to see! So, why doesn't the stick operate well as is? Be-
cause the equation is upside down! Most of the resistance in the system is up in the loading
coil where that "traffic" jam is pissing off all those little electrons! With an efficient antenna
like a screwdriver, or a large inductor coil antenna, the resistance now drops in the coil so
that the 50 ohms is no longer there. Why? You widened the "road" by making

the curves
less tight, and the wire larger so it can handle more RF, they don't "get mad" at each other,
and "traffic" moves right along. But to make the radio happy as well, you have to add some
sort of impedance matching device at the feedpoint to bring that 17 ohms up to a figure that
will again allow the individual resistances to add up to 50 ohms.

I suspect that your trouble has more to do with the lack of ground due to the mag mount.
The antenna is decoupled from the other half which is the vehicle. Look at it as if it were
a kind of dipole, or inverted "L"--which, in a sense, it is. The radio is "seeing" only half of
the antenna because the shield is not terminated.

I suspect that, if you ditch the mag mount, and attach a permanent mount to the bumper or
trunk or deck, the antenna will resonate, after pruning, on 75 meters. But, because of the
nature of hamsticks, your results will not be exactly stellar. They will, however, work pretty
well above 40 meters. Some people are quite satisfied with hamsticks and brag on their
results. I can't help but wonder--compared to what? But to each his own, and if the hamstick is what one must use, then that is fine. I just prefer to be heard the first time I call.

Best 73, and I hope I have helped.

Jerry
K4KWH

DL7JSK <dl7jsk@darc.de> wrote in message
news:a6cr6fvja00$1@news.t-online.com...
> > Just remember one thing: If you are serious about having a good 75 meter
> HF
> > mobile, it
> > takes a BIG UGLY antenna! Along with some grounding and a few other
> tricks.
> > You
> Ok,but "big ugly" is quite relative.What do you say to this: complete
length
> 2,60m,the coil takes abt. 1,20m.Is this to be called big ugly ? Ok,the mag
> mount is originally for 2m,but I used it succesfully for 2-20m antennas
>
> 73
> Tom
>
>
>

>

4858. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 23:52:12 UTC
From: Don Kelly <dhky@peeshaw.ca>
Message-ID: <Mexi8.60332$eb.2380506@news3.calgary.shaw.ca>
Source record: 146945
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

My "Oxford Canadian Dictionary" gives the "um" form as the main form and the
"ium" form as secondary (preceded by "Brit.")
As a Canadian, I spell and say "aluminum" (agreeing with the
dictionary)but understand "aluminium" which ex- Brits use. Some of our usage
is as in the US and some as in britain (i.e. colour,etc)

--
Don Kelly
dhky@peeshaw.ca
remove the urine to answer
"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:a6cjqh$a9j$1@slb0.atl.mindspring.net...
> Bob:
>
> [snip]
> > That's because it is an American dictionary. Other than the US and
Canada,
> > the entire world spells it aluminium, which was also what the element's
> > original name at the time of its discovery was, and is a spelling that
> > adheres to the traditional "ium" ending on most metals.
> [snip]
>
> No! Actually the Canadians spell it the British way and say it the
American
> way! Really.
>
> What else?
>
> --Peter K1PO
>
>

4859. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-09 23:54:37 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8AA0BD.BB10F1E7@IEEE.org>
Source record: 146946

Jerry Oxendine wrote:
>
> The higher frequencies are more forgiving than 75 meters and, generally
> speaking, "natural"
> impedances exhibited by such antennas are usually higher. For example, look
> at the many
> mag mounted CB antennas. But as you go downwards in frequency, if the
> antenna is rea-
> sonably efficient, the impedance tends to go downward, too, so you have to
> add a little
> "help" to bring this figure back up to 50 ohms.

Maybe this will help, Jerry. Here's the radiation resistance of an 8ft
center-loaded whip Vs frequency according to the ARRL Antenna Book.

1.8 MHz 0.2 ohms Perfect SWR = 50/0.2 = 250:1
3.8 MHz 0.8 ohms Perfect SWR = 50/0.8 = 62.5:1
7.2 Mhz 3.0 ohms Perfect SWR = 50/3 = 17:1
14.2 MHz 5.8 ohms Perfect SWR = 50/5.8 = 9:1
21.25 MHz 27 ohms Perfect SWR = 50/27 = 1.9:1

Of course, we cannot get that perfect SWR because there are around
10 ohms of ground losses. That 10 ohms of ground losses are about
93% of the signal on 75m but are only about 27% of the signal
on 15m and even less on 10m.

Moral: The higher the SWR on 75m, the better the antenna. My
screwdriver has an SWR of 4:1 without base matching. Of course,
it is the 12.5 ohm feedpoint impedance that is desired, not
the other possibility, a 200 ohm feedpoint impedance. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

4860. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 01:50:17 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a6eed6jdi1@slb4.atl.mindspring.net>
Source record: 146947
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Bob:

[snip]
"Bob Wilson" <rfwilson@intergate.nospam.bc.ca> wrote in message
news:u8ku0j91la0m1b@corp.supernews.com...
> In article <a6cjqh$a9j$1@slb0.atl.mindspring.net>, ab4bc@ix.netcom.com
> >No! Actually the Canadians spell it the British way and say it the
> American
> >way! Really.
>
> The hell we do! I am a Canadian, and have never seen it spelled
"Aluminium"
> here in Canada, and among other things I have worked with aluminum
extruders
> for 25 years. In Canada, we use the corrupted American spelling
("Aliminum")
> and the American pronounciation as well.
>
> Bob.
[snip]

Young whipper snapper! Heh, heh... Bob it so happens that I am a
naturalized American. But...

I was born and educated in Canada. I completed all of my schooling in
Candaa, without stating my age I'll say that I finished K-12 somewhat before
the fifties ended. My experience was varied as well: e.g. K-4 in Nova
Scotia, 5-9 in British Columbia, 10-13 in Ontario, etc... It so happens that
at the many Canadian schools that I attended in that era, we exclusively
used the OED in all the schools that I attended. And I was definitely
taught to spell the element Al as aluminium! (Oxford English Dictionary).

These days, even though I have been living in the USA for years and I am now
a US citizen, I still find myself spelling the OED way!

Only the spell-checker in MS Word keeps others from learning of my spelling
heritage, heh, heh...

--Peter K1PO

4861. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 02:22:15 UTC
From: ed price <edprice@cox.net>
Message-ID: <rrzi8.10484$5S6.376760@news2.west.cox.net>
Source record: 146949
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:a6eed6jdi1@slb4.atl.mindspring.net...
> Bob:
>
> [snip]
> "Bob Wilson" <rfwilson@intergate.nospam.bc.ca> wrote in message
> news:u8ku0j91la0m1b@corp.supernews.com...
> > In article <a6cjqh$a9j$1@slb0.atl.mindspring.net>, ab4bc@ix.netcom.com
> > >No! Actually the Canadians spell it the British way and say it the
> > American
> > >way! Really.
> >
> > The hell we do! I am a Canadian, and have never seen it spelled
> "Aluminium"
> > here in Canada, and among other things I have worked with aluminum
> extruders
> > for 25 years. In Canada, we use the corrupted American spelling
> ("Aliminum")
> > and the American pronounciation as well.
> >
> > Bob.
> [snip]
>
> Young whipper snapper! Heh, heh... Bob it so happens that I am a
> naturalized American. But...
>
> I was born and educated in Canada. I completed all of my schooling in
> Candaa, without stating my age I'll say that I finished K-12 somewhat
before
> the fifties ended. My experience was varied as well: e.g. K-4 in Nova
> Scotia, 5-9 in British Columbia, 10-13 in Ontario, etc... It so happens
that
> at the many Canadian schools that I attended in that era, we exclusively
> used the OED in all the schools that I attended. And I was definitely
> taught to spell the element Al as aluminium! (Oxford English Dictionary).
>
> These days, even though I have been living in the USA for years and I am
now
> a US citizen, I still find myself spelling the OED way!
>
> Only the spell-checker in MS Word keeps others from learning of my
spelling
> heritage, heh, heh...

>
> --Peter K1PO

So, set your spull chucker preference to British English!

Ed

4862. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 02:47:07 UTC
From: monte.carroll@nashville.com
Message-ID: <3c8ac7ab.221745329@news.nashville.com>
Source record: 146950

All the Rohn 20 cost was about two hours of labor taking it down and getting it home. And I got a three element beam, a rotor, and a tilt base with it. But, just as important, was the time spent with an old ham (he helped), and the start of a good friendship. He got out of Amateur Radio years ago and is happy to see the tower put back in service. Over the next few weeks I'll clean it up, replace what's necessary and get it back in the air. I'll bake some pies (my other hobby) for him and his wife, too.

There is some minor rust, and the bolts between the sections will be replaced. What's your suggestion on dealing with rust?

Monte

On Sat, 9 Mar 2002 15:05:47 -0600, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

>I wouldn't pay more than $20 a section for it unless it is almost new.
>Sometimes it is available for the removal, but follow the advice from Rohn
>and others about rust, weak spots, and temporary guy wires if you want to
>take some down. BTW, I have 100 feet of 25 which is in its second location
>and was originally erected by me in 1962. I have replaced most of the joint
>hardware due to rust, and touched up a lot of spots on other places,
>especially the cable clamps on the guys before I replaced them with
>preformed grips, but the tower itself shows no rust on the outside, and
>sounds solid still at the point it leaves the cement base. I worry about
>the anchor rods and examine them regularly, but they are holding their
>galvanizing well also.
>
>--
>Crazy George
>Remove NO and SPAM from return address
>
>Monte B. Carroll <monte.carroll@nashville.com> wrote in message
>news:3c89fe23.170145656@news.nashville.com...
>>
>> What's a fair price for used 25?
>>
>> Monte

4863. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 02:47:29 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6ehh0$dpgc2$1@ID-124126.news.dfncis.de>
Source record: 146951

There's a regular advert which appears in program interupts on UK TV.

There's a fellow who says something like "I don't know anything about it -
but I know a man who does."

At least he gives the name of that man.

4864. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 02:50:07 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a6ehkstme1@nntp9.atl.mindspring.net>
Source record: 146952
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Ed:

I don't know, does MS have a Canadian English preference for its' spell checker as opposed to a British English preference? I have never checked for this option? If one is a Canadian Anglophone, how does one set their preference on the MS Word spell checker?

Is there now an official Canadian Standard English Dictionary? If so can you share with us what it is? The British have their venerable OED, which used to be the "official" Canadian dictionary back when I was a child in Canada. I was taught from the OED during my whole Canadian education. There was always an OED in every Canadian classroom when I was a child!

We Americans have our Daniel Webster, and of course the MS spell checker, which I currently have set to correct me as I type, but... what do the Canadian Anglophones have today? Heh, heh... I haven't thougt about it in years, but... do (poor downtrodden) Anglophone Canadians even have an official dictionary these days?

BTW... I presume you know that there is a Quebec French preference on spell checkers, as opposed to a Parisian French preference, etc... and indeed many software products are customized specifically for Quebec French, occasionally including some hardware items like keyboards, that customization effort is a small "cottage" industry in some parts of Quebec, but...

I still wonder... are Canadian English speakers now so honored (or is it honoured sic? Ooops... MS's spell checker just tried to over-ride that last instance of hono(u)red!) as to have their own official dictionary and not one borrowed either from the British or the New World Revolutionists?

--Peter K1PO

"ed price" <edprice@cox.net> wrote in message
news:rrzi8.10484$5S6.376760@news2.west.cox.net...
>
> "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
> news:a6eed6jdi1@slb4.atl.mindspring.net...
> > Bob:
> >
> > [snip]
> > "Bob Wilson" <rfwilson@intergate.nospam.bc.ca> wrote in message
> > news:u8ku0j91la0m1b@corp.supernews.com...
> > > In article <a6cjqh$a9j$1@slb0.atl.mindspring.net>, ab4bc@ix.netcom.com
> > > >No! Actually the Canadians spell it the British way and say it the

> > > American
> > > >way! Really.
> > >
> > > The hell we do! I am a Canadian, and have never seen it spelled
> > "Aluminium"
> > > here in Canada, and among other things I have worked with aluminum
> > extruders
> > > for 25 years. In Canada, we use the corrupted American spelling
> > ("Aliminum")
> > > and the American pronounciation as well.
> > >
> > > Bob.
> > [snip]
> >
> > Young whipper snapper! Heh, heh... Bob it so happens that I am a
> > naturalized American. But...
> >
> > I was born and educated in Canada. I completed all of my schooling in
> > Candaa, without stating my age I'll say that I finished K-12 somewhat
> before
> > the fifties ended. My experience was varied as well: e.g. K-4 in Nova
> > Scotia, 5-9 in British Columbia, 10-13 in Ontario, etc... It so happens
> that
> > at the many Canadian schools that I attended in that era, we exclusively
> > used the OED in all the schools that I attended. And I was definitely
> > taught to spell the element Al as aluminium! (Oxford English
Dictionary).
> >
> > These days, even though I have been living in the USA for years and I am
> now
> > a US citizen, I still find myself spelling the OED way!
> >
> > Only the spell-checker in MS Word keeps others from learning of my
> spelling
> > heritage, heh, heh...
> >
> > --Peter K1PO
>
> So, set your spull chucker preference to British English!
>
> Ed
>
>
>

4865. Re: G-Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 03:04:11 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <3C8ACD32.D6EAFBEA@adelphia.net>
Source record: 146953

Might make the antenna straight again! ;^)

CAM wrote:
>
> Alan Gault wrote:
> > Looking for a G-Whip mobile antenna in UK. Will pay reasonable price for
> > genuine item. Had a little accident with my own.
>
> Will a G-String work?
> --
> cheers, CAM http://www.qsl.net/w5dxp

4866. Re: vertical antenna grounds

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 03:26:50 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203091926.567ffe11@posting.google.com>
Source record: 146954

me@nowwhere.com wrote in message news:<3C894730.1DBB5856@swbell.net>...

>
> how good a ground would it be? good, bad, indifferent?
>
> any help appreciated.

Actually, according to charts, the Dallas area is better ground cdx
than many other places. You are in a belt of good ground that extends
from Texas up into Kansas, Neb, etc. The well case ground would not be
near as good as a set of radials. MK

4867. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 03:38:53 UTC
From: "..." <mecs@voyager.net>
Message-ID: <3c8ad8e1$0$35565$bbae4d71@news.net-link.net>
Source record: 146955

A single thin piece of wire at the top, especially if it goes in just one direction from the top insulator won't act as much of a top hat but rather as a folded inverted L. Especially if a physically short vertical there will be high voltage at the top of the wire, you need some surface area to dissipate it to prevent it from burning the insulation.

What I have used in the past is to terminate the top end of the antenna on a small piece of copper pipe - can use 3/8" if using under 250 watts, "½" if running 1 KW. It need not be more than 6" in length. Solder the wire to the copper pipe. Sweat a threaded male connector to the top of the pipe. Place the connector into a piece into a female threaded piece of PVC. Connect a PVC "T" to the threaded connector with the bottom of the "T" having the threaded female connector. Place PVC end caps on the "T". You now have a mechanically good insulator/support for the vertical element which will dissipate the current.
Drill a hole in each PVC cap and string a nylon rope through the horizontal portion of the "T"
Tie each end to the each tree respectively.

Use as long a vertical element as you can. A shortened helically wound vertical will transmit just fine but you will not capture much signal and you will be disappointed in what you will receive. The shorter the antenna the narrower the bandwidth will be around the resonant frequency.

Elevated radials will perform better than grounded ones. Use at least 4, 8 or 16 would be better. They can be very thin wire (even #22), it won't matter. If they are up 8 feet they'll be largely invisible. Try to make them 10% longer than the antenna length if you have the room.

Best of luck
Richard W9EEE

AB Brown wrote in message ...
>I would like to install a vertical antenna for 20-80 meters. Due to space
>and antenna restrictions, I am going to have to construct the antenna from
>copper wire. Here's a description of my antenna installation plans:
>
>My yard contains two 40-45 foot pine trees spaced about 10 feet apart. I
am
>going to vertically attach a wire between the trees of about 35 feet in
>length, which I hope will serve as the vertical part of the antenna. At
the
>40-45 foot level, I may stretch a horizontal wire between the pines of
about
>10 feet in length to serve as a tophat. The vertical may only be 35 feet

>because I'd like to attach 4 elevated 8 foot high ground radial wires to
the
>base. Of course, at the base of the antenna will be a variable pi network
>to match to 50 ohm coax to the antenna and allow all band operation.
>
>Opinions on my plan? Is a slightly shorter vertical with elevated radials
>better than a longer vertical with ground radials? How about the 10 foot
>top hat?
>
>Thanks, in advance.
>
>AB
>
>
>

4868. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 03:53:19 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u8lm5f2t8hc11b@corp.supernews.com>
Source record: 146956
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <a6eed6jdi1@slb4.atl.mindspring.net>, ab4bc@ix.netcom.com
says...
>

>
>Young whipper snapper!

Hey! I resemble that remark! :)

>Heh, heh... Bob it so happens that I am a
>naturalized American. But...
>
>I was born and educated in Canada. I completed all of my schooling in
>Candaa, without stating my age I'll say that I finished K-12 somewhat
before
>the fifties ended. My experience was varied as well: e.g. K-4 in Nova
>Scotia, 5-9 in British Columbia, 10-13 in Ontario, etc... It so happens
that
>at the many Canadian schools that I attended in that era, we exclusively
>used the OED in all the schools that I attended. And I was definitely
>taught to spell the element Al as aluminium! (Oxford English Dictionary).
[Snip]

Actually, that is rather interesting to me. All through my school years in
Vancouver (I graduated High School in 1963), not once were we expected to
use the correct (i.e. English and the rest of the world's) spelling of
Aluminum (that is, to spell it Aluminium). I recall once or twice it was
mentioned in passing as something that "they do in England", but that was
all. From what you say, it appears that there were varying "standards" on
this in different parts of Canada. Interesting.

Bob.

4869. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 04:15:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6emo0$dnej4$1@ID-124126.news.dfncis.de>
Source record: 146957

Please don't take it personally. I admit to unjustified exaggeration when I said "everybody's" time.

But the necessity to read through contributions, before realising time has in fact been wasted, will be appreciated.

It is tedious on occasions to read through long lists of references to books, papers, articles and authors who 99% of readers have never heard of, or at least have little hope of ever obtaing access to, or will never have the time to search for, issued by contributers of this newsgroup who feel insecure and are in need of moral support for their statements from obscure, remote sources.

The only conclusion to be drawn is that some contributers are at least very widely read and have immediate access to extensive libraries, sound factual technical contributions being effectively nil.

But engineering, a hobby or not, does not consist of reading ill-understood books.

Nevertheless, many contributers, including myself, obviously obtain entertainment and satisfaction from this particular newsgroup's many topics and activities.

Reg

4870. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 05:31:09 UTC
From: Don Kelly <dhky@peeshaw.ca>
Message-ID: <xcCi8.259929$A44.14581831@news2.calgary.shaw.ca>
Source record: 146958
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:a6ehkstme1@nntp9.atl.mindspring.net...
> Ed:
>
> I don't know, does MS have a Canadian English preference for its' spell
> checker as opposed to a British English preference? I have never checked
> for this option? If one is a Canadian Anglophone, how does one set their
> preference on the MS Word spell checker?
>
> Is there now an official Canadian Standard English Dictionary? If so can
> you share with us what it is? The British have their venerable OED, which
> used to be the "official" Canadian dictionary back when I was a child in
> Canada. I was taught from the OED during my whole Canadian education.
> There was always an OED in every Canadian classroom when I was a child!

"Canadian Oxford Dictionary" It's pretty good- includes such things as
qiviut, etc. Spelling is colour, honour, etc but also aluminum (one I)-
however the variants color, honor are also listed.
I am close to your age) but in Alberta, we tended to use color, etc -less
enamoured with the old country than Ontario or BC.
I just checked my MS Word- it does have a variety of English settings,
including "Canadian" but this appears to be more British (aluminium for
example)

--
Don Kelly
dhky@peeshaw.ca
remove the urine to answer

>
> We Americans have our Daniel Webster, and of course the MS spell checker,
> which I currently have set to correct me as I type, but... what do the
> Canadian Anglophones have today? Heh, heh... I haven't thougt about it in
> years, but... do (poor downtrodden) Anglophone Canadians even have an
> official dictionary these days?
>
> BTW... I presume you know that there is a Quebec French preference on
spell
> checkers, as opposed to a Parisian French preference, etc... and indeed
many
> software products are customized specifically for Quebec French,
> occasionally including some hardware items like keyboards, that
> customization effort is a small "cottage" industry in some parts of

Quebec,
> but...
>
> I still wonder... are Canadian English speakers now so honored (or is it
> honoured sic? Ooops... MS's spell checker just tried to over-ride that
last
> instance of hono(u)red!) as to have their own official dictionary and not
> one borrowed either from the British or the New World Revolutionists?
>
> --Peter K1PO
>
>
> "ed price" <edprice@cox.net> wrote in message
> news:rrzi8.10484$5S6.376760@news2.west.cox.net...
> >
> > "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
> > news:a6eed6jdi1@slb4.atl.mindspring.net...
> > > Bob:
> > >
> > > [snip]
> > > "Bob Wilson" <rfwilson@intergate.nospam.bc.ca> wrote in message
> > > news:u8ku0j91la0m1b@corp.supernews.com...
> > > > In article <a6cjqh$a9j$1@slb0.atl.mindspring.net>,
ab4bc@ix.netcom.com
> > > > >No! Actually the Canadians spell it the British way and say it the
> > > > American
> > > > >way! Really.
> > > >
> > > > The hell we do! I am a Canadian, and have never seen it spelled
> > > "Aluminium"
> > > > here in Canada, and among other things I have worked with aluminum
> > > extruders
> > > > for 25 years. In Canada, we use the corrupted American spelling
> > > ("Aliminum")
> > > > and the American pronounciation as well.
> > > >
> > > > Bob.
> > > [snip]
> > >
> > > Young whipper snapper! Heh, heh... Bob it so happens that I am a
> > > naturalized American. But...
> > >
> > > I was born and educated in Canada. I completed all of my schooling in
> > > Candaa, without stating my age I'll say that I finished K-12 somewhat
> > before
> > > the fifties ended. My experience was varied as well: e.g. K-4 in
Nova
> > > Scotia, 5-9 in British Columbia, 10-13 in Ontario, etc... It so
happens
> > that

> > > at the many Canadian schools that I attended in that era, we
exclusively
> > > used the OED in all the schools that I attended. And I was definitely
> > > taught to spell the element Al as aluminium! (Oxford English
> Dictionary).
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> > > These days, even though I have been living in the USA for years and I
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> > now
> > > a US citizen, I still find myself spelling the OED way!
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> > > Only the spell-checker in MS Word keeps others from learning of my
> > spelling
> > > heritage, heh, heh...
> > >
> > > --Peter K1PO
> >
> > So, set your spull chucker preference to British English!
> >
> > Ed
> >
> >
> >
>
>

4871. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 05:34:54 UTC
From: Spehro Pefhany <speff@interlog.com>
Message-ID: <2gCi8.95238$aFN.502@news1.bloor.is>
Source record: 146959
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In sci.electronics.design Peter O. Brackett <ab4bc@ix.netcom.com> wrote:

> Only the spell-checker in MS Word keeps others from learning of my spelling
> heritage, heh, heh...

Just looking at Alcan's history- it's interesting- they started as a subsidiary of Alcoa, got divested in 1928 as the _Aluminum_ company of Canada, and then in 1982 merged with the British Aluminium Company plc (as well as buying US aluminum assets of Atlantic Richfield) became Alcan _Aluminium_ Limited. In 2000 they merged with Alusuisse Group Ltd. to become just Alcan Inc., which would seem to solve the problem (for now).

Best regards,
--
Spehro Pefhany --"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com
9-11 United we Stand

4872. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 06:11:52 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C8AF8DE.11CF@earthlink.net>
Source record: 146960
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Just to stray a little further OT, is Canada still considered a colony?

Remember "Blame Canada," from "South Park: Bigger, Longer, and Uncut?"
There's a line: "They're not even a real country any waaaaaay!"

Peter O. Brackett wrote:
>
> Ed:
>
> I don't know, does MS have a Canadian English preference for its' spell
> checker as opposed to a British English preference? I have never checked
> for this option? If one is a Canadian Anglophone, how does one set their
> preference on the MS Word spell checker?
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> Is there now an official Canadian Standard English Dictionary? If so can
> you share with us what it is? The British have their venerable OED, which
> used to be the "official" Canadian dictionary back when I was a child in
> Canada. I was taught from the OED during my whole Canadian education.
> There was always an OED in every Canadian classroom when I was a child!
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> We Americans have our Daniel Webster, and of course the MS spell checker,
> which I currently have set to correct me as I type, but... what do the
> Canadian Anglophones have today? Heh, heh... I haven't thougt about it in
> years, but... do (poor downtrodden) Anglophone Canadians even have an
> official dictionary these days?
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> BTW... I presume you know that there is a Quebec French preference on spell
> checkers, as opposed to a Parisian French preference, etc... and indeed many
> software products are customized specifically for Quebec French,
> occasionally including some hardware items like keyboards, that
> customization effort is a small "cottage" industry in some parts of Quebec,
> but...
>
> I still wonder... are Canadian English speakers now so honored (or is it
> honoured sic? Ooops... MS's spell checker just tried to over-ride that last
> instance of hono(u)red!) as to have their own official dictionary and not
> one borrowed either from the British or the New World Revolutionists?
>
> --Peter K1PO
>
> "ed price" <edprice@cox.net> wrote in message
> news:rrzi8.10484$5S6.376760@news2.west.cox.net...
> >
> > "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message

> > news:a6eed6jdi1@slb4.atl.mindspring.net...
> > > Bob:
> > >
> > > [snip]
> > > "Bob Wilson" <rfwilson@intergate.nospam.bc.ca> wrote in message
> > > news:u8ku0j91la0m1b@corp.supernews.com...
> > > > In article <a6cjqh$a9j$1@slb0.atl.mindspring.net>, ab4bc@ix.netcom.com
> > > > >No! Actually the Canadians spell it the British way and say it the
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> > > ("Aliminum")
> > > > and the American pronounciation as well.
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> > > > Bob.
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> > > Young whipper snapper! Heh, heh... Bob it so happens that I am a
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> > > I was born and educated in Canada. I completed all of my schooling in
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> > > Scotia, 5-9 in British Columbia, 10-13 in Ontario, etc... It so happens
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> > > at the many Canadian schools that I attended in that era, we exclusively
> > > used the OED in all the schools that I attended. And I was definitely
> > > taught to spell the element Al as aluminium! (Oxford English
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> > > Only the spell-checker in MS Word keeps others from learning of my
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> > > heritage, heh, heh...
> > >
> > > --Peter K1PO
> >
> > So, set your spull chucker preference to British English!
> >
> > Ed
> >

> >
> >

--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4873. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 06:36:29 UTC
From: Spehro Pefhany <speff@interlog.com>
Message-ID: <N9Di8.96520$aFN.40552@news1.bloor.is>
Source record: 146961
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In sci.electronics.design Rich Grise <richgrise@earthlink.net> wrote:
> Just to stray a little further OT, is Canada still considered a colony?

Yes, but it is now a colony of the US rather than Great Britain.

Best regards,
--
Spehro Pefhany --"it's the network..." "The Journey is the reward"
speff@interlog.com Info for manufacturers: http://www.trexon.com
Embedded software/hardware/analog Info for designers: http://www.speff.com
9-11 United we Stand

4874. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 07:01:13 UTC
From: Rich Grise <richgrise@earthlink.net>
Message-ID: <3C8B0468.3940@earthlink.net>
Source record: 146962
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Spehro Pefhany wrote:
>
> In sci.electronics.design Rich Grise <richgrise@earthlink.net> wrote:
> > Just to stray a little further OT, is Canada still considered a colony?
>
> Yes, but it is now a colony of the US rather than Great Britain.
>
> Best regards,
> --
> Spehro Pefhany --"it's the network..." "The Journey is the reward"

But, I thought the US only colonized little backwater countries that
couldn't defend themselv.... Oh. Never mind.

;-)
--
Cheers!
Rich

"We have met the enemy, and he is us!"
- Pogo Possum, ca. 1950's

4875. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 08:04:42 UTC
From: David Cook <nospam.davepc2@oz.net>
Message-ID: <usEi8.11112$702.10757@sccrnsc02>
Source record: 146963

I feel that "performance" is subjective. I really like my Titan because it's a no-fuss antenna. I agree that it may not pull in the signals as well as some other bits of wire, but it sure is convenient to be able to jump from band to band without having to switch antennas.

I have a 2-el 17 meter mini-beam and a 20 meter dipole also. I find the dipole sometimes works better when the signals are broadside to it, but the Titan fills in for stations off the ends. Same-o for the mini-beam. It's got an Armstrong rotator, so if it doesn't happen to be pointing in the right direction, I can switch over to the Titan.

I had a bunch of wires strung up all over the place before I got the Titan. The XYL was not at all pleased. After putting the Titan up on an out of the way spot on our lot, the home is much happier.

And lastly, I'm a just rag chewer. The Titan fills the bill just fine for that. If you're looking for serious performance, you're not talking about single-element verticals and dipoles anymore. I can't say that the Titan is the best all-band vertical as far as performance, but it does a great job for what I want out of QSOing.

-- Dave, WA0TTN

"Mike" <km6ab@pacbell.net> wrote in message
news:3C88568A.1BDCADFF@pacbell.net...
> I had a GAP titan that went together well, had a decent match on all
> advertised bands and performed very poorly compared to most antennas I
> have used. My bad experience is from direct A-B comparisons with a Titan
> and several other types of antennas. There is a lot of info and postings
> about this topic and a google group search will flood your computer with
> GAP testimonials. From what I can tell most of the praises come from
> users who have not compared the GAP to anything else.
>

4876. Re: UHF PCB Antenna design questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 08:23:26 UTC
From: Tom Twist <tom@twist.no>
Message-ID: <mu5m8us56s9g26k6ktbu26a12p68sb4l7o@4ax.com>
Source record: 146964

On Fri, 08 Mar 2002 23:28:18 -0500, Doug Dougherty
<minerva@mindspring.com> wrote:

> I need a small PCB antenna for a short-range, 900 MHz ISM-band
>application. The design calls for a small (1.5") circuit with components at
>the center of the board, and an antenna trace running around its periphery.
>I don't know much about antennas, but I understand there are 3 types that are
>best suited for this application: a quarter-wave stub, a loop, and a semi-loop.

<snip>

> Which of these 3 antenna types would be best for this application? Any
>help or useful references would be greatly appreciated.
>

Chipcon has an application note about such antennas:

http://www.chipcon.com/pdf/AN_003_Antennas_1_1.pdf

Tom

Email: tom@twist.no (ttwist@online.no, lb8x@qsl.net)
Phone: +47 35972928/90662366, Ham call sign: LB8X Locator: JO49UA
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

4877. Giovanni D2T Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 11:53:03 UTC
From: Jason Ingram <jason.ingram@ntlworld.com>
Message-ID: <B8B0F254.E15B%jason.ingram@ntlworld.com>
Source record: 146965

has anybody had an experience of this antenna, considering it's size and drawbacks is it any good.

Cheers

Jason
G7BSK

4878. 17m transmission on 1118kHz? & Palstar AT300LCN

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 12:13:58 UTC
From: JRW <freeboy@ic24.net>
Message-ID: <u8mk50bv1g21b2@corp.supernews.com>
Source record: 146966

Hi all,

If I transmit voice on 18.165MHz it can be heard on 1117kHz-ish. Also if I try other frequencies the same happens. The MW receivers are mains powered and are in the same house. My antenna feeder (RG58) goes through one room, and up into the attic. Could the cause of this phenomenon be RF in the mains? A battery powered MW receiver on the same frequency did not receive my signal, but, I don't know if that radio was selective enough.

BTW The transmission is USB, and is 10W PEP. If I transmit SSTV then only the radio nearest the feed receives the signal, but on voice all radios receive the signal.

Any suggestions appreciated,

also,

What is the impedence of the balanced feeder connection on the Palstar AT300LCN ATU?

TNX
John

4879. Re: UHF PCB Antenna design questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 12:29:47 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6fjkt$dul8q$1@ID-124126.news.dfncis.de>
Source record: 146967

Tom Twist wrote -

> Chipcon has an application note about such antennas:
>
> http://www.chipcon.com/pdf/AN_003_Antennas_1_1.pdf

==========

Chipcon AS's application note is about the best quantitative summary of performance of short, low-profile, antennas I have come across.

Although writen for UHF applications it is also applicable to HF antennas used in restricted environments.

Reg G4FGQ

4880. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 13:11:04 UTC
From: DL7JSK <dl7jsk@darc.de>
Message-ID: <a6fm1aakl02$1@news.t-online.com>
Source record: 146968

Ok,the higher the swr (here) on 80m the better my hamstick,I got that,but my finals won't be very happy at a swr of 4.So the antenna tuner remains necessary

73
Tom

"CAM" <Cecil.A.Moore@IEEE.org> schrieb im Newsbeitrag news:3C8AA0BD.BB10F1E7@IEEE.org...
> Jerry Oxendine wrote:
> >
> > The higher frequencies are more forgiving than 75 meters and, generally
> > speaking, "natural"
> > impedances exhibited by such antennas are usually higher. For example, look
> > at the many
> > mag mounted CB antennas. But as you go downwards in frequency, if the
> > antenna is rea-
> > sonably efficient, the impedance tends to go downward, too, so you have to
> > add a little
> > "help" to bring this figure back up to 50 ohms.
>
> Maybe this will help, Jerry. Here's the radiation resistance of an 8ft
> center-loaded whip Vs frequency according to the ARRL Antenna Book.
>
> 1.8 MHz 0.2 ohms Perfect SWR = 50/0.2 = 250:1
> 3.8 MHz 0.8 ohms Perfect SWR = 50/0.8 = 62.5:1
> 7.2 Mhz 3.0 ohms Perfect SWR = 50/3 = 17:1
> 14.2 MHz 5.8 ohms Perfect SWR = 50/5.8 = 9:1
> 21.25 MHz 27 ohms Perfect SWR = 50/27 = 1.9:1
>
> Of course, we cannot get that perfect SWR because there are around
> 10 ohms of ground losses. That 10 ohms of ground losses are about
> 93% of the signal on 75m but are only about 27% of the signal
> on 15m and even less on 10m.
>
> Moral: The higher the SWR on 75m, the better the antenna. My
> screwdriver has an SWR of 4:1 without base matching. Of course,
> it is the 12.5 ohm feedpoint impedance that is desired, not
> the other possibility, a 200 ohm feedpoint impedance. :-)
> --
> cheers, CAM http://www.qsl.net/w5dxp

4881. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 13:51:07 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a6foc8$3id$1@slb1.atl.mindspring.net>
Source record: 146869
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

Hi Bob:

Actually I attended school in BC in Victoria, not Vancouver. Of course it might be expected that Victoria was/is more British than Vancouver.

--Peter

"Bob Wilson" <rfwilson@intergate.nospam.bc.ca> wrote in message news:u8lm5f2t8hc11b@corp.supernews.com...
> In article <a6eed6jdi1@slb4.atl.mindspring.net>, ab4bc@ix.netcom.com
> says...
> >
>
> >
> >Young whipper snapper!
>
> Hey! I resemble that remark! :)
>
> >Heh, heh... Bob it so happens that I am a
> >naturalized American. But...
> >
> >I was born and educated in Canada. I completed all of my schooling in
> >Candaa, without stating my age I'll say that I finished K-12 somewhat
> before
> >the fifties ended. My experience was varied as well: e.g. K-4 in Nova
> >Scotia, 5-9 in British Columbia, 10-13 in Ontario, etc... It so happens
> that
> >at the many Canadian schools that I attended in that era, we exclusively
> >used the OED in all the schools that I attended. And I was definitely
> >taught to spell the element Al as aluminium! (Oxford English
Dictionary).
> [Snip]
>
> Actually, that is rather interesting to me. All through my school years in
> Vancouver (I graduated High School in 1963), not once were we expected to
> use the correct (i.e. English and the rest of the world's) spelling of
> Aluminum (that is, to spell it Aluminium). I recall once or twice it was
> mentioned in passing as something that "they do in England", but that was
> all. From what you say, it appears that there were varying "standards" on
> this in different parts of Canada. Interesting.
>
> Bob.
>

4882. Help finding whip collar adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 14:05:13 UTC
From: Sean Baxter <NOSPAMsbaxter@gte.net>
Message-ID: <tKJi8.6377$KK5.2914@nwrddc01.gnilink.net>
Source record: 146870

I need help in finding a collar adapter that will combine two sections of a stainless steel whip antenna. I need to cut a whip in half for easy transport. I know I have seen them at ham fests but can not find a vendor today.

The collar is about an inch long with hex set screws or thumb screws to lock in both sides of the whip. The whip diameter is about 1/8".

Thanks for any help.

Sean - K3XT

4883. Re: G-Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 15:03:57 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c8b75fa_2@news.iglou.com>
Source record: 146872

Whats a G-whip? I can't find a link.

--
Steve Ellington
N4LQ

When two wrongs don't make a right, try three.
"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:3C8ACD32.D6EAFBEA@adelphia.net...
> Might make the antenna straight again! ;^)
>
> CAM wrote:
> >
> > Alan Gault wrote:
> > > Looking for a G-Whip mobile antenna in UK. Will pay reasonable price
for
> > > genuine item. Had a little accident with my own.
> >
> > Will a G-String work?
> > --
> > cheers, CAM http://www.qsl.net/w5dxp

4884. Re: Uniden Bearcat 350A Scanner BRAND NEW

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 15:13:48 UTC
From: Runnyriver <noton6@microbrain.com>
Message-ID: <a6fsio$dkne9$1@ID-121301.news.dfncis.de>
Source record: 146871
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.scanner,rec.radio.swap

How about a lawn mower? It was running last summer.

> "S Ecurity Unlimited" <securit1951@earthlink.net> wrote in message
> news:4Ath8.41134$0C1.3297624@newsread1.prod.itd.earthlink.net...
> > I will also do trades as well.
> >
> >
>
>

4885. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 16:03:04 UTC
From: k1bqt@aol.com
Message-ID: <20020310110304.25084.00000812@mb-fe.aol.com>
Source record: 146873

Reg--

What are you smoking? It must be pretty good stuff!

Rick K1BQT

4886. ScrewDriver Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 17:21:38 UTC
From: hamop@repeater.net
Message-ID: <3c8b947f.410783@news.ptd.net>
Source record: 146874

A while back I took my ScrewDriver antenna off my full size 96 Extended cab GMC truck. This weekend we had super high winds and I was going to try to work some of the Great Lakes QSO Party. The antenna all ways worked fine no matter where I tuned it. I picked it up at Dayton last year from a guy with a 9 call, I think from Ill. I forgot his website URL but it was something like amatuerantennas.com or something close. Now I can't get it to tune on 10,12,15,17 at all the radio just got nuts. It will sometimes tune on 20 meters. It always tunes on 30,40, and 75 without any problems. I am using an Heathkit SB-1400 with an MFJ tuner set for direct only so that I can see the SWR meter on it. I also tried my icom 746 with the same results. I have a 54" whip on the top, and have been using it right along....

Any one have any ideas for me? I even took a pop can and put 4 loops around it with the coax incase I had some RF feedback. Yes, before someone asksI made sure it was grounded so that the matching unit was working.

Corey KF3DY

4887. Newbie with an ATAS 100, what mount is best?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 17:46:59 UTC
From: Jeff Brown <jbrown21@sprynet.com>
Message-ID: <3C8B9C13.1FFBCFFD@sprynet.com>
Source record: 146875

Just ordered an ATAS 100 for my FT100D. What brand of mount
do you all recommend? Where is a good place to mount it on a
Chevy van? Do you recommend a diplexer or an separate
antenna for 2m/445? Thanks, it's been 15 years since I
mobiled with just a Hustler and 430S! Now it's diplexers,
NMO, PO, Screwdrivers, ...still trying to figure it all
out (that's why I didn't want to order a mount yet)!
Thanks,
Jeff WB9FOL

4888. Re: ScrewDriver Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 17:48:50 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C8B9C6A.831D66AC@icok.net>
Source record: 146876

Corey,
Is the antenna back on the truck, or did you mount
it somewhere else?
'Doc

4889. Re: ScrewDriver Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 18:09:20 UTC
From: hamop@repeater.net
Message-ID: <3c8ba0ba.3542556@news.ptd.net>
Source record: 146877

On the back in the same exact place where it was before. It is behind the tail gate with some plate metal coming off the bumper about 4 inches. I also took off the other mounting equipment and hooked some rope up around the frame for my tanoe cover for support.

On Sun, 10 Mar 2002 17:48:50 GMT, 'Doc <w5lz@icok.net> wrote:

>Corey,
> Is the antenna back on the truck, or did you mount
>it somewhere else?
> 'Doc

4890. Re: UHF PCB Antenna design questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 18:40:10 UTC
From: Doug Dougherty <minerva@mindspring.com>
Message-ID: <3C8BA88A.D0F21B40@mindspring.com>
Source record: 146878

Reg Edwards wrote:
>
> Tom Twist wrote -
>
> > Chipcon has an application note about such antennas:
> >
> > http://www.chipcon.com/pdf/AN_003_Antennas_1_1.pdf
>
> ================================
>
> Chipcon AS's application note is about the best quantitative summary of
> performance of short, low-profile, antennas I have come across.
>
> Although writen for UHF applications it is also applicable to HF antennas
> used in restricted environments.
> ---
> Reg G4FGQ

Thanks very much Reg and Tom. That is the best application note I have seen for these antennas.

Reg, why not use multiple turns in a loop antenna? Would that change the radiation pattern from radial to perpendicular to the plane of the loop?

Doug
AL7GK

4891. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 18:50:39 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8BAAFF.3418002B@IEEE.org>
Source record: 146880

DL7JSK wrote:
>
> Ok,the higher the swr (here) on 80m the better my hamstick,I got that,but my
> finals won't be very happy at a swr of 4.So the antenna tuner remains
> necessary

Most mobile hams solve the matching problem with a coil or cap
to ground at the antenna base. It might work if you attach the
coil from the base of the antenna to the base of your mag mount.
--
cheers, CAM http://www.qsl.net/w5dxp

4892. Re: 17m transmission on 1118kHz? & Palstar AT300LCN

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 18:54:04 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8BABCC.D551C57F@IEEE.org>
Source record: 146881

JRW wrote:
>
> Hi all,
>
> If I transmit voice on 18.165MHz it can be heard on 1117kHz-ish. Also if I
> try other frequencies the same happens. The MW receivers are mains powered
> and are in the same house.

What are the IF frequencies of your MW receivers?
--
cheers, CAM http://www.qsl.net/w5dxp

4893. Re: CC&R's and antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 18:54:47 UTC
From: Beans <beans@gate.net>
Message-ID: <3C8BABF7.ED58810B@gate.net>
Source record: 146879

dan wrote:

>
> Hi all,
> I agree with the above post, there are a lot of things that can bring
> enjoyment from the hobby other than large antenna arrays. My fellow
> GMDXA member, N9XX, does just great with a very short vertical and
> attic antenna. So, that said, yes, it's great to have a big array.
> My question is, why move into an area that has restrictions? Is the
> area a status thing? Is it a wife driven thing? Is there positively
> no other option?

I didn't become a ham until recently. I have lived in my home for a long ime, and
can't move just because I became a ham. So that's one reason.

Jeff

4894. Re: ScrewDriver Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 18:57:46 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8BACAA.C017EE25@IEEE.org>
Source record: 146882

KF3DY wrote:
> Any one have any ideas for me?

It is not clear how you configured your antenna after you removed
it from the pickup. You lost your ground plane so are you now using
radials for a counterpoise? If your antenna is configured properly,
the first thing to suspect is the finger stock.
--
cheers, CAM http://www.qsl.net/w5dxp

4895. Re: 17m transmission on 1118kHz? & Palstar AT300LCN

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 19:00:06 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <a6gafi0cpj@enews1.newsguy.com>
Source record: 146883

there are lots of possibilities. it could be just plain front end overload, rf on the ac mains, an IF leak in the transmitter, bad image rejection in the receiver, mixing with some other signal nearby, or any combination of the above. i would start by putting a filter on the ac cord for that radio. then check for overload by removing the rx antenna or inserting an attenuator. after that there are various combinations of IF leaks or image frequencies, which most of the time i would ignore as they are hard to remove and very short range.

btw, sstv would probably be not as noticeable as it is an almost constant amplitude so would appear as a carrier unless you were receiving in ssb.

"JRW" <freeboy@ic24.net> wrote in message
news:u8mk50bv1g21b2@corp.supernews.com...
> Hi all,
>
> If I transmit voice on 18.165MHz it can be heard on 1117kHz-ish. Also if
I
> try other frequencies the same happens. The MW receivers are mains
powered
> and are in the same house. My antenna feeder (RG58) goes through one
room,
> and up into the attic. Could the cause of this phenomenon be RF in the
> mains? A battery powered MW receiver on the same frequency did not
receive
> my signal, but, I don't know if that radio was selective enough.
>
> BTW The transmission is USB, and is 10W PEP. If I transmit SSTV then only
> the radio nearest the feed receives the signal, but on voice all radios
> receive the signal.
>
> Any suggestions appreciated,
>
> also,
>
> What is the impedence of the balanced feeder connection on the Palstar
> AT300LCN ATU?
>
> TNX
> John
>
>

4896. Re: ScrewDriver Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 19:34:52 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <g7dn8u0hkh93o3jkjrfktf83amtajiq4oe@4ax.com>
Source record: 146884

I agree. First thing to check is the finger stock. Remove the cover (if not clear) and see what is going on when the coil gets down toward the bottom. Same thing happened to me recently. finger stock became unsoldered on one end.

73, Dick - W6CCD

On Sun, 10 Mar 2002 12:57:46 -0600, CAM <Cecil.A.Moore@IEEE.org> wrote:

>KF3DY wrote:
>> Any one have any ideas for me?
>
>It is not clear how you configured your antenna after you removed
>it from the pickup. You lost your ground plane so are you now using
>radials for a counterpoise? If your antenna is configured properly,
>the first thing to suspect is the finger stock.

4897. Re: UHF PCB Antenna design questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 20:02:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6gf8d$dn0u2$1@ID-124126.news.dfncis.de>
Source record: 146886

Doug Dougherty asked -
> Reg, why not use multiple turns in a loop antenna? Would that change the
> radiation pattern from radial to perpendicular to the plane of the loop?
==========

If the larger number of turns of thinner pcb track widths are all in the same plane there will be zero effect on the radiation pattern. There are just some amps flowing round the same circle. The pattern is still omnidirectional in the plane of the turns with a null at 90 degrees to that plane.

Now very much reduce the diameter of the turns and stack the turns one above another at right angles to the board. You end up with a 1/4-wave or 1/2-wave continuously-loaded vertical. Also known as a Helical. But the pattern is still omnidirectional in the plane of the turns with a null at 90 degrees.

The reason for NOT using multi-turn transmitting loops is an even lower efficiency than a single turn. The conductor loss resistance increases due to N times the length of more than N times thinner conductors, compounded by proximity effects of close-spaced turns. Radiation resistance fights a losing battle.

The ONLY reason multi-turn receiving loops are used on medium and long waves is because 500,000 pF air-spaced variable tuning capacitors are not available. ;o)

Yours, Reg.

4898. Re: Adjusting a CB antenna for Low VHF?.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 20:08:07 UTC
From: IJ.McCrum@ulst.ac.uk
Message-ID: <3c8ba785.2474013@news.ntlworld.com>
Source record: 146885

On Sun, 3 Mar 2002 22:31:16 +0000 (UTC), "Paul Logan"
<Paul.Logan4@btinternet.com> wrote:

>Hi all,
>
>I was wondering could someone provide me some information about modifying a
>5/8th wave CB antenna to have a centre frequency of say 42.5 mhz. I am
>interested in Low VHF reception and have been having fun in recent times
>hearing the California Highway patrol in the evenings around these
>frequencies.

>Paul Logan,
>Lisnaskea, N. Ireland

Hi Paul, whilst any old aerial will work for receiving. You will get
better reception with a directional aerial... same way TV yagis give
better pictures. Of course with a directional aerial you have to know
where to point it... or use a rotator.

What you are trying to do with the CB antenna is a bit of a stretch. A
vertical antenna for 42.5Mhz would not be hard to make from scratch...

Actually if you do a webserach for antennas for the 6m (50Mhz) amateur
band it should be fairly easy to scale them up to 42.5MHz.

A number of textbooks will give constructional plans for 1/4 wave or
even 1/2 wave whips...

Cheers
Ian/MI5AFL, Donaghadee, Northern Ireland.

4899. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 20:58:38 UTC
From: elektrode <elektrode@ntlworld.com>
Message-ID: <2MPi8.14763$xO2.1206149@news11-gui.server.ntli.net>
Source record: 146887
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

"Spehro Pefhany" <speff@interlog.com> wrote in message
news:2gCi8.95238$aFN.502@news1.bloor.is...
> In sci.electronics.design Peter O. Brackett <ab4bc@ix.netcom.com> wrote:
>
> > Only the spell-checker in MS Word keeps others from learning of my
spelling
> > heritage, heh, heh...
>
> Just looking at Alcan's history- it's interesting- they started as a
> subsidiary of Alcoa, got divested in 1928 as the _Aluminum_ company of
> Canada, and then in 1982 merged with the British Aluminium Company plc (as
> well as buying US aluminum assets of Atlantic Richfield) became Alcan
> _Aluminium_ Limited. In 2000 they merged with Alusuisse Group Ltd. to
> become just Alcan Inc., which would seem to solve the problem (for now).
>
> Best regards,

Not entirely.The original British spelling was Aluminum, but it was changed
to Aluminium by the International Union of Pure and Applied Chemistry, in
order to follow the 'ium' endings of other elements. America also used this
international spelling until 1925, when the American Chemical Society
decided to revert to the original British version. Have no idea why. Hope
that confuses everyone! (G)
--
JohnS

4900. Re: Newbie with an ATAS 100, what mount is best?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 21:30:09 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020310163009.28439.00001145@mb-cg.aol.com>
Source record: 146888

Don't use a mag mount. The ATAS-100 antenna must be well grounded at the base.

I used a Diamond trunk lip mount. The antenna does not seem to have a lot of wind resistance but something strong is nice. Be sure to get a good ground at the base.

Don't use an expensive duplexer to get on VHF/UHF. Just get a cheap second antenna for those bands. MFJ has a mag mount VHF/UHF antenna that looks liek a cell phone antenna and sells for about $20. It works just fine. If you try to use the ATAS100 with a duplexer it makes it harder to tune or scan back and forth. You have to listen to the relays in the FT-100D clack every time it goes to VHF or UHF. I am sure the constant work isn't good for them.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

4901. Re: References on Half wave end fed top loaded vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 21:33:34 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020310163334.28439.00001148@mb-cg.aol.com>
Source record: 146889

If you feed the vertical at the top you only need one radial. Check out
Cebik's article on top fed inverted L antennas.
http://www.cebik.com/gup25.html
Mine works very well.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free,
Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

4902. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 21:51:47 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203101351.4da0d3b3@posting.google.com>
Source record: 146890

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C8BAAFF.3418002B@IEEE.org>...
> DL7JSK wrote:
> >
> > Ok,the higher the swr (here) on 80m the better my hamstick,I got that,but my
> > finals won't be very happy at a swr of 4.So the antenna tuner remains
> > necessary
>
> Most mobile hams solve the matching problem with a coil or cap
> to ground at the antenna base. It might work if you attach the
> coil from the base of the antenna to the base of your mag mount.

Usually with a mag mount I would just use a small tuner at the rig.
The coax will be short and the losses from the mismatch are pretty
low. In fact, I can hardly tell a difference in performance from
matching at the rig or matching at the base of the antenna. The low
bands have a worse mismatch, but the coax losses decrease with freq so
it works out ok. My coax is only about 8 ft long usually either way.
The mfj random wire tuner will work fine for most matches. I think
they also sell matchers made for mobile antennas at quite a few
places. A simple L network is all thats needed to match about
anything. I usually do my matching at the rig most of the time. That
may sound funky to the purists, but it works just fine as long as the
coax is short. It lets me fine tune the match while moving. MK

4903. Re: Help finding whip collar adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 22:12:27 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <E0Ri8.31385$Nn6.1729523@e3500-atl2.usenetserver.com>
Source record: 146892

I wish I had known. I saw a whole box of them at Charlotte, NC hamfest this
weekend.
Try this: www.sauderelectronics.com I *think* that's were I saw then.

Jerry
K4KWH
Sean Baxter <NOSPAMsbaxter@gte.net> wrote in message
news:tKJi8.6377$KK5.2914@nwrddc01.gnilink.net...
> I need help in finding a collar adapter that will combine two sections of
a
> stainless steel whip antenna. I need to cut a whip in half for easy
> transport. I know I have seen them at ham fests but can not find a vendor
> today.
>
> The collar is about an inch long with hex set screws or thumb screws to
lock
> in both sides of the whip. The whip diameter is about 1/8".
>
> Thanks for any help.
>
> Sean - K3XT
>
>
>

4904. - FREE HOME DELIVERY!!! www.discount-buyer.com -

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 22:13:24 UTC
From: udayg1000@aol.com
Message-ID: <20020310171324.14768.00000959@mb-ba.aol.com>
Source record: 146891

http://www.discount-buyer.com

These Home Entertainment Products on SALE today at AMAZING DISCOUNTS!!!
FREE HOME DELIVERY ON ALL ITEMS!!!

Pioneer Complete Home Theater
Price: $320.95
(While supplies last!)

Key Features : 50W x 4, Dolby Pro Logic, SFC, Subwoofer Preout. Processing : Dolby Pro-Logic, 3 Simulated Sound Fields. Power: Stereo: 50 watts per channel; Surround: 50W x 4. Speaker System: Subwoofer/Satellite System, Wooded Cabinet Satellites & Sub. Front L/R: 4" Full Range. Center: 4" Full Range. Rears: 4" Full Range. Subwoofer: 6" Passive. Convenience Features: Pre-Programmed A/V Remote Control (w/DSS & Cable Codes) Subwoofer Pre-Output, 4 Audio Inputs (Including Tuner), Color Coded Wires.

Sharp DVD Player with Dolby Digital Decoder and Component Output Terminals
Price: $182.48
(While supplies last!)

10bit Video DAC Size, Standard Remote, 2.5 lbs Weight, Black Unit Color, Optical & Coax Audio Output, S-Video Video Output, Plays Audio CDs, Dolby Prologic Decoder, 500 Lines Horizontal Resolution, This product has been refurbished and comes with a 90 day warranty.

Panasonic 61" Projection Televison
Price: $1,983.20
(While supplies last!)

2Tuner Picture-in-Picture with Channel Search, Advanced Screen Sheild, Fine-Pitch Screen, 3-line comb filter, Digital Convergence, 7" Radial Faceplate CRT's, 4-element Hybrid Lens, Stereo/SAP Reception, Bass/Treble/Balance Control, Component Video Inputs (y,pb,pr).

4905. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 22:51:50 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6go38$eatbd$1@ID-124126.news.dfncis.de>
Source record: 146893

Rick asked -

> What are you smoking? It must be pretty good stuff!

==========

For tonight, it says on the label -

"HARDY'S"
"NOTTAGE HILL"
"CABERNET SAUVIGNON SHIRAZ"
"South Eastern Australia, 1999"

It's Red.

In terms of Yankee Dollars, what the Andrews Sisters were working for in 1944 while drinking rum and coco-cola, it's roughly 7 dollars a bottle.

The world gets a smaller place every few minutes !

Hic!

Reg.

4906. Re: Bad swr on a hamstick

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 23:11:00 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8BE804.7EA11700@IEEE.org>
Source record: 146894

Mark Keith wrote:
> I usually do my matching at the rig most of the time. That
> may sound funky to the purists, but it works just fine as long as the
> coax is short. It lets me fine tune the match while moving. MK

The losses in 8 ft of coax is enough to lose a 75m shootout. :-)
Since a coil increases its reactance with frequency, that's what
I use with my screwdriver. If I need to remove my top hat for high
frequency operation, I also remove the coil.
--
cheers, CAM http://www.qsl.net/w5dxp

4907. Re: MULTEE Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-10 23:51:01 UTC
From: k1bqt@aol.com
Message-ID: <20020310185101.01713.00000713@mb-me.aol.com>
Source record: 146895

>It's Red.<

Ha! I knew it. But, if it's red, it's good for your heart! Enjoy-and with a good stinky cheese.

Rick K1BQT

4908. Automatic tower lowering.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 00:01:49 UTC
From: Mitch Kobierowski <mskobier@3-cities.com>
Message-ID: <3C8BF529.46A8A3FD@3-cities.com>
Source record: 146896

Hello all,
Several years ago I saw an article on a ham who built an automatic crank up tower lowering system for his crank up tower in one of the ham magazines(can't remember which one). It was activated when the wind speed reached a preset speed and automatically lowered his tower. Does anyone know where I can find that article or a link to his page if he has one? Or if anyone remembers the article and which magazine it was in, that would be just as good.

Thanks
Mitch KJ7JA

4909. WTB-ANTENNA OR PARTS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 00:16:09 UTC
From: n2ion@aol.com
Message-ID: <20020310191609.21426.00001167@mb-mq.aol.com>
Source record: 146897

I'M LOOKING TO BUY EITHER A DRIVEN ELEMENT FOR A HYGAIN TH7DX ANTENNA, OR A
WHOLE ANTENNA.
EMAIL WITH DETAILS

4910. Re: Newbie with an ATAS 100, what mount is best?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 00:33:41 UTC
From: Jeff Brown <jbrown21@sprynet.com>
Message-ID: <3C8BFB65.B16ED94D@sprynet.com>
Source record: 146898

Thanks for the info, Craig! I built a glass mount 2m/432 antenna (un-tested yet, too cold outside ;) so I'll try out your suggestion.
Jeff

> Don't use a mag mount. The ATAS-100 antenna must be well grounded at the base.
> I used a Diamond trunk lip mount. The antenna does not seem to have a lot of
> wind resistance but something strong is nice. Be sure to get a good ground at
> the base.
> Don't use an expensive duplexer to get on VHF/UHF. Just get a cheap second
> antenna for those bands. MFJ has a mag mount VHF/UHF antenna that looks liek a
> cell phone antenna and sells for about $20. It works just fine. If you try to
> use the ATAS100 with a duplexer it makes it harder to tune or scan back and
> forth. You have to listen to the relays in the FT-100D clack every time it

4911. Re: UHF PCB Antenna design questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 00:47:41 UTC
From: Doug Dougherty <minerva@mindspring.com>
Message-ID: <3C8BFEAD.1C81CBA3@mindspring.com>
Source record: 146899

Reg Edwards wrote:
>
> Doug Dougherty asked -
> > Reg, why not use multiple turns in a loop antenna? Would that change the
> > radiation pattern from radial to perpendicular to the plane of the loop?
> ==
>
> If the larger number of turns of thinner pcb track widths are all in the
> same plane there will be zero effect on the radiation pattern. There are
> just some amps flowing round the same circle. The pattern is still
> omnidirectional in the plane of the turns with a null at 90 degrees to that
> plane.

Reg,

I understand that using more loops with thinner trace widths will increase the resistance of a loop antenna, and your point about interactions between multiple turns is well taken. But won't multiple turns give a loop antenna a higher radiation resistance? It's my understanding that radiation resistance increases exponentially with the size of the loop. Wouldn't two turns of the same current flowing around the same circle, double the magnetic field intensity?

4912. FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 01:04:58 UTC
From: Lou <tech@dp.net>
Message-ID: <a6h1db$26k9$1@news.dp.net>
Source record: 146900

2 - A-99 Antennas. CB/10 meter. These are the ones that RS sold under their own name. Open the box (at least the ones I DID open) and get Antron paperwork. These two are unopened. They are on clearance and sold AS IS. IF you should have any problems, you must contact the manufacturer for parts.

$40 per antenna - shipped

Please reply direct. Thanks.

--
Lou
Owner of: C.L. FURLONG ENTERPRISES

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4913. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 01:20:24 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c8c0ab3_3@news1.prserv.net>
Source record: 146901

--
Monte B. Carroll <monte.carroll@nashville.com> wrote in message
news:3c8ac7ab.221745329@news.nashville.com...
>
> All the Rohn 20 cost was about two hours of labor taking it down and
> getting it home. And I got a three element beam, a rotor, and a tilt
> base with it. But, just as important, was the time spent with an old
> ham (he helped), and the start of a good friendship. He got out of
> Amateur Radio years ago and is happy to see the tower put back in
> service. Over the next few weeks I'll clean it up, replace what's
> necessary and get it back in the air. I'll bake some pies (my other
> hobby) for him and his wife, too.
>
> There is some minor rust, and the bolts between the sections will be
> replaced. What's your suggestion on dealing with rust?

Wire brush and paint. I use cold galvanizing spray available in numerous
brands at hardware stores and home centers. Others claim that any good
outdoor alkyd enamel works as well, and I am not prepared to argue. Latex
doesn't stop the moisture. Rustoleum used to be the best choice, but it
doesn't sem as good as it used to be. Just get a good coat of paint with no
holes in it. One caution, never use chemical rust cleaners like Naval
Jelly, as various undesirable things happen to the steel. Hydrogen
embrittlement in the case of Naval Jelly.

BTW, how have you identified this as Rohn 20? It hasn't been produced in
many, many years. Because it has little torque strength. If you do put
that big beam on it, be sure to use some sort of torque arms at the rotator
to resist the twist.

Crazy George
Remove NO and SPAM from return address

>
> Monte
>
> On Sat, 9 Mar 2002 15:05:47 -0600, "Crazy George"
> <munschNO@attglobal.net.SPAM> wrote:
>
> >I wouldn't pay more than $20 a section for it unless it is almost new.
> >Sometimes it is available for the removal, but follow the advice from
Rohn
> >and others about rust, weak spots, and temporary guy wires if you want to
> >take some down. BTW, I have 100 feet of 25 which is in its second
location

> >and was originally erected by me in 1962. I have replaced most of the
joint
> >hardware due to rust, and touched up a lot of spots on other places,
> >especially the cable clamps on the guys before I replaced them with
> >preformed grips, but the tower itself shows no rust on the outside, and
> >sounds solid still at the point it leaves the cement base. I worry about
> >the anchor rods and examine them regularly, but they are holding their
> >galvanizing well also.
> >
> >--
> >Crazy George
> >Remove NO and SPAM from return address
> >
> >Monte B. Carroll <monte.carroll@nashville.com> wrote in message
> >news:3c89fe23.170145656@news.nashville.com...
> >>
> >> What's a fair price for used 25?
> >>
> >> Monte

4914. Re: Automatic tower lowering.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 01:22:31 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c8c0ab4_3@news1.prserv.net>
Source record: 146902

The outline of it was first, a tower with an electrical winch, and a wind speed indicator with a comparator which tripped a relay at a preset speed. Relay applied down voltage to the winch.

--
Crazy George
Remove NO and SPAM from return address
Mitch Kobierowski <mskobier@3-cities.com> wrote in message news:3C8BF529.46A8A3FD@3-cities.com...
> Hello all,
> Several years ago I saw an article on a ham who built an automatic
> crank up tower lowering system for his crank up tower in one of the ham
> magazines(can't remember which one). It was activated when the wind
> speed reached a preset speed and automatically lowered his tower. Does
> anyone know where I can find that article or a link to his page if he
> has one? Or if anyone remembers the article and which magazine it was
> in, that would be just as good.
>
> Thanks
> Mitch KJ7JA
>

4915. Re: WTB-ANTENNA OR PARTS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 01:59:26 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C8C0F02.5604282B@tampabay.rr.com>
Source record: 146903

i assume you dont wish to go thru hygain to get the part?
there website is www.hy-gain.com
just in case you didnt know it

N2ION wrote:

> I'M LOOKING TO BUY EITHER A DRIVEN ELEMENT FOR A HYGAIN TH7DX ANTENNA, OR A
> WHOLE ANTENNA.
> EMAIL WITH DETAILS

4916. a link to an FCC graphic, does this make sense?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 02:23:26 UTC
From: "1.156" <robXX@piovere.com>
Message-ID: <D9471A8BFD50E087.53B37814C9776BD2.E7710C4F8799C143@lp.airnews.net>
Source record: 146904

Recently the FCC issued a preliminary ruling, changing the part 15 limits for emissions from

ground penetrating radars and similar things. Here's a single graphic showing the limits they

propose:

http://www.wavebounce.com/images/UWB%20limits%20prelim%2002Feb.gif

My problem is that the vertical axis of the graph is in dBm. I'm trying to figure out what

meaning this can have when it's plotted vs. frequency. I'm used to seeing plots like this showing

spectral density (dBm/Hz) power levels in dBm obtained by integrating between two frequencies.

For a wideband source, the bandwidth of the measuring device will determine how much power is

detected, centered at any given frequency. Is it possible that the FCC is simply assuming a

bandwidth minimum, like 1MHz, which they do mention in various places in the part 15 rules?

I would appreciate any comments on this --

Email would be nice (please remove the xx in my return address) but I will be checking the ng.

4917. Re: ScrewDriver Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 02:25:01 UTC
From: hamop@repeater.net
Message-ID: <3c8c151c.33340956@news.ptd.net>
Source record: 146906

Sorry All, I am putting this at the same spot on the truck. I am not making it my home station antenna. I am also wondering if I should mount it right to the bumper instead of using the 4 inch standoff. Any suggestions?

Corey KF3DY

On Sun, 10 Mar 2002 17:21:38 GMT, hamop@repeater.net (KF3DY) wrote:

>A while back I took my ScrewDriver antenna off my full size 96
>Extended cab GMC truck. This weekend we had super high winds and I
>was going to try to work some of the Great Lakes QSO Party. The
>antenna all ways worked fine no matter where I tuned it. I picked it
>up at Dayton last year from a guy with a 9 call, I think from Ill. I
>forgot his website URL but it was something like amatuerantennas.com
>or something close. Now I can't get it to tune on 10,12,15,17 at all
>the radio just got nuts. It will sometimes tune on 20 meters. It
>always tunes on 30,40, and 75 without any problems. I am using an
>Heathkit SB-1400 with an MFJ tuner set for direct only so that I can
>see the SWR meter on it. I also tried my icom 746 with the same
>results. I have a 54" whip on the top, and have been using it right
>along....
>
>Any one have any ideas for me? I even took a pop can and put 4 loops
>around it with the coax incase I had some RF feedback. Yes, before
>someone asksI made sure it was grounded so that the matching unit was
>working.
>
>Corey KF3DY

4918. Re: UHF PCB Antenna design questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 02:25:14 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6h4jb$dmhqu$1@ID-124126.news.dfncis.de>
Source record: 146905

> It's my
> understanding that radiation resistance increases exponentially with
> the size of the loop.

==========

Doug, dump your old wife adviser and switch to a later edition of the R**L Handbook.

You won't find any reference to exponential relationship and loop size in the excellent Chipcon AS application notes.

==========

> Wouldn't two turns of the same current flowing
> around the same circle, double the magnetic field intensity?

==========

Indeed it would.

But the trouble is, the ONLY way of doubling the radiated field intensity external to the antenna is to increase the power output from the transmitter. That's cheating. Think about it. It has little to do with what the antenna might consist of.

It should be obvious, for the same power input to a multi-turn antenna, the circulating current in each turn must decrease. The feedpoint input impedance to the loop increases as the square of the number of turns.

As I said, the radiation resistance fights a losing battle with antenna loss resistance.

But in your case, it hardly matters. For a range of a few hundred yards? and with a few milliwatts Tx power almost anything will work.

Yours, Reg.

4919. Cobwebb antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 02:51:11 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203101851.170dfe44@posting.google.com>
Source record: 146907

Is anyone here familiar with the Cobwebb antenna
(http://www.g3tpw.ukgateway.net/) for 10m/12m/15m/17m/20m? The
individual who makes and sells this antenna says that it is a series
of nested 1/2 wavelength dipoles bent into a square. Is this Cobwebb
antenna a series of 1/2 wavelength loop antennas for different bands?

Jason Hsu, AG4DG
jason_hsu_802701@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

4920. Re: G-Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 02:55:38 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <3C8C1CB3.E17942FD@adelphia.net>
Source record: 146911

It is a short antenna made using a device known as a henway.

- Mike -

N4LQ wrote:
>
> Whats a G-whip? I can't find a link.
>
> --
> Steve Ellington
> N4LQ
>
> When two wrongs don't make a right, try three.
> "Mike Coslo" <mcoslo@adelphia.net> wrote in message
> news:3C8ACD32.D6EAFBEA@adelphia.net...
> > Might make the antenna straight again! ;^)
> >
> > CAM wrote:
> > >
> > > Alan Gault wrote:
> > > > Looking for a G-Whip mobile antenna in UK. Will pay reasonable price
> for
> > > > genuine item. Had a little accident with my own.
> > >
> > > Will a G-String work?
> > > --
> > > cheers, CAM http://www.qsl.net/w5dxp

4921. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 03:12:25 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u8o84phpfql42e@corp.supernews.com>
Source record: 146908
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

In article <a6foc8$3id$1@slb1.atl.mindspring.net>, ab4bc@ix.netcom.com
says...
>
>Hi Bob:
>
>Actually I attended school in BC in Victoria, not Vancouver. Of course it
>might be expected that Victoria was/is more British than Vancouver.
>

Naturally. In fact, it is more British than Britain. I say! Care for
afternoon tea at the Empress Hotel, perhaps??

Bob.

4922. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 03:17:07 UTC
From: rfwilson@intergate.nospam.bc.ca
Message-ID: <u8o8djhrpdo281@corp.supernews.com>
Source record: 146909
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

```
In article <3C8B0468.3940@earthlink.net>, richgrise@earthlink.net says...
>
>Spehro Pefhany wrote:
>>
>> In sci.electronics.design Rich Grise <richgrise@earthlink.net> wrote:
>> > Just to stray a little further OT, is Canada still considered a colony?
>>
>> Yes, but it is now a colony of the US rather than Great Britain.
>>
>> Best regards,
>> --
>> Spehro Pefhany --"it's the network..." "The Journey is the
reward
>"
>
>But, I thought the US only colonized little backwater countries that
>couldn't defend themselv.... Oh. Never mind.

Speaking as a Canadian, yer absolutely right on the money. What other
country do you know of that had to charter a plane to get its troops
overseas (maybe that should be "troop") as we recently did?

Bob.
```

4923. Re: Cobwebb antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 03:25:48 UTC
From: k3bu@aol.com
Message-ID: <20020310222548.05962.00001330@mb-fo.aol.com>
Source record: 146910

>
>Is anyone here familiar with the Cobwebb antenna
>(http://www.g3tpw.ukgateway.net/) for 10m/12m/15m/17m/20m? The
>individual who makes and sells this antenna says that it is a series
>of nested 1/2 wavelength dipoles bent into a square. Is this Cobwebb
>antenna a series of 1/2 wavelength loop antennas for different bands?

Another "miracle" antenna and bunch of CB type crapola like:

"The most important design point about the CobWebb is that it is a completely horizontally polarised, confined electric field antenna, which provides maximum radiation efficiency and the absolute minimum of interference problems. "

Right up there with Freaktennas.

Yuri

4924. ARNewsline 1282 - March 8 2002

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 04:04:46 UTC
From: radionews@aol.com
Message-ID: <20020310230446.24765.00001084@mb-mv.aol.com>
Source record: 146912

Amateur Radio Newsline™ Report 1282 – March 8, 2002

Amateur Radio Newsline report number 1282 with a release date of
Friday, March 8th, 2002 to follow in 5-4-3-2-1.

The following is a Q-S-T.

The Dayton Hamvention announces the EMMY AND OSCARS of Amateur Radio. We have the winners on Amateur Radio Newsline report number 1282 coming your war right now.

(Billboard Cart Here)

**

HAMVENTION 2002: AWARD WINNERS NAMED

The Dayton Hamvention has named Radio Amateur Information Network founder Alanson “Hap” Holly, KC9RP, as its 2002 Radio Amateur of the Year. Holly received the news of his selection on Thursday evening February 28th in a phone call from Cathi Hoskins, N8ZCQ, who chairs the Hamvention Awards and Banquet Committee. KC9RP tells Amateur Radio Newsline that he was completely taken by surprise:

--
Holly KC9RP: “I was absolutely stunned! In fact, all I could say was me? I mean seriously, I was just absolutely floored.”
--

Holly, lives in Des Plaines Illinois has been licensed since 1965. He began his ham radio informational programming career in 1984 on a local Chicago Area repeater. This eventually lead him to become founder, moderator and guiding light of a weekly amateur radio audio feature magazine known as the RAIN Report.

--
Sample audio from Rain Report.
--

RAIN programming is distributed to hundreds of repeaters across the country via a telephone dial-up line, the rainreport.com website, by a subscription tape service and broadcast over W-A-Zero-R-C-R's weekly 160 meter informational net.

But that’s is only a small part of the Hap Holly story. Originally licensed in Escondido California at age 14, Holly who has been blind since age 7 served as a phone-patch station and net control for the famed WESTCARS traffic net until 1970. He then headed off to Principia College in Illinois and from 1970 to graduation in 1974, ran phone patches and kept radio schedules for many of

his fellow students.

Holly graduated Principia with a Bachelor of Arts degree in Sociology, and soon found himself in the Chicago area. There, he sought out world-class jazz accordionist Leon Sash, to pursue further training in music. As a professional keyboard player, Holly’s diverse repertoire of American music of the past six decades has made him a popular choice in the Chicago area.

Hap met his wife-to-be while he was teaching a class in non-visual perception to high school students at a summer camp in Buena Vista, Colorado. The two were married in August of 1976. Stephanie, who is sighted, received her ham ticket and KA9WKD callsign in 1986.

Over the years, Hap Holly has written articles for the Spec-Com Journal, Radio Scan Magazine and occasionally reports for us here on the Amateur Radio Newsline. Holly is also a common sight at the Dayton Hamvention, taping forums which are then incorporated throughout the year into his RAIN Reports. And since 1975 KC9RP has been an honored member of the Des Plaines Lions Club. He has also been a member of the Des Plaines Toastmasters since 1976. He and Stephanie are also active with Des Plaines Illinois Emergency Medical Alert system.

Named as this years Hamvention Technical Excellence award winner is Alan Waller, K3TKJ, of Laurel, Delaware. Waller was chosen for his work that lead to the interfacing the Internet to Amateur Radio.

First licensed in 1961, Waller combined his decades-long love for Amateur Radio and a burgeoning interest in the then-new Internet to design and manage the www.qsl.net and www.qth.net web sites. That was back in 1993. Since that time, Alan Waller's web sites have come to serve the needs of tens of thousands of ham radio operators worldwide by providing a vast technical reference platform, an electronic mail service, web page hosting services, and links to thousands of other ham radio related sites. And in the true spirit of the Amateur Radio, Waller's initial work utilized leading edge experimentation to see what could be done with the technology then available. This has developed into a mature, reliable service to the world wide ham radio community.

Rounding out this seasons winners are a pair of pair of space exploring hams who have been named as co-recipients of the 2002 Hamvention Special Achievement Award. Former astronauts Owen Garriott, W5LFL, and Tony England, W0ORE, are being honored for paving the way for manned ham radio operations from the space shuttles that has made ham radio a permanent part of mans exploration of space.

Owen Gariott, W5LFL was first. On November 28, 1983, Garriott, was launched into space aboard the space ship Columbia for the STS-9 mission. It was the Spacelab 1 mission and Garriott brought along the first Amateur Radio station on a crew-tended space vehicle. It was a simple Motorola hand held transceiver connected to a special antenna designed to fit in the Space Shuttle’s window.

Three days later, W5LFL came on the air and hams across the United States and around the world were witness to a historic radio transmission:

--
Owen Garriott W5LFL: “This is W5LFL in Columbia. W5LFL in Columbia orbiting the Earth at an altitude of 135 nautical miles passing over the U.S. West Coast and calling CQ.”
--

Among those who heard Owen Garriott's Amateur Radio transmissions from space was Lance Collister, WA1JXN of Frenchtown Montana. Collister, who is now W7GJ, is credited with being the first amateur to work an astronaut in orbit. Take a listen:

--
Lance Collister WA1JXN/W7GJ: “W5LFL on Columbia, WA1JXN, W-A-1-Japan - Xray-Norway, WA1JXN Frenchtown Montana standing by.”

Owen Garriott, W5LFL: “Hello W1JXN, WA1JXN, WA1-Juliet-Xray-November. This is W5LFL. You’re our first contact from orbit. WA1JXN, how do you read? Over?”
--

The success of Garriott’s mission lead to the development of SAREX -- The Shuttle Amateur Radio Experiment. And, over the years, SAREX permitted youngsters in classrooms around the world to speak directly with astronauts in space. But for this to happen, the technology of manned ham radio operations from space had to be enhanced. This aspect of the then new SAREX program fell to the next ham radio operator orbited: Tony England, W0ORE.

W0ORE flew into space on the shuttle Challenger in 1985. It was Mission 51F, Spscelab 2. In addition to the 2 meter FM voice gear, Tony England also had with him the first ever ham television station to go into space. Slow Scan yes, but capable of sending back high resolution images which hams on the ground equipped with SSTV gear could view live or record on a simple audio cassette for later viewing and historical archiving. From space, Tony England described the station he was using:

--
Tony England, W0ORE: “Essentially we’ve got a commercial TV camera that anyone could go out to their local radio store ant buy. We feed this into a scan converter built by a commercial outfit and modified by NASA Amateur Radio clubs and this takes a snapshot of the scene and digitizes it and put it in a memory.

Then its sent to a handie-talkie like this. From there we will send it over a wire up to the upper window upstairs and to this antenna when I get it up there in the window. Then it will be transmitted to the ground.

When we get going, we will be able to send color TV images of what we are doing on board as a series of snapshots updated every 10 or 20 seconds. Amateurs anywhere on the ground will be able to receive them, and ones with scan converters will see the pictures.”
--

That flight also marked another first. The first ever two way television -- ham radio television -- to and from space.

Tony England went on to flight prove both the improved FM voice and then new SSTV systems. The SSTV was so successful that NASA gave very serious consideration to a permanent installation on all shuttles for back up communications. More important, the early on-orbit operations by Own Garriott W5LFL and Tony England W0ORE made possible the thousands of educational contacts between children in school classrooms and the crews flying in space. First, on board the shuttles, and now as a permanent part of the International Space Station.

Hap Holly KC9RP, Alan Waller K3TKJ, Owen Garriott W5LFL and Tony England W0ORE will receive their honors at the Hamvention Awards Banquet slated for Saturday evening, May 18th at the Nutter Center in Dayton Ohio. Amateur Radio Newsline will be there to bring you this story and all the news about Hamvention 2002. (ARNewsline™ from Dayton Hamvention® news release. Some audio from "Amateur Radio's Newest Frontier" and "SAREX - The Shuttle Amateur Radio Experiment" video presentations)

**

Break 1

From the United States of America, We are the Amateur Radio Newsline, heard on bulletin stations around the world including the Indiana Hamfest Association net serving Indianapolis Indiana.

(5 sec pause here)

**

RADIO RULES: FCC RESUMES VANITY PROCESSING

Vanity license processing is getting back on tract. According to a Legaue bulletin the FCC now has all outstanding vanity applications filed last October in hand and is ready to resume routine vanity processing. Until recently a single missing vanity application had been holding up a backlog of more than 2000 vanity applications. The FCC credits the ARRL in part with helping to locate applicants and resolving the problem. (ARRL, FCC)

**

RESCUE RADIO: AMATEUR RADIO EMERGENCY COMMS SUMMIT

The first ever Amateur Radio Emergency Communications summit was held in Indianapolis last week. Amateur News Weekly's Jack Parker, W8ISH, reports on the success of this first meeting.

--
They came from the Red Cross, Salvation Army, ARES, RACES and even CB-radio's REACT team. Two dozen representatives of different Amateur Radio emergency communications groups met in a Federal Building training room to find ways of helping local and state emergency management organizations. The summit was organized by Marion County ARES director Mike Palmer, N9FEB. Palmer cited a need to develop better communications and cooperation between the different groups.

Many amateurs wear two or three different hats when it comes to providing public service. Palmer wants to identify those who are willing to help and to better utilize the voice and data communications available in the Marion County Amateur Radio Community. Many of the summit participants agreed this type of effort is long overdue.

Members of Army-Navy and Air Force Mars, as well as the Indiana Wing of the Civil Air Patrol offered their services during times of disaster. Everyone agreed this was a good start and look forward to future efforts to better train and organize Amateur Radio Emergency Communications in Marion County and Central Indiana.

Reporting from Indianapolis for Amateur News Weekly, this is Jack Parker W8ISH.

--

According to Jack, everyone came away from the meeting knowing that cooperation between groups is a key element in providing better service to the public. (ANW)

**

RADIO RULES: FCC ADOPTS AMBER EAS EVENT CODE FOR CHILD ABDUCTION CASES
The Federal Communications Commission has announced the adoption of a Report and Order amending the Emergency Alert System rules. Included are several new EAS event and location codes, which broadcast stations and cable systems may use to alert the public in the event of state and local emergencies. Of these, a new Child Abduction Emergency event code may be the most interesting to hams involved in Search and Rescue and who have E-A-S decoders installed in their repeaters.

The plan is described as a voluntary partnership between law enforcement agencies and the media that will be used to alert the public of serious child abduction cases where police believe that the child is in danger of bodily harm or death. Under the plan, radio and television stations will be permitted but not required to interrupt programming to disseminate information concerning serious child abductions when the new Child Abduction Emergency code is received. It could also be used by hams as an automated call to action to help find a missing child if used to activate an E-A-S equipped Amateur Service repeater.

Police departments say that every minute counts in dealing with an abducted child situation. In adding the Child Abduction Emergency code the FCC says that its responding to public concerns. (FCC)

**

ENFORCEMENT: FCC COMPLETES GEORGIA ARRL VEC EXAM SESSION AUDIT

The FCC has wrapped up an investigation into apparent irregularities at five ARRL VEC-sponsored Amateur Radio examination sessions in Georgia during 2000 and 2001. As a result of the probe, FCC Special Counsel Riley Hollingsworth says that several examinees will be called back for partial retesting:

--
Riley Hollingsworth: “We determined reviewing all of the information that was brought to our by the League that eight examinees will have to be retested on the code element. The ARRL has also relieved ten VE’s of their duties as volunteer examiners.”
--

According to the ARRL Letter, all V-E’s who might have been involved were suspended after the FCC investigation began last year. (FCC, RAIN)

**

ENFORCEMENT: A REPEATER OUTSIDE OF THE BAND

The FCC is also looking at the operation of repeater in the Metro New York City area. Again, the FCC’s Riley Hollingsworth:

--
Riley Hollingsworth: “We opened an inquiry into allegations that an uncoordinated repeater operated by Thomas Batista, KC2DDD, and Gerardo Arias, N2IFU, in Corona and Staten Island New York. Now that repeater is not only causing interference to a coordinted repeater, but the input is apparently on a frequency not even allocated to the Amateur band. So, needless to say we are real interested in reviewing that response when it comes in.
--

What Hollingsworth will be looking for is an answer to why the machine is using 143.020 MHz as an input frequency as well as why its on the air without coordination. 143.020 MHz is a full 800 Kilohertz below the bottom edge of the 2 meter Amateur band. (FCC, RAIN)

**

CONVENTIONS: SOUTH EAST VHF SOCIETY CONFERENCE

On a far lighter note, the Sixth Annual Southeastern VHF Society Conference will take place April 26th through the 27th in Oak Ridge, Tennessee. And they too are putting out a call for papers. If you are interested in participating, please contact KG4QDZ by e-mail to kg4qdz@arrl.net. (VHF Reflector)

**

CONVENTIONS: CHARLESTON HAMFEST MARCH 16

And the 18th Annual Charleston Area Hamfest and Computer Show will be held Saturday, March 16, 2002 from 9 AM to 3 PM at the Coonskin Armory in Charleston, West Virginia. Talk-in is on the 145.35 MHz repeater. Admission is $5 and there will be free parking. More information is available by e-mail to n8tmw@arrl.net. (N8TMW)

**

BREAK 2

Here when you need us 52 weeks a year. We are the Amateur Radio Newsline, with links to the world from our only official website at www.arnewsline.org.

(5 sec pause here)

**

HAM RADIO POLITICS: NCI LEADER CALLS FOR ELECTIONS

Bruce Perens, K6BP, the founder and an incumbent director of No Code International says that its time for new directions for the group and has called for elections. Amateur Radio Newsline’s Norm Seeley, KI7UP, has more:

--
According to Bruce Perins, K6BP, when he started NCI in 1997, he never dreamed that it’s goals would be achieved so quickly. But says Perins; “we are most of the way there.”

Perins notes that last year the International Amateur Radio Union voted to ask for the removal of the international treaty provision requiring Morse Code testing for Radio Amateurs. Now Perins observes that even ARRL has voted in favor of removing code requirements from the international Radio Regulations.

With what he terms as -- no remaining credible opposition to NCI's cause left on the international level -- Perins says that it is time to turn NCI’s focus to domestic policy. He says that for NCI to take an appropriate role in the end-game of the no-code battle means cooperation with national societies like the American Radio Relay League. And to do this, Perrins believes may take some new people.

So Perins has asked that an election for new directors be held no later than April 30th of this year. He also says that any person who was an NCI member on December 31, 2001 can be a candidate for director, and is eligible to vote in the election.

For the Amateur Radio Newsline, I’m Norm Seeley, KI7UP.

--

More information about No Code International is on the web at www.nocode.org. (ARNewsline with information from K6BP)

**

HAM RADIO IN SPACE: AO-40 GPS TEST RESULTS PUBLISHED

The February issue of GPS World included an article titled Formation Flying in Space. Authored in-part by AMSAT North America's Frank Bauer, KA3HDO, the essay shows G-P-S results from the receivers that NASA’ Goddard Space Flight Center provided for flight on the AMSAT OSCAR 40 bird. According to Tom Clark, W3IWI, the data shown in the article was downloaded using AO-40's RUDAK system by WD0E and KB0G. (ANS)

**

WRTC-2002: ORGANIZING COMMITTEE ANNOUNCES THE COMPLETE LIST OF OFFICIAL ON-SITE REFEREES

The WRTC 2002 Organizing Committee has named a full list of on-site referees for the upcoming games. The committee says that it received more than 100 highly qualified applications and those chosen were from that group. A full list of referees and other information is available on the web at www.wrtc2002.org (WRTC2002)

**

DX

In D-X, word that Dave Cree, G3TBK, has returned to work in the Caribbean. Throughout March Dave will be active as J88DR from St. Vincent. For the first two weeks of April look for him J3 slash G3TBK from Grenada. Operations will be on all bands, but concentrating on the WARC bands, mostly on C-W, but with some SSB. QSL to Dave's home call either direct or via the RSGB bureau. (RSGB)

The New Zealand Amateur Transmitters Society is warning hams world wide of what they say is a pirate operation. According the NZART News, a maritime mobile station using the callsign ZL2TO and the name Tony has been heard recently operating on nets on 15 Meters. This station currently gives his location as the Cape Verde Islands. Only one problem. The ZL2TO call sign is allocated the Waitara Amateur Radio Club. (NZART)

And the South Africa Radio League news service says that anyone who has held a QSO's with 7Q8 slash ZS6GH or C9 slash ZS6GH should write them off . SARL says that these have been declared null and void because license or authorization to operate was issued by the telecommunications regulators in Malawi or Mozambique. (SARL)

**

THAT FINAL ITEM: NOMINATIONS SOUGHT FOR THE YOUNG HAM OF THE YEAR AWARD

And finally, we started this weeks newscast with a story about awards. Lets end it on a similar note as we here a Amateur Radio Newsline officially open the 2002 nominating season for our own Young Ham of the Year Award.

The Young Ham of the Year award was created in 1986 by amateur Radio Newsline producer Bill Pasternak, WA6ITF, to fill what he viewed as a void where younger members of ham radio society were often overlooked:

--
Bill Pasternak, WA6ITF: “When I was a young ham in the 50’s and 60’s the good deeds of young hams were often overlooked and ignored. When I grew up I was fortunate enough to be in a position to remedy this and thats how the Young Ham of the Year Award program came about. Thats how it came into being”
--

The award as originally envisioned as very low budget. One idea was for a certificate that would be mailed to a ham, age 18 or younger who had shown some exceptional ability or performed some heroic deed that set him or her apart from the crowd. When Bill mentioned the idea to Chip Margelli K7JA, of Vertex Standard back in the company’s days as Yaesu USA, the idea quickly expanded. Margelli offered company support on the spot:

--
Chip Margelli, K7JA: “When Bill Pasternak gave me a call and dsescribed the project to me in the tiniest bit of detail it was obvious that this was a no-brainer and something that we as a company at Yaesu wanted to encourage. So, I jumped at the opportunity to be a major contributor and it has been a great project ever since.”
--

The award now had substance, but it lacked a permanent home. One was found in 1993 when it was invited to the Huntsville Hamfest:

--
Bill Pasternak, WA6ITF: “The way we got to Huntsville? Simple. We advertised. We put a notice into the newscast that we were searching for a permanent home. The answer came in a note from Scotty Neustadter, now W4WW, who is the Huntsville Hamfest Chairman. Scotty basically said bring it to Huntsville. And we did.”
--

While the presentation ceremony did go to Seaside Oregon in 1994, it returned to Huntsville in 1995 where it has been ever since. And in 1996 a second major corporate underwriter came on board. C-Q Magazine. Rich Moseson W2VU, is editor:

--
Rich Moseson, W2VU: “We at CQ have always thought that it is very important to promote Amateur Radio to young people and we saw that co-sponsorship of the award was the way to help do that.
--

What CQ did was to add to the Young Ham of the Year awards chest something very special. A week of fun and excitement at Spacecamp. Today, with corporate sponsorship from Vertex-Standard USA and CQ Magazine, and support from countless others including the ARRL, Dave Bell Associates and Rosewood Communications the Young Ham of the Year Award continues to honor the Amateur Radio related achievements of those hams age 18 or younger. And now its time to find a fitting recipient for 2002.

Full details, rules and a nominating form are available right now on our website at www.arnewsline.org. Just scroll down to the Young Ham of the Year Award area and click to download. Or you can send a self addressed stamped envelope to the 2002 Newsline Young Ham of the Year Award, 28197 Robin Avenue, Santa Clarita California 91350 and we will mail back the materials.

The Amateur Radio Newsline Young Ham of the Year Award is a one of a kind. It honors the youth of ham radio and in doing so, we hope it helps to insure a bright future for the hobby and the radio service that all of us love. (ARNewsline™)

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NEWSCAST CLOSE

With thanks to Alan Labs, Amateur News Weekly, AMSAT, the ARRL, the CGC Communicator, CQ Magazine, the FCC, the Ohio Penn DX Bulletin, Radio Netherlands, Rain, the RSGB and Australia's Q-News, that's all from the Amateur Radio Newsline(tm). Our e-mail address is newsline@arnewsline.org. More information is available at Amateur Radio Newsline's(tm) only official website located at www.arnewsline.org. You can also write to us or support us at Amateur Radio Newsline(tm), P.O. Box 660937, Arcadia, California 91066.

Before we go, another reminder that the nominating period for the 2002 amateur Radio Newsline Young Ham of the Year is now open. Nominees must be 18 or younger. Full rules and an application is on our website at www.arnewsline.org.

For now, with Bill Pasternak, WA6ITF, at the editors desk, I'm Roy Neal, K6DUE, thank you for listening." Amateur Radio Newsline(tm) is Copyright 2002. All rights reserved.

4925. Re: ScrewDriver Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 04:09:24 UTC
From: lcox107nospam@comcast.net
Message-ID: <U5Wi8.180912$7a1.15684091@bin5.nnrp.aus1.giganews.com>
Source record: 146913

I would check the finger stock first. The coil should not be able to move
around in the finger stock. It should be a snug fit. Be sure the copper
coil is clean. use some very fine sandpaper and make it shine again. Check
with an ohm meter while running the coil up and down. (NOT TRANSMITTING).
One lead on the body of the antenna and the other lead attached to the whip.
I think this will solve the problem!
Les, AA4F

"KF3DY" <hamop@repeater.net> wrote in message
news:3c8b947f.410783@news.ptd.net...
> A while back I took my ScrewDriver antenna off my full size 96
> Extended cab GMC truck. This weekend we had super high winds and I
> was going to try to work some of the Great Lakes QSO Party. The
> antenna all ways worked fine no matter where I tuned it. I picked it
> up at Dayton last year from a guy with a 9 call, I think from Ill. I
> forgot his website URL but it was something like amatuerantennas.com
> or something close. Now I can't get it to tune on 10,12,15,17 at all
> the radio just got nuts. It will sometimes tune on 20 meters. It
> always tunes on 30,40, and 75 without any problems. I am using an
> Heathkit SB-1400 with an MFJ tuner set for direct only so that I can
> see the SWR meter on it. I also tried my icom 746 with the same
> results. I have a 54" whip on the top, and have been using it right
> along....
>
> Any one have any ideas for me? I even took a pop can and put 4 loops
> around it with the coax incase I had some RF feedback. Yes, before
> someone asksI made sure it was grounded so that the matching unit was
> working.
>
> Corey KF3DY
>

4926. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 04:14:28 UTC
From: monte.carroll@nashville.com
Message-ID: <3c8c2a6a.5558544@news.nashville.com>
Source record: 146914

I'm just guessing it's Rohn 20. I heard that it was smaller than 25
and my foot (size 8-1/2) barely fits between the poles. The previous
owner says he's had it for 30 years, and he got it second-hand. It
has that zig-zag pattern of cross supports like Rohn 25.

I've decided against the beam, instead hoisting a G5RV from it and
probably mounting a 2-meter J-pole on the top. I may even install an
FM broadcast dipole on it for the garage stereo. The tower, installed
next to and supported by the garage, should be able to handle that.

Took the rotor off this evening. Underneath is marked ATR-4, or
something-4. I can't remember the prefix exactly.

ACE Hardware will be my first stop on the way to work tomorrow morning
for replacement hardware.

Thank you for your kind help. You and the other responders contribute
to the fraternity of ham radio.

Monte
WC4MBC

>> There is some minor rust, and the bolts between the sections will be
>> replaced. What's your suggestion on dealing with rust?
>
>
>Wire brush and paint. I use cold galvanizing spray available in numerous
>brands at hardware stores and home centers. Others claim that any good
>outdoor alkyd enamel works as well, and I am not prepared to argue. Latex
>doesn't stop the moisture. Rustoleum used to be the best choice, but it
>doesn't sem as good as it used to be. Just get a good coat of paint with no
>holes in it. One caution, never use chemical rust cleaners like Naval
>Jelly, as various undesirable things happen to the steel. Hydrogen
>embrittlement in the case of Naval Jelly.
>
>BTW, how have you identified this as Rohn 20? It hasn't been produced in
>many, many years. Because it has little torque strength. If you do put
>that big beam on it, be sure to use some sort of torque arms at the rotator
>to resist the twist.
>
>Crazy George

4927. Learn NVIS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 05:00:50 UTC
From: DJ <kb5ylg@attglobal.net>
Message-ID: <3c8c3d31_3@news1.prserv.net>
Source record: 146915
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

This weekend I participated in a multi-state MARS emergency communications simulation and test with a scenario of a Terrorist Attack with multiple attack modes and multiple cities in harms way. Good practice.

During the test I learned something pretty important that you might benefit from, too.

During one of the Texas nets, there were multiple observations about how bad the propogation was
really poor on 40 meters (around noon today).

However, after the net closed, a net from another state came on and all their signals were coming in perfectly clear and readable.

What was the difference? Proximity. What effect could account for hearing stations further away easier than hearing stations nearby? The dead or skip zone!!

The Texas stations were not close enough to each other to work the ground wave propogation. But they were not far enough apart for skywave propogation to work well for them either.

The solution? NVIS.

Near Vertical Incidence Skywave operations. Sounds technical, but it's easy.

Most amateur radio antennas are designed and positioned to radiate their signals as far to the horizon as possible, to extend the distance of the skywave propogation. That's the "low angle of radiation" desired in antennas, meaning more energy is radiated out to the horizon. The result can leave a dead zone between the end of the groundwave region, and the beginning of the skywave returning to earth.

To improve signals into the dead zone, you have to chance the incident angle from nearly horizontal to more vertical.

The easiest way to do this?

Lower your antenna. That's it.

As it turns out, the closer an antenna is to the ground, the more of it's energy is directed up (nearly vertical), instead of out. I have read several articles about Near Vertical Incident Signal operations, but now I know why it is so important.

Not all communication is directed to the other side of the planet.
Sometimes we want to talk to people just 100 miles away, for example.

What height should the antenna be for NVIS?

According to a study done by the military, about .15 wavelength off the ground is the best mix of suppressing ground noise, and getting good near vertical radiation.

For 40 meters, that's about 20 feet, give or take a few feet. Works fine for dipole or vee configuration.

I added a 40M and 80M dipole to my tower today, at about 25 feet, and got instant good signal reports from stations that earlier could hardly make out my signal.

What if I want to talk to stations that are both near (in the NVIS zone) and far (Skywave zone) during the nets?

Well you can try to find the best height for your antenna that will give you propogation to the areas you want to work. Or just use two antennas and switch between them using an antenna switch. Any station complaining they can't hear you may hear you quite well if you switch to your alternative antenna position.

This NVIS mode is also good for getting signals over mountains or other obstructions, too.

David KB5YLG

4928. test

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 05:51:14 UTC
From: LM <llmcc10@msn.com>
Message-ID: <O7NgfEMyBHA.1416@cpimsnntpa04>
Source record: 146916

testing

4929. Re: Cobwebb antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 06:00:54 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203102200.240928f2@posting.google.com>
Source record: 146917

jason_hsu@my-deja.com (Jason Hsu) wrote in message
news:<f7d9a152.0203101851.170dfe44@posting.google.com>...
> Is anyone here familiar with the Cobwebb antenna
> (http://www.g3tpw.ukgateway.net/) for 10m/12m/15m/17m/20m? The
> individual who makes and sells this antenna says that it is a series
> of nested 1/2 wavelength dipoles bent into a square. Is this Cobwebb
> antenna a series of 1/2 wavelength loop antennas for different bands?

It's what he says it is. You lose efficiency by having the elements
closer together than 90 degrees due to cancellation. It's not quite as
good as having all the dipoles spread apart. It should be quite usable
though. MK

4930. Re: Cobwebb antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 06:01:53 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <a6hh6d$5pe$1@slb7.atl.mindspring.net>
Source record: 146918

"Yuri Blanarovich" <k3bu@aol.com> wrote in part:
> Right up there with Freaktennas.

Shhhhhhhhhh....

--

It Came From C. L. "Candyman, Candyman, Candyma-ACK! ARRRRGHHHH!!!" Smith's
Unclaimed Mysteries.
http://www.unclaimedmysteries.net

I have sold more books about physics than Madonna has about sex.
- Stephen Hawking

4931. Re: Newbie with an ATAS 100, what mount is best?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 07:50:21 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <1lZi8.2264$qg1.334@nwrddc04.gnilink.net>
Source record: 146819

"Jeff Brown" <jbrown21@sprynet.com> wrote in message
news:3C8B9C13.1FFBCFFD@sprynet.com...
> Just ordered an ATAS 100 for my FT100D. What brand of mount
> do you all recommend?

Homebrew SO-239 barrel connector

> Where is a good place to mount it on a
> Chevy van?

Homebrew aluminum roof rack bar

>Do you recommend a diplexer or an separate
> antenna for 2m/445?

Seperate vhf/uhf antenna mounted on the same rack using the same method.

Thanks, it's been 15 years since I
> mobiled with just a Hustler and 430S! Now it's diplexers,
> NMO, PO, Screwdrivers, ...still trying to figure it all
> out (that's why I didn't want to order a mount yet)!
> Thanks,
> Jeff WB9FOL

Email me direct if you would like to see some pictures to give you a
general idea what I did on my Blazer. It cost less than $15.00 to make it,
and it works fb on all bands that the ATAS covers (even at over 100 mph...)

73 de W6DKN

4932. Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 09:57:10 UTC
From: Michel de Ruiter <pd1aiw@amsat.org>
Message-ID: <3c8c7f4a$0$7485$4d4ebb8e@news.nl.uu.net>
Source record: 146820

Hello,

I have been looking on the net for a schematic for building a 5/8 wave vertical antenna! I did find some schematics but unfortunately never with a good calculation or explanation how to make the coil.

Who can help, or is having a good idea how to make one?

I want to make it in first instance for 2 meters.

Thanks in advance,

Michel

PD1AIW

4933. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 10:36:46 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6i1d3$ecmdc$1@ID-124126.news.dfncis.de>
Source record: 146821

Download in a few seconds program BOTLOAD from website below. Very easy to use.

Will tell you bottom loading coil inductance for any height of vertical antenna at any frequency.

Will also tell you how many turns to wind on the coil for any given length and diameter of coil former.

For a 5/8-wave and similar verticals there is no point in locating the loading coil anywhere except at the bottom.

Choose the exact height to make the feedpoint exactly 50 ohms. Or 75 ohms if you prefer.

Download BOTLOAD now.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

Michel de Ruiter <pd1aiw@amsat.org> wrote in message
news:3c8c7f4a$0$7485$4d4ebb8e@news.nl.uu.net...
> Hello,
>
>
> I have been looking on the net for a schematic for building a 5/8 wave
> vertical antenna! I did find some schematics but unfortunately never with
a
> good calculation or explanation how to make the coil.
>
> Who can help, or is having a good idea how to make one?
>
>
> I want to make it in first instance for 2 meters.
>
>
> Thanks in advance,
>
>
> Michel
>
> PD1AIW
>

>
>
>
>
>

4934. Re: References on Half wave end fed top loaded vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 13:46:34 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203110546.6f6cf8a2@posting.google.com>
Source record: 146822

I doubt it, since it is the current issue.

The authors may have something on the web somewhere. I will look.

The basic design looks similar to a coaxial sleeve dipole or a
4-radial ground plane with the radials hanging straight down. What is
unique about it is how it is fed. Unfortunately their description is
a little vague as to the details. The 'sleeve' part is actually 4
wires around the center mast, essentially forming four 1/4 wave open
stubs spaced 90 degrees around the mast. This attaches to the center
of the half-wave tall mast, which is grounded at the bottom. The feed
point is on the 1/4 wave stubs a short distance down from the attach
point. Exactly how the feeding is done is unclear.

Something like this, turned upright. F is the feed point. (Don't ask
me... I don't know how it works either!)

```
g
r
o ------------F---
u |
n--------------------------------------
d |
------------F---
```

They claim that they designed it using some MiniNEC variant, but don't
give enough details for you to try it yourself. I haven't had a
chance to try figuring it out yet.

Jim
N8EE

"KA9CAR" <nospam@nospam.usa> wrote in message news:<a6b0qe$r2u$1@news1.tribune.com>...
> I would like to read that article. I checked the ARRL members only web
> site, and as far as I can tell, you have to order hard copies of articles.
> Is there some place they are posted on line that I missed?
>
> John
>
>
> JLB <jim.bolinger@lintek.aeroflex.com> wrote in message
> news:8d5ec8a2.0203080511.5854ad0a@posting.google.com...
> > "KA9CAR" <nospam@nospam.usa> wrote in message
> news:<a68ght$1f8c$1@news1.tribune.com>...
> > > I am planning to do some antenna work this summer, anticipating that the
> > > decline in sunspots will force me down to 30 and 40 within a couple of

> > > years. My all band doublet is only around 30 feet in the air so it's
> > > radiation angle on 30 and down is high.
> > >
> > > I would like to try a Vertical, but elevated radials are out of the
> > > question, which eliminates a 1/4 wave Vertical.
> > >
> > > This leads me to a half wave, end fed vertical, with a simple ground for
> the
> > > tank circuit.
> > > My trees are only about 35 feet tall, but they spread out as they go up
> > > (maples).
> > >
> > > I envision a "top hat" of 2 coil loaded radials stretched through the
> top of
> > > the tree, and a vertical wire hanging from that, down to the feed point.
> > >
> > > Any body have a book or web site or article they want to recomend, as
> > > reading for this project? Getting the top hat into the tree will be
> > > difficult enough that I don't want to have to do it twice!
> > >
> > > John
> > > KA9CAR
> >
> >
> > The March/April issue of QEX has an article on a grounded half wave
> > vertical antenna. You might want to take a look at it.
> >
> > The article talks about the problems with the typical half wave
> > vertical and proposes a solution. I wouldn't mind trying it on 30 Mtr
> > my self.
> >
> > Jim
> > N8EE

4935. Re: Cobwebb antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 13:56:43 UTC
From: post_to_usenet@hotmail.com
Message-ID: <b6b4e772.0203110556.7bb541c8@posting.google.com>
Source record: 146823

nm5k@wt.net (Mark Keith) wrote in message
news:<25eb70d7.0203102200.240928f2@posting.google.com>...
> jason_hsu@my-deja.com (Jason Hsu) wrote in message
news:<f7d9a152.0203101851.170dfe44@posting.google.com>...
> > Is anyone here familiar with the Cobwebb antenna
> > (http://www.g3tpw.ukgateway.net/) for 10m/12m/15m/17m/20m? The
> > individual who makes and sells this antenna says that it is a series
> > of nested 1/2 wavelength dipoles bent into a square.
>
> It's what he says it is. You lose efficiency by having the elements
> closer together than 90 degrees due to cancellation. It's not quite as
> good as having all the dipoles spread apart. It should be quite usable
> though. MK

Hi,

I have just modeled the CobWebb antenna for 10-15-20 on EZNEC and I must be wrong or it has quite a good gain in the three bands, problem is very limited bandwidth.

Could the reduced bandwidth be due to very low feedpoint impedance (~ 5ohms)? If so, how could this be improved? Maybe by placing the different halos at different heights to reduce mutual coupling?

I include the model file in a post to follow this one.

Toni

4936. Re: Cobwebb antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 13:59:09 UTC
From: post_to_usenet@hotmail.com
Message-ID: <b6b4e772.0203110559.33130f08@posting.google.com>
Source record: 146824
Body handling: Inline uuencoded payload not displayed: CobWebb.zip

This is the EZNEC model of the previous post.

[Inline uuencoded payload not displayed: CobWebb.zip]

4937. Re: Learn NVIS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 14:50:51 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C8CC435.8B532212@icok.net>
Source record: 146825
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

David,
Another way of doing the same thing is by judicious
selection of the frequency of use.
'Doc

4938. Re: ScrewDriver Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 14:56:47 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C8CC599.940329CE@icok.net>
Source record: 146826

Corey,
The 4" extension may be making the antenna too long
for the higher bands (using the very top portion of the
coil). I'd try removing it and seeing what happens...
'Doc

4939. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 15:03:28 UTC
From: Gary Tait <taitg@hurontel.on.ca>
Message-ID: <uC3j8.30390$X2.308239@nnrp1.uunet.ca>
Source record: 146827

Michel de Ruiter <pd1aiw@amsat.org> wrote in message
news:3c8c7f4a$0$7485$4d4ebb8e@news.nl.uu.net...
> Hello,
>
>
> I have been looking on the net for a schematic for building a 5/8 wave
> vertical antenna! I did find some schematics but unfortunately never with
a
> good calculation or explanation how to make the coil.
>
> Who can help, or is having a good idea how to make one?
>
>
> I want to make it in first instance for 2 meters.
>
>
> Thanks in advance,
>
>
> Michel
>
> PD1AIW
>
What I did was take 3/4 wavelenth of copper tubing, wind 1/8 wavelength
into a coil at the bottom, solder to the center of an so239, with 4 1/4
wavelength groundplannes. Flimsy as heck, but worked like a charm.
(you may wish to build it into PVC conduit)

4940. VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 15:05:23 UTC
From: Gary Tait <taitg@hurontel.on.ca>
Message-ID: <fE3j8.30392$X2.308200@nnrp1.uunet.ca>
Source record: 146828

Where, on the web, can I find some simple plans for an easy to build, half decent VLF/LORAN C antenna?

4941. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 15:20:32 UTC
From: G Blair <gblair@sympatico.ca>
Message-ID: <3C8CCB40.F7AEAA22@sympatico.ca>
Source record: 146830

Gary Tait wrote:
>
> Where, on the web, can I find some simple plans for an easy to build, half
> decent VLF/LORAN C antenna?

There aren't any.

Loran C antennas consist of an 8 foot whip and either a matching coil or
a 100 KHz resonant LC circuit, usually with a built in pre-amp.

4942. Re: vertical antenna grounds

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 15:23:57 UTC
From: me <me@nowwhere.com>
Message-ID: <3C8CCC0D.FFB90D7A@nowwhere.com>
Source record: 146829

Mark Keith wrote:

> me@nowwhere.com wrote in message news:<3C894730.1DBB5856@swbell.net>...
>
> >
> > how good a ground would it be? good, bad, indifferent?
> >
> > any help appreciated.
>
> Actually, according to charts, the Dallas area is better ground cdx
> than many other places. You are in a belt of good ground that extends
> from Texas up into Kansas, Neb, etc. The well case ground would not be
> near as good as a set of radials. MK

many tnx for the advise. it was just an idea and it appears not a very
good
one at that.

again, many tnx to the group!!!

73

larry
kd5foy

4943. Re: Learn NVIS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 15:42:16 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203110742.1f7308ff@posting.google.com>
Source record: 146831
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

"DJ" <kb5ylg@attglobal.net> wrote in message
>
> During one of the Texas nets, there were multiple observations about how bad
> the propogation was
> really poor on 40 meters (around noon today).
>
> However, after the net closed, a net from another state came on and all
> their signals were coming in perfectly clear and readable.

40 meters was tore up. We were having solar flares, etc. The band is
usually not as bad as it was yesterday. MK

4944. WANTED: how to homebrew a better SWR noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 15:49:44 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203110749.7c597dd0@posting.google.com>
Source record: 146832
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I have an MFJ-212 Matchmaker, a noise bridge device I use to adjust my tuner or antenna for minimum SWR. I turn on the Matchmaker, and I can listen to the noise on my transceiver. To minimize the transmiter SWR, I adjust my tuner or antenna for the minimum noise level (as heard from the speaker or as seen on the S meter).

Can anyone here explain how such a noise bridge device works? I have seen a few circuit diagrams, but I would like to know what various parts of the circuit do. (I know there is a small, low-powered transmitter that sends out a fraction of a watt at a wide range of frequencies. The forward voltage and reflected voltage have to be measured. Etc.)

I have just thought up a project: a better SWR noise bridge. I do have a few gripes about this device, and this is my inspiration to build something better. (This project will also give me much-needed practical experience with RF circuits.)

First, I'd rather NOT rely on listening to the transceiver speaker, as signal spikes (whether from noise spikes or other hams transmitting) make it challenging to tune for minimum noise from the noise bridge. I want my homebrewed SWR noise bridge to have its own speaker, which I guess would be less sensitive and would be driven by the SWR ratio and NOT connected to the antenna or transmission line. An alternative is to use a series of light bars/LEDs, analog meters, or a digital display to show the SWR.

Second, I'd like my homebrewed SWR meter to allow for both coarse and fine tuning. The MFJ-212 Matchmaker is very crude - I cannot distinguish between an SWR of 10 and an SWR of 100. Even an SWR of 5 doesn't sound that different from an SWR of 100. Since bandwidth can be VERY narrow on the lower bands (like 40m and 80m), this crudeness is frustrating. I would like my homebrewed SWR noise bridge to have several different modes, such as a crude mode to be used for SWRs over 100 (so I can tell I'm tuning in the right direction on 80m), a coarse mode to be used for SWRs under 100, a medium mode for SWRs under 10, a fine mode for SWRs under 5, and a super-fine mode for SWRs under 2.

The MFJ-212 Matchmaker has some characteristics that I do like and would like to duplicate, however. One is its ability to easily handle at least 100 W (supposedly, as I'm not in the habit of testing this) if you accidentally transmit. Second is the ability to bypass the noise bridge circuit by turning the device off (as I would rather not test its ability to handle 100 W). Third is the use of a 9V battery (which gives me a way to use up partly-used smoke detector batteries).

Jason Hsu, AG4DG
jason_hsu_802701@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

4945. Homebrewing circuits for HF vs. VHF/UHF/microwave

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 15:57:30 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203110757.4243b7f0@posting.google.com>
Source record: 146833
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

What does it take to homebrew circuits for VHF, UHF, and microwave frequencies? From what I understand, the higher the frequency, the greater the impact of stray capacitances and inductances as the wavelength contracts to the point that it is no longer much larger than the electronic components. I guess this is part of the reason why there are fewer SWR meters and antenna analyzers commercially available for VHF-and-up as compared to HF.

What does it take to overcome the impact of stray capacitances and inductances? More careful construction? Stripline? Anything else?

Jason Hsu, AG4DG
jason_hsu_802701@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

4946. FS: M-squared 2mtr beam

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 16:26:11 UTC
From: jimmoci@aol.com
Message-ID: <20020311112611.00823.00000738@mb-ck.aol.com>
Source record: 146834

FS: M-Squared 2 meter beam. 17 elements 22ft long. 5 yrs old. Antenna is down and partially disassembled. Pick up only near Phila. $50

4947. Re: TH6-DXX compatibility questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 16:41:44 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c8ce467_1@news1.prserv.net>
Source record: 146835

Monte:
A couple of comments:
I'm not sure what tower that is, as to my knowledge, Rohn never made a tower with the zig zag bracing smaller than 25. 20 and 20G (20 was painted, 20G galvanized) was about the same face size (12.5" outside, 11.25" on centers), but the leg tubing was smaller in diameter, and it only had horizontal "W" cross section straps around it. I am going to dig out my archival Rohn file if I can still find it and double check, but I'm wondering if that is the top portion of one of their self supporting towers. I just thought of another possibility. There was a small government tower which came through MARS back in the 60s or 70s. The zig zag was welded on the outside of the legs, instead of between them as the Rohn is. And the sections went together with some sort of half turn clamping mechanism. Was your source possibly a MARS member back then?

The hardware should be at least grade 5 and it is highly desirable that it be galvanized. Having said that, the only source of same which I am sure of is Texas Towers, where I but new bolts for my 25G. I did discover a source of galvanized grade 8 bolts out in California last month, but they only sell in box (100) quantities.

--
Crazy George
Remove NO and SPAM from return address
Monte B. Carroll <monte.carroll@nashville.com> wrote in message
news:3c8c2a6a.5558544@news.nashville.com...
>
> I'm just guessing it's Rohn 20. I heard that it was smaller than 25
> and my foot (size 8-1/2) barely fits between the poles. The previous
> owner says he's had it for 30 years, and he got it second-hand. It
> has that zig-zag pattern of cross supports like Rohn 25.
>
> I've decided against the beam, instead hoisting a G5RV from it and
> probably mounting a 2-meter J-pole on the top. I may even install an
> FM broadcast dipole on it for the garage stereo. The tower, installed
> next to and supported by the garage, should be able to handle that.
>
> Took the rotor off this evening. Underneath is marked ATR-4, or
> something-4. I can't remember the prefix exactly.
>
> ACE Hardware will be my first stop on the way to work tomorrow morning
> for replacement hardware.
>
> Thank you for your kind help. You and the other responders contribute
> to the fraternity of ham radio.

>
> Monte
> WC4MBC
>
> >> There is some minor rust, and the bolts between the sections will be
> >> replaced. What's your suggestion on dealing with rust?
> >
> >
> >Wire brush and paint. I use cold galvanizing spray available in numerous
> >brands at hardware stores and home centers. Others claim that any good
> >outdoor alkyd enamel works as well, and I am not prepared to argue.
Latex
> >doesn't stop the moisture. Rustoleum used to be the best choice, but it
> >doesn't sem as good as it used to be. Just get a good coat of paint with
no
> >holes in it. One caution, never use chemical rust cleaners like Naval
> >Jelly, as various undesirable things happen to the steel. Hydrogen
> >embrittlement in the case of Naval Jelly.
> >
> >BTW, how have you identified this as Rohn 20? It hasn't been produced in
> >many, many years. Because it has little torque strength. If you do put
> >that big beam on it, be sure to use some sort of torque arms at the
rotator
> >to resist the twist.
> >
> >Crazy George
>

4948. Re: Learn NVIS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 16:51:06 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c8ce468_1@news1.prserv.net>
Source record: 146836
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Twit.

What's the difference between skywave and Skywave? See the cloud burners section of W4RNL's web site if you really want to try to understand what is going on. If the ionosphere doesn't cooperate, it doesn't matter what you call it, it won't propagate signals from point A to point B. I was working what you now call NVIS back in the 50s on 75 and 40 meters. Should I have gotten permission first?

--
Crazy George
Remove NO and SPAM from return address

4949. Re: SWL needs help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 17:14:34 UTC
From: Christopher Maness <chris@ns2.internetinsite.com>
Message-ID: <_B5j8.807$dn2.201@nwrddc02.gnilink.net>
Source record: 146837

I would suggest purchasing a used reciever on e-bay or the like. You can
get a much better reciever in that price range in the used catagory.

Also, I would check into the reviews at eham.net

example:

http://www.eham.net/reviews/detail/479

Terry Mitchell <terry@mitchell.demon.nl> wrote:

> Dear people,
>
> A few years ago I did sell all mine receivers and I want to start all
> over again as a SWL. Does anybody know what is a good receiver to
> start with again and what is on the market. I have a budget from 320
> U$ (371 Euro). But I have another problem as well I’m moved to a
> new apartment and second floor in a flat and the roof is not flat but
> slanting (if I wrote it correct). I have a ceiling what I can use but
> there is still that antenna problem how can I solve this ?
>
> Thanks for all the help in advance
>
> Terry Mitchell

--

My religion consists of a humble admiration of the illimitable superior
spirit who reveals himself in the slight details we are able to perceive
with our frail and feeble mind.
-- Albert Einstein

Christopher G. Maness | 4243 Central Ave. | http://www.chrismaness.com
Home: (909) 686-5010 | Riverside, CA 92506 | kq6up@kq6up.#sca.ca.us.noam
Cell: (909) 223-9179 | ------------------------| http://www.kq6up.org
Pgr: (800) 960-0543 | Carpe Diem! | telnet://kq6up.ampr.org

4950. Double shield Coax connection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 17:37:26 UTC
From: Ed Laughery <laughery@bellsouth.net>
Message-ID: <GN5j8.41656$Yd.2258359@e3500-atl1.usenetserver.com>
Source record: 146838

Hi

With coax that is constructed with center conductor, a foil inner shield, followed by a braid outer shield, should the inner foil shield be grounded as well as the outer shield or should it be allowed to float.

If using a match xfmr with this type of coax, would you connect one side of the xfrm between antenna and a grounded inner foil and the other side of the xfmr between the coax center conductor and the outer (ungrounded shield).

I would appreciate any other schemes that anyone could suggest.

Regards
Ed L

4951. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 18:02:40 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a6ircj$c9$1@news1.tribune.com>
Source record: 146839

I take your description to be a 2 wire top hat on a verticle. Or a T shaped antenna.
I am attempting to do the same thing.

On frequencies where the wire is a multiple of a half wavelength, the impeadence will be high and minimal grounding is required. On frequencies where it is an odd multiple of a 1/4 wave, it will be a low impeadence and 4 resonant radials, at least 2 feet above the ground, or 60 burried radials would give good performance.

Check out Verticals with out Vertigo by w4rnl. his web site is Cebik.com
KA9CAR

AB Brown <abbrown@nospammail.com> wrote in message news:a6b96l$g2l$1@slb6.atl.mindspring.net...
> I would like to install a vertical antenna for 20-80 meters. Due to space
> and antenna restrictions, I am going to have to construct the antenna from
> copper wire. Here's a description of my antenna installation plans:
>
> My yard contains two 40-45 foot pine trees spaced about 10 feet apart. I
am
> going to vertically attach a wire between the trees of about 35 feet in
> length, which I hope will serve as the vertical part of the antenna. At
the
> 40-45 foot level, I may stretch a horizontal wire between the pines of
about
> 10 feet in length to serve as a tophat. The vertical may only be 35 feet
> because I'd like to attach 4 elevated 8 foot high ground radial wires to
the
> base. Of course, at the base of the antenna will be a variable pi network
> to match to 50 ohm coax to the antenna and allow all band operation.
>
> Opinions on my plan? Is a slightly shorter vertical with elevated radials
> better than a longer vertical with ground radials? How about the 10 foot
> top hat?
>
> Thanks, in advance.
>
> AB
>
>
>

4952. Re: Double shield Coax connection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 18:15:58 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C8CF448.2FAFA981@icok.net>
Source record: 146840

Ed,
Treat both shields as one.
'Doc

4953. Re: WANTED: how to homebrew a better SWR noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 18:23:38 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <jqpp8us6canh75nbmn9v28ob9umi93ulv8@4ax.com>
Source record: 146841
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 11 Mar 2002 07:49:44 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>I have an MFJ-212 Matchmaker, a noise bridge device I use to adjust my
>tuner or antenna for minimum SWR. I turn on the Matchmaker, and I can
>listen to the noise on my transceiver. To minimize the transmiter
>SWR, I adjust my tuner or antenna for the minimum noise level (as
>heard from the speaker or as seen on the S meter).
>
>Can anyone here explain how such a noise bridge device works? I have
>seen a few circuit diagrams, but I would like to know what various
>parts of the circuit do. (I know there is a small, low-powered
>transmitter that sends out a fraction of a watt at a wide range of
>frequencies. The forward voltage and reflected voltage have to be
>measured. Etc.)

I think you already list the significant attributes; but in a nutshell
it is a white noise generator (white noise meaning a broadband
emission of RF - from ELF to low VHF).

>
>I have just thought up a project: a better SWR noise bridge. I do
>have a few gripes about this device, and this is my inspiration to
>build something better. (This project will also give me much-needed
>practical experience with RF circuits.)

Being better means one of two things: more power, or better white
noise characteristic. It is highly unlikely you need a better white
noise characteristic (if the bridge works at any frequency, it works
just at well at all frequencies).

>
>First, I'd rather NOT rely on listening to the transceiver speaker, as
>signal spikes (whether from noise spikes or other hams transmitting)
>make it challenging to tune for minimum noise from the noise bridge.

Turn off AGC/AVC.

>I want my homebrewed SWR noise bridge to have its own speaker, which I
>guess would be less sensitive and would be driven by the SWR ratio and
>NOT connected to the antenna or transmission line. An alternative is
>to use a series of light bars/LEDs, analog meters, or a digital
>display to show the SWR.

This goes wholly beyond the scope of the instrument; this is the
source, after-all, not the load.

>
>Second, I'd like my homebrewed SWR meter to allow for both coarse and
>fine tuning. The MFJ-212 Matchmaker is very crude - I cannot
>distinguish between an SWR of 10 and an SWR of 100. Even an SWR of 5
>doesn't sound that different from an SWR of 100. Since bandwidth can
>be VERY narrow on the lower bands (like 40m and 80m), this crudeness
>is frustrating. I would like my homebrewed SWR noise bridge to have
>several different modes, such as a crude mode to be used for SWRs over
>100 (so I can tell I'm tuning in the right direction on 80m), a coarse
>mode to be used for SWRs under 100, a medium mode for SWRs under 10, a
>fine mode for SWRs under 5, and a super-fine mode for SWRs under 2.
>

Hi Jason,

Nearly all that you ask for above is a product or problem of your rig. The noise bridge approach is the simplest, (arguably) cheapest alternative to on-air tune up. An even simpler and (unarguably) cheaper method would be to use on the air signals. The problem here, solved by the white noise source, is there may be no signal, the signal may be variable for many reasons, the signal may drift and so on. The white noise source on the other hand provides a fixed level signal at ALL frequencies that is usually greater than over the air signal levels.

However, as to this last, in a 3.2 kHz band with at ANY particular frequency we are talking about a total noise (frequency) power of -73 dBm for an S-9 reading (if, in fact, you experience it at this level). This is a far cry from a fraction of a watt nearly 100 dB away; and this disparity reveals how the power is divvied up along the RF spectrum.

If you want to improve your bridge, it would be to bump up the gain to 1W or add a wideband 10dB gain amplifier. As simple as this point may seem, it will definitely test your self-challenge:
>(This project will also give me much-needed
>practical experience with RF circuits.)
Building stable wide band amplifiers is the bed rock of RF design. You should have a copy (or good treatment) of H.W. Bode by now(?).

It could also serve as the basis for many simple Shack radio standards. My white noise source consists of a weakly, LED illuminated, Photomultiplier Tube terminated with a 50 Ohm resistor (the apparent source as the PMT is a constant current device). This provides me with a white noise bandwidth out to >1GHz.

73's
Richard Clark, KB7QHC

4954. Re: Homebrewing circuits for HF vs. VHF/UHF/microwave

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 18:36:47 UTC
From: Bob Liesenfeld <robert.liesenfeld@neicoltech.org>
Message-ID: <3C8CF93F.1FC41B46@neicoltech.org>
Source record: 146842
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Jason Hsu wrote:

> What does it take to homebrew circuits for VHF, UHF, and microwave
> frequencies?

Hi Jason,
My experience has been that using 'dead bug' construction (also known as 'dirty') works very well up to 1.5GHz and perhaps higher. Lead length must be reduced to a minimum (zero if possible) and this type of construction allows for this quite well.

Bob WB0POQ

4955. Re: Homebrewing circuits for HF vs. VHF/UHF/microwave

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 18:46:08 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <hltp8u8kuc1qb9g26esaifn3a51hfjf3km@4ax.com>
Source record: 146843
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 11 Mar 2002 07:57:30 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>What does it take to homebrew circuits for VHF, UHF, and microwave
>frequencies? From what I understand, the higher the frequency, the
>greater the impact of stray capacitances and inductances as the
>wavelength contracts to the point that it is no longer much larger
>than the electronic components. I guess this is part of the reason
>why there are fewer SWR meters and antenna analyzers commercially
>available for VHF-and-up as compared to HF.
>
>What does it take to overcome the impact of stray capacitances and
>inductances? More careful construction? Stripline? Anything else?
>
>Jason Hsu, AG4DG
>jason_hsu_802701@@@yahoo.com
>http://www.jasonhsu.com/ham_radio-technical.html

Hi Jason,

Modularize your stages or functional blocks: mixer on one board, VCO
on another board, MOD/DEMOD on yet another and so on. Shield each
module (should go without saying). By pass power and control lines.
Observe proper grounding techniques.

Actually, the last point about observing proper grounding is the most
difficult to implement. The failures to observe are found in ALL the
common design problems (coupling problems, birdies, instability,
offset, noise...). Modularization tends to increase this hazard, but
mono designs do not fare much the better.

You also need to characterize each module. Build and test it to
complete specification. It is highly likely you want to preserve your
investment; then make it generally useful. For example, design the
mixer board to a spec that is more easily met across a spread of
applications you might want to test it in. This means that most I/O
will be designed around the 50 Ohm standard. You will already find
that most commercial packages anticipate this.

What you already describe as difficulties can be limited to the module
board and the problem isolated to an obvious source. Most UHF/SHF
design is quite intuitive and straightforward when you consider the
geometries and wavelength. On the other hand, there are greater
difficulties that arise from the complexity of the modulation, or in
the control of AGC (or its application). That is to say, there is

usually more grief to be found in the "system" signals than in the RF path.

73's
Richard Clark, KB7QHC

4956. Re: Double shield Coax connection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 19:32:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8D0659.5194C1CC@IEEE.org>
Source record: 146844

Ed Laughery wrote:
> With coax that is constructed with center conductor, a foil inner shield,
> followed by a braid outer shield, should the inner foil shield be grounded
> as well as the outer shield or should it be allowed to float.

If the inner foil shield is touching the braid, just ignore the foil and
treat the coax like RG-58.
--
cheers, CAM http://www.qsl.net/w5dxp

4957. Re: Pull strength of 18 ga stranded or recommendations for hanging a 80 mtr dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 19:44:50 UTC
From: Sylvan Butler <Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna8q2bo.nu7.Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 146780

On Sat, 09 Mar 2002 19:59:31 GMT, Harold Burton <hwburton@swbell.net> wrote:
> Over time I've seen several references to electric fence conductor used for
> wire
> antennas. I've seen it and it's basically fiberglass or some such material
> with just enough wire in it to be a conductor. It might just be that this

But I don't think you'd want that kind for an antenna. I prefer the
plain wire variety. The most common is 17ga or 14ga galvanized
steel wire. Another fairly common is some guage of aluminum wire.

Sure, you can get the fiberglass cord or tape (especially the tape
for horse enclosures since it is very visible) but...

sdb
--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

4958. Half-Wave Half-Square

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 19:46:41 UTC
From: ardujenski@aol.com
Message-ID: <20020311144641.28447.00001639@mb-cg.aol.com>
Source record: 146845

A half-square is a pretty decent antenna. However would there be any improvement with using 1/2 wave length verticals vs 1/4wl on 20m and above? Maybe the answeer is NO since folks would be doing it already but curious why not.
Alan KB7MBI

4959. Re: 17m transmission on 1118kHz? & Palstar AT300LCN

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 20:16:42 UTC
From: JRW <freeboy@ic24.net>
Message-ID: <u8q5mv93oslm73@corp.supernews.com>
Source record: 146847

Hello folks,

This evening I wound the main cable of a MW receiver around a ferrite rod,
but that made no difference. I did however do some more tests with
different radios. Yupiteru MVT7100 received the signal all over the MW band
where there were no stations but the receievd signal was weak. Sangean
ATS909 received the signal only slightly. It was extremely weak indeed.

John
"David Robbins" <k1ttt@arrl.net> wrote in message
news:a6gafi0cpj@enews1.newsguy.com...
> there are lots of possibilities. it could be just plain front end
overload,
> rf on the ac mains, an IF leak in the transmitter, bad image rejection in
> the receiver, mixing with some other signal nearby, or any combination of
> the above. i would start by putting a filter on the ac cord for that
radio.
> then check for overload by removing the rx antenna or inserting an
> attenuator. after that there are various combinations of IF leaks or
image
> frequencies, which most of the time i would ignore as they are hard to
> remove and very short range.
>
> btw, sstv would probably be not as noticeable as it is an almost constant
> amplitude so would appear as a carrier unless you were receiving in ssb.
>
> "JRW" <freeboy@ic24.net> wrote in message
> news:u8mk50bv1g21b2@corp.supernews.com...
> > Hi all,
> >
> > If I transmit voice on 18.165MHz it can be heard on 1117kHz-ish. Also
if
> I
> > try other frequencies the same happens. The MW receivers are mains
> powered
> > and are in the same house. My antenna feeder (RG58) goes through one
> room,
> > and up into the attic. Could the cause of this phenomenon be RF in the
> > mains? A battery powered MW receiver on the same frequency did not
> receive
> > my signal, but, I don't know if that radio was selective enough.
> >
> > BTW The transmission is USB, and is 10W PEP. If I transmit SSTV then
only
> > the radio nearest the feed receives the signal, but on voice all radios

> > receive the signal.
> >
> > Any suggestions appreciated,
> >
> > also,
> >
> > What is the impedence of the balanced feeder connection on the Palstar
> > AT300LCN ATU?
> >
> > TNX
> > John
> >
> >
>
>

4960. Re: 6 meter antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 20:31:51 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a6j431$c6o$1@bob.news.rcn.net>
Source record: 146846
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"JEEPMON" <JEEPMON@HOTMAIL.COM> wrote:

> I need help picking the best 6 meter vertical antenna.
> I think I have narrowed it down to:
> Hy-Gain V-6R
> Diamond DP-GH62

> Has anyone ever used these two antennas and if so wich are the best in
> radiation, gain, and quality.

I've been through a couple of GH62 antennas.
They offer great gain, but are easily destroyed by wind.

4961. Re: Learn NVIS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 20:46:46 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <a6j540$18vc@r02n01.cac.psu.edu>
Source record: 146848
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Most likely "Crazy George" couldn't get his antenna very high.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:3c8ce468_1@news1.prserv.net...
> Twit.
>
> What's the difference between skywave and Skywave? See the cloud burners
> section of W4RNL's web site if you really want to try to understand what
is
> going on. If the ionosphere doesn't cooperate, it doesn't matter what you
> call it, it won't propagate signals from point A to point B. I was
working
> what you now call NVIS back in the 50s on 75 and 40 meters. Should I have
> gotten permission first?
>
> --
> Crazy George
> Remove NO and SPAM from return address
>
>

4962. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 21:55:21 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203111355.679a5f9b@posting.google.com>
Source record: 146849

G Blair <gblair@sympatico.ca> wrote in message news:<3C8CCB40.F7AEAA22@sympatico.ca>...
> Gary Tait wrote:
> >
> > Where, on the web, can I find some simple plans for an easy to build, half
> > decent VLF/LORAN C antenna?
>
> There aren't any.
>
> Loran C antennas consist of an 8 foot whip and either a matching coil or
> a 100 KHz resonant LC circuit, usually with a built in pre-amp.

Funny....The Cessna 172 I fly has a Loran receiver in it, and I don't
recall seeing a 8 foot whip anywhere.

What would be wrong with a multiturn loop? A foot or two in diameter,
resonated with a capacitor?

For fixed operation it should work fine. If you are mobile you would
want a whip.

Jim
N8EE

4963. Re: a link to an FCC graphic, does this make sense?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 22:04:39 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203111404.6be9f392@posting.google.com>
Source record: 146850

My guess would be that they are talking about the total power being emitted, which would be dBm, regardless of the type of signal.

The same thing as saying that hams can't use more than x kW (depending on band), whether their bandwidth is 100Hz (cw), 3 kHz (SSB), 6 kHz (AM), 15 kHz (FM), etc. It all must add up to less than x kW.

Jim
N8EE

"1.156" <robXX@piovere.com> wrote in message news:<D9471A8BFD50E087.53B37814C9776BD2.E7710C4F8799C143@lp.airnews.net>...
> Recently the FCC issued a preliminary ruling, changing the part 15 limits for emissions from
>
> ground penetrating radars and similar things. Here's a single graphic showing the limits they
>
> propose:
>
> http://www.wavebounce.com/images/UWB%20limits%20prelim%2002Feb.gif
>
> My problem is that the vertical axis of the graph is in dBm. I'm trying to figure out what
>
> meaning this can have when it's plotted vs. frequency. I'm used to seeing plots like this showing
>
> spectral density (dBm/Hz) power levels in dBm obtained by integrating between two frequencies.
>
> For a wideband source, the bandwidth of the measuring device will determine how much power is
>
> detected, centered at any given frequency. Is it possible that the FCC is simply assuming a
>
> bandwidth minimum, like 1MHz, which they do mention in various places in the part 15 rules?
>
> I would appreciate any comments on this --
>
> Email would be nice (please remove the xx in my return address) but I will be checking the ng.

4964. Re: WANTED: how to homebrew a better SWR noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 22:14:04 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203111414.502f6247@posting.google.com>
Source record: 146851
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Richard Clark <kb7qhc@attbi.com> wrote in message
news:<jqpp8us6canh75nbmn9v28ob9umi93ulv8@4ax.com>...
>
> Turn off AGC/AVC.
>
What is AGC/AVC? (I'm not even sure if my radio has it.)

> >I want my homebrewed SWR noise bridge to have its own speaker, which I
> >guess would be less sensitive and would be driven by the SWR ratio and
> >NOT connected to the antenna or transmission line. An alternative is
> >to use a series of light bars/LEDs, analog meters, or a digital
> >display to show the SWR.
>
> This goes wholly beyond the scope of the instrument; this is the
> source, after-all, not the load.
>
OK, I can see that a white noise generator wouldn't work here. I
guess some type of miniature signal generator (with a knob or other
control on the device) is needed to ensure transmission at just one
frequency.

> >
> >Second, I'd like my homebrewed SWR meter to allow for both coarse and
> >fine tuning. The MFJ-212 Matchmaker is very crude - I cannot
> >distinguish between an SWR of 10 and an SWR of 100. Even an SWR of 5
> >doesn't sound that different from an SWR of 100. Since bandwidth can
> >be VERY narrow on the lower bands (like 40m and 80m), this crudeness
> >is frustrating. I would like my homebrewed SWR noise bridge to have
> >several different modes, such as a crude mode to be used for SWRs over
> >100 (so I can tell I'm tuning in the right direction on 80m), a coarse
> >mode to be used for SWRs under 100, a medium mode for SWRs under 10, a
> >fine mode for SWRs under 5, and a super-fine mode for SWRs under 2.
> >
>
> Hi Jason,
>
> Nearly all that you ask for above is a product or problem of your rig.
> The noise bridge approach is the simplest, (arguably) cheapest
> alternative to on-air tune up. An even simpler and (unarguably)
> cheaper method would be to use on the air signals. The problem here,
> solved by the white noise source, is there may be no signal, the
> signal may be variable for many reasons, the signal may drift and so
> on. The white noise source on the other hand provides a fixed level
> signal at ALL frequencies that is usually greater than over the air

> signal levels.
>
The white noise signal isn't always much greater than over-the-air signals. The over-the-air signals can be significant on 40m and 80m at night. And while my radio does have an attenuator, this affects the white noise AND the on-air noise.

4965. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 22:17:41 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u8qb8081ll1v9b@corp.supernews.com>
Source record: 146852

> > Loran C antennas consist of an 8 foot whip and either a matching coil or
> > a 100 KHz resonant LC circuit, usually with a built in pre-amp.
>
> Funny....The Cessna 172 I fly has a Loran receiver in it, and I don't
> recall seeing a 8 foot whip anywhere.

That is because Brother Blair is used to marine installations. There is no such thing as a "resonant" antenna for Loran. All you do is stick a **vertical** whip into the air as long as you think reasonable. For marine, this may indeed be 8'. For aviation, it is generally 24" or less. Mine is 18" of brass brazing rod epoxied into a BNC connector.

Don't put it out into the wingtips. I tried this design on the prototype Long-EZ and it went stark nutz every time Dick rolled it.

>
> What would be wrong with a multiturn loop? A foot or two in diameter,
> resonated with a capacitor?

Go through the calculation for a 100 kHz. loop of any reasonable diameter and how many turns and how much capacitance. It is an interesting number.

>
> For fixed operation it should work fine. If you are mobile you would
> want a whip.

That's true. 18" works all the way from out in the Pacific to roughly Scottsbluff Nebraska for me. I really don't have the huevos to find out single-engine how far out into the Pacific it would work {;-)

Jim

4966. Re: WANTED: how to homebrew a better SWR noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 22:39:08 UTC
From: k7itm@aol.com
Message-ID: <3200347.0203111439.338e626c@posting.google.com>
Source record: 146853
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

For the first questions, have a look at some of the very good postings
that have been made on how directional couplers work. You should be
able to find some in the Google archives. For example, I posted one
explanation back in 1992 under the title, "A (long) look at SWR &
directional pwr mtrs" that you should be able to find. But there are
plenty more of them...some other by me, many by others.

One thing to consider in building your dream tuner-tuning aid is that
noise excitation is very broadband, and you ultimately need a circuit
that's more narrowband than the tuning you're trying to achieve. Your
receiver does this for you with a noise bridge: you only listen to a
small piece of the spectrum. If you're going to have a speaker in
the tuning aid, you might consider using narrowband excitation instead
of narrowband detection.

There've been some articles on using the very sensitive Analog Devices
logarithmic RF detectors to measure SWR. You should probably have a
look for/at them. Some of them probably come very close to what you
want. Actually, one of your complaints is that it's hard to tell that
you're getting closer to proper tuning when you're a badly de-tuned.
You could help that a LOT if you displayed not SWR but load impedance.
There's a lot more info about how to tune if you know the line is
presenting 2 ohms, or 5+j61 ohms, or 1250 ohms...all about 25:1 SWR
(to a 50 ohm system).

Cheers,
Tom

jason_hsu@my-deja.com (Jason Hsu) wrote in message
news:<f7d9a152.0203110749.7c597dd0@posting.google.com>...
> I have an MFJ-212 Matchmaker, a noise bridge device I use to adjust my
> tuner or antenna for minimum SWR. I turn on the Matchmaker, and I can
> listen to the noise on my transceiver. To minimize the transmiter
> SWR, I adjust my tuner or antenna for the minimum noise level (as
> heard from the speaker or as seen on the S meter).
>
> Can anyone here explain how such a noise bridge device works? I have
> seen a few circuit diagrams, but I would like to know what various
> parts of the circuit do. (I know there is a small, low-powered
> transmitter that sends out a fraction of a watt at a wide range of
> frequencies. The forward voltage and reflected voltage have to be
> measured. Etc.)
>
> I have just thought up a project: a better SWR noise bridge. I do

> have a few gripes about this device, and this is my inspiration to
> build something better. (This project will also give me much-needed
> practical experience with RF circuits.)
>
> First, I'd rather NOT rely on listening to the transceiver speaker, as
> signal spikes (whether from noise spikes or other hams transmitting)
> make it challenging to tune for minimum noise from the noise bridge.
> I want my homebrewed SWR noise bridge to have its own speaker, which I
> guess would be less sensitive and would be driven by the SWR ratio and
> NOT connected to the antenna or transmission line. An alternative is
> to use a series of light bars/LEDs, analog meters, or a digital
> display to show the SWR.
>
> Second, I'd like my homebrewed SWR meter to allow for both coarse and
> fine tuning. The MFJ-212 Matchmaker is very crude - I cannot
> distinguish between an SWR of 10 and an SWR of 100. Even an SWR of 5
> doesn't sound that different from an SWR of 100. Since bandwidth can
> be VERY narrow on the lower bands (like 40m and 80m), this crudeness
> is frustrating. I would like my homebrewed SWR noise bridge to have
> several different modes, such as a crude mode to be used for SWRs over
> 100 (so I can tell I'm tuning in the right direction on 80m), a coarse
> mode to be used for SWRs under 100, a medium mode for SWRs under 10, a
> fine mode for SWRs under 5, and a super-fine mode for SWRs under 2.
>
> The MFJ-212 Matchmaker has some characteristics that I do like and
> would like to duplicate, however. One is its ability to easily handle
> at least 100 W (supposedly, as I'm not in the habit of testing this)
> if you accidentally transmit. Second is the ability to bypass the
> noise bridge circuit by turning the device off (as I would rather not
> test its ability to handle 100 W). Third is the use of a 9V battery
> (which gives me a way to use up partly-used smoke detector batteries).
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

4967. Re: Half-Wave Half-Square

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 23:29:39 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C8D3CD5.98081295@gte.net>
Source record: 146854

ARDUJENSKI wrote:

> A half-square is a pretty decent antenna. However would there be any
> improvement with using 1/2 wave length verticals vs 1/4wl on 20m and above?
> Maybe the answeer is NO since folks would be doing it already but curious why
> not.
> Alan KB7MBI

> Alan KB7MBI

I seee some problems with this. 1st, you could not feed it at a corner, as this would now be a voltage loop. 2nd, the horizontal section would now be an in phase 1/2 wave and would radiate- this is not the case for 1/4 wave legs (where the 1/2 wave section is self cancelling)..

Dale W4OP

4968. Radioamateur Chat!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-11 23:39:21 UTC
From: Ja <ja@ja.com>
Message-ID: <llfq8u8o58r6s573m8a8q30kgtr5eenh1f@4ax.com>
Source record: 146855

http://www.qsl.net/9a8ra/
73..

4969. Sigma 40 by Force12

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 00:20:41 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C8D49D9.5080808@sympatico.ca>
Source record: 146856

Good evening all,

A friend has asked me to check into opinions about the Sigma 40 antenna by Force12 (his VIC 20 is too slow for the internet :-)). Having moved to a new QTH and given up a tower as well, he is looking into this antenna as a replacement for his slippers.

Thanks in advance!
--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

4970. Re: Sigma 40 by Force12

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 00:22:05 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C8D4A2D.8010808@sympatico.ca>
Source record: 146857

oops.... that should be "a replacement for his slopers."

VA3ATD wrote:

> Good evening all,
>
> A friend has asked me to check into opinions about the Sigma 40 antenna
> by Force12 (his VIC 20 is too slow for the internet :-)). Having moved
> to a new QTH and given up a tower as well, he is looking into this
> antenna as a replacement for his slippers.
>
> Thanks in advance!

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

4971. Re: Automatic tower lowering.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 00:33:21 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <a6ji4s$111@nntpa.cb.lucent.com>
Source record: 146858

Hmmmmm... sounds like a great "Attractive Nuisance" Lawsuit.

4972. Re: G-Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 00:41:42 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c8d4ee8$1_2@news.iglou.com>
Source record: 146859

Are henway's stored in Russian Urns?

--
Steve Ellington
N4LQ

When two wrongs don't make a right, try three.
"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:3C8C1CB3.E17942FD@adelphia.net...
> It is a short antenna made using a device known as a henway.
>
> - Mike -
>
> N4LQ wrote:
> >
> > Whats a G-whip? I can't find a link.
> >
> > --
> > Steve Ellington
> > N4LQ
> >
> > When two wrongs don't make a right, try three.
> > "Mike Coslo" <mcoslo@adelphia.net> wrote in message
> > news:3C8ACD32.D6EAFBEA@adelphia.net...
> > > Might make the antenna straight again! ;^)
> > >
> > > CAM wrote:
> > > >
> > > > Alan Gault wrote:
> > > > > Looking for a G-Whip mobile antenna in UK. Will pay reasonable
price
> > for
> > > > > genuine item. Had a little accident with my own.
> > > >
> > > > Will a G-String work?
> > > > --
> > > > cheers, CAM http://www.qsl.net/w5dxp

4973. Re: WTB-ANTENNA OR PARTS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 01:42:30 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c8d616b_2@news1.prserv.net>
Source record: 146860

You need the element or the insulators? I gave up on Hy Gain's cheap fiberglass and fabricated an element mount from a piece of 2" X 4" fiberglass I beam about 3 feet long. U bolt a small plate to the boom to hold the middle of the I-beam, and u-bolt the elements to the web of the I beam.

--
Crazy George
Remove NO and SPAM from return address
N2ION <n2ion@aol.com> wrote in message
news:20020310191609.21426.00001167@mb-mq.aol.com...
> I'M LOOKING TO BUY EITHER A DRIVEN ELEMENT FOR A HYGAIN TH7DX ANTENNA, OR
A
> WHOLE ANTENNA.
> EMAIL WITH DETAILS

4974. Re: Learn NVIS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 01:45:16 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c8d616c_2@news1.prserv.net>
Source record: 146861
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

40 feet on the wooden a-frame masts described in the ARRL handbooks of the
day. As level dipoles, not drooping, as now seems to be the fad.

Say hello to Drs. Sonsteby and Breakall for me.

--
Crazy George
Remove NO and SPAM from return address
John Passaneau <jxp16@psu.edu> wrote in message
news:a6j540$18vc@r02n01.cac.psu.edu...
> Most likely "Crazy George" couldn't get his antenna very high.
>
>
>
> --
> John Passaneau
> Penn State University, State College Pa.
> W3JXP
> w3jxp@arrl.net
>
>
> "Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
> news:3c8ce468_1@news1.prserv.net...
> > Twit.
> >
> > What's the difference between skywave and Skywave? See the cloud
burners
> > section of W4RNL's web site if you really want to try to understand what
> is
> > going on. If the ionosphere doesn't cooperate, it doesn't matter what
you
> > call it, it won't propagate signals from point A to point B. I was
> working
> > what you now call NVIS back in the 50s on 75 and 40 meters. Should I
have
> > gotten permission first?
> >
> > --
> > Crazy George
> > Remove NO and SPAM from return address
> >
> >
>
>

4975. Re: Learn NVIS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 02:05:02 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <indj8.3648$tP2.379551@bgtnsc05-news.ops.worldnet.att.net>
Source record: 146862
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

DJ, KB5YLG, posted:

> This weekend I participated in a multi-state MARS emergency
> communications simulation and test with a scenario of a
> Terrorist Attack with multiple attack modes and multiple
> cities in harms way. Good practice.

.... <deleted>

> What height should the antenna be for NVIS?
>
> According to a study done by the military, about .15 wavelength
> off the ground is the best mix of suppressing ground noise, and
> getting good near vertical radiation.
>
> For 40 meters, that's about 20 feet, give or take a few feet.
> Works fine for dipole or vee configuration.
>
> I added a 40M and 80M dipole to my tower today, at about 25
> feet, and got instant good signal reports from stations that
> earlier could hardly make out my signal.

Which makes me wonder what kind of antenna you were using
before. It wasn't a multi-band vertical, was it? If it
was, your improved results with the dipole, while valid,
could also be partially due to better overall radiation
efficiency.

Your experiences do mirror a very large volume of amateur
radio observations and operating experience on 80 and 40
meters accumulated over the past seven or eight decades.
Not Really Important Stuff like MARS, but it does give one
a feel for how the ionosphere boils and bubbles.

--
Jim Bromley, K7JEB k7jeb@arrl.net
Glendale, Arizona

4976. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 02:07:10 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203111807.29e0c1e8@posting.google.com>
Source record: 146863

"KA9CAR" <nospam@nospam.usa> wrote in message news:<a6ircj$c9
>
> On frequencies where the wire is a multiple of a half wavelength, the
> impeadence will be high and minimal grounding is required. On frequencies
> where it is an odd multiple of a 1/4 wave, it will be a low impeadence and 4
> resonant radials, at least 2 feet above the ground, or 60 burried radials
> would give good performance.

A 1/2 wave still needs radials to reduce ground losses, if ground
mounted. It just doesn't require them to be a "complete" antenna. It
is much less lossy than a 1/4 wave though if both are on the ground.
You will notice all BC stations that run 1/2 waves still use a set of
1/2 wave radials. The 60 buried radials would give good performance,
but the 4 radials 2 feet above ground would not be near as good.
Ground losses will be fairly high. You really need to be a 1/4 wave
up, or near it, to have good performance from 4 resonant radials
elevated. Even at an 1/8 wave up 4 radials is only marginal. This is
why Cecils 40m ground plane never beats his dipole. :(It's too low
for the amount of radials used. "Unless he's changed it since I last
heard about it" I ran a 40m ground plane with 4 radials at 1/4 wave up
and it never lost to the dipole at any distance over 1000 miles. But
thats about as low as I can go and get decent results with only 4
radials. At that height, I would need about 10 radials to equal the
"BC standard" of 120 radials or more. As it was my 4 at 1/4 wave up
equaled about 60 on the ground. 4 radials at two feet up, are not much
better than 4 on the ground. The only real purpose in raising them off
the ground is to keep from detuning them so they will be resonant. MK

4977. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 02:24:10 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203111824.707363@posting.google.com>
Source record: 146864

"Michel de Ruiter" <pd1aiw@amsat.org> wrote in message
news:<3c8c7f4a$0$7485$4d4ebb8e@news.nl.uu.net>...
> Hello,
>
>
> I have been looking on the net for a schematic for building a 5/8 wave
> vertical antenna! I did find some schematics but unfortunately never with a
> good calculation or explanation how to make the coil.
>
> Who can help, or is having a good idea how to make one?
>
>
> I want to make it in first instance for 2 meters.

You would probably be better off with a well designed 1/4 wave ground
plane on 2m than a 5/8 gp. The "usual" type of 5/8 gp is a bad design
for low angle 2m use. You would want to make a "dual 5/8" collinear if
you want to see any real improvement. I have given the formulas for
5/8's many times and should be in deja news. Rather than retype it all
here, I'm going to give you a program which will calculate a 5/8 GP
for any freq, and also includes the formulas in the program. This
program also will do simple dipoles, etc, and also will do tuned
stubs, quarter sections, etc. It's fairly handy. Reg's program will
work also, but this one has a section made just for 5/8's. Look under
"advanced antennas" in the program. I put the program on my server.
Don't worry, there is no viruses and it's pretty small... It's at :
http://web.wt.net/~nm5k/hdqtenna.exe
The program is DOS, and will run in a windows DOS box no problem. It
was made by N5HDQ up in northern Texas.
For examples of why I don't like the "average" 5/8 on 2m, check:
http://web.wt.net/~nm5k/acompari.htm

MK

4978. Re: G-Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 02:26:38 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <3C8D6766.17BB2B29@adelphia.net>
Source record: 146865

```
Right along with the piecost's

- Mike -

N4LQ wrote:
>
> Are henway's stored in Russian Urns?
>
> --
> Steve Ellington
> N4LQ
>
> When two wrongs don't make a right, try three.
> "Mike Coslo" <mcoslo@adelphia.net> wrote in message
> news:3C8C1CB3.E17942FD@adelphia.net...
> > It is a short antenna made using a device known as a henway.
> >
> > - Mike -
> >
> > N4LQ wrote:
> > >
> > > Whats a G-whip? I can't find a link.
> > >
> > > --
> > > Steve Ellington
> > > N4LQ
> > >
> > > When two wrongs don't make a right, try three.
> > > "Mike Coslo" <mcoslo@adelphia.net> wrote in message
> > > news:3C8ACD32.D6EAFBEA@adelphia.net...
> > > > Might make the antenna straight again! ;^)
> > > >
> > > > CAM wrote:
> > > > >
> > > > > Alan Gault wrote:
> > > > > > Looking for a G-Whip mobile antenna in UK. Will pay reasonable
> price
> > > for
> > > > > > genuine item. Had a little accident with my own.
> > > > >
> > > > > Will a G-String work?
> > > > > --
> > > > > cheers, CAM http://www.qsl.net/w5dxp
```

4979. Re: Homebrewing circuits for HF vs. VHF/UHF/microwave

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 02:28:58 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3C8D6814.440@pop.removethistomailme.net>
Source record: 146866
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Jason Hsu wrote:
>
> What does it take to homebrew circuits for VHF, UHF, and microwave
> frequencies? From what I understand, the higher the frequency, the
> greater the impact of stray capacitances and inductances as the
> wavelength contracts to the point that it is no longer much larger
> than the electronic components. I guess this is part of the reason
> why there are fewer SWR meters and antenna analyzers commercially
> available for VHF-and-up as compared to HF.
>
> What does it take to overcome the impact of stray capacitances and
> inductances? More careful construction? Stripline? Anything else?
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

Bob and Richard's advice is spot on. Solder components directly to bare copper board and minimize their lead lengths. Modularize everything (SMA jacks and the Hammond 1590-series boxes are your friends). And watch out for ground loops (I would not put a VCO in its own chassis, because you will NEVER get the ground currents out of the tuning line).

Ugly construction is usable to 2 GHz easily. If you keep your connections under 1/10 wavelength or so (~1 cm at 2.4 GHz), then you can avoid a lot of the nasty transmission-line behavior that people usually worry about at these frequencies. Just rely on 50-ohm building blocks as much as you can (if Hammond is your friend, then http://www.minicircuits.com is your next-door-neighbor who works for Victoria's Secret), and plan to give up about 0.5 dB per device due to VSWR.

There are a few photos of hand-wired VHF-to-microwave projects on my site (below), including a complete synthesizer with 1 Hz resolution between 1 and 2 GHz that fits in a single 4x2x1 Hammond box. The ugly RF wiring is completely buried under other parts, but it's there.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

4980. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 02:33:48 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203111833.237fadb6@posting.google.com>
Source record: 146867

"Michel de Ruiter" <pd1aiw@amsat.org> wrote in message news:<3c8c7f4a$0$7485

Hummmm...The browsers don't seem to want to download an exe file too
well. I zipped up the program and put it on the server also. It's at:
http://web.wt.net/~nm5k/hdqtenna.zip
Sorry about the confusion. I recommend d/ling the zip file. It's
smaller also. MK

4981. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 02:47:08 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8D6C2C.7A85AAC8@IEEE.org>
Source record: 146868

Mark Keith wrote:
> Even at an 1/8 wave up 4 radials is only marginal. This is
> why Cecils 40m ground plane never beats his dipole. :(It's too low
> for the amount of radials used. "Unless he's changed it since I last
> heard about it"

I added 4 radials for a total of 8 and it still usually loses
to my 75m dipole up at 40ft. A ham in Iowa checked into the
Good Old Boy's II Net on Sunday night. I quickly switched over
to the vertical to see the difference. He was S9 on the dipole
and S7 on the vertical.
--
cheers, CAM http://www.qsl.net/w5dxp

4982. Screwdriver Autotuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 02:54:27 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8D6DE3.FFA09369@IEEE.org>
Source record: 146769

I was listening to 75m the other night when I pulled into the grocery store parking lot. My screwdriver was set on 40m and I made a mental note to tune it to 75m when I finished grocery shopping. I came back to my pickup, put my groceries in the right hand part of the cab and started walking around the rear of the truck to get in on the driver's side. My screwdriver was busily tuning itself toward the 75m setting as if by magic. I got a weird feeling as I unlocked the driver's side door and looked to see what was going on. I had put a five liter box of wine down on the screwdriver control box.
--
cheers, CAM http://www.qsl.net/w5dxp

4983. Re:Half-wave end-fed half wave vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 02:57:45 UTC
From: ann7how@aol.com
Message-ID: <20020311215745.11087.00001449@mb-cu.aol.com>
Source record: 146770

Chapter 2 of the Antenna Book, edition 17 and previous, has a graph of capacitances of spheres, discs and cylinders as a function of length (with diameter equal to length). This is from a Sept. 1923 (!) QST article on end-fed half waves. It is included in the QST CD series which somebody may be willing to copy for you. Be happy to, but my printer is going to be out of order until I can get around to getting a new ink cylinder, which may be longer than you want to wait. I'll let you know when. 73, Hal, W8UYA

4984. Re: Double shield Coax connection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 03:37:22 UTC
From: "Bob M." <xxxxx@yyyy.zzz>
Message-ID: <SJej8.193271$pN4.11023528@bin8.nnrp.aus1.giganews.com>
Source record: 146771

On some foil + braid coax, the foil is permanently bonded to the center insulator and is a real pain to remove. On others, it's wrapped loosely and can be simply snipped off and unrolled. In either case, it _IS_ part of the outer shield. If it's bonded, it should go INSIDE of a connector's shield connection; if it's just wrapped around, you can cut it off and put just the braid on the OUTSIDE of the shield connection. Naturally, this depends on the type of connector being used. For example a mini-UHF crimp connector expects the braid and some outside insulation to go outside the outer shield, then a ferrule goes outside everything and crimps down. If the foil is bonded, it can go inside the outer shield, leaving the braid and outside insulation to be under the ferrule. If you're using an ordinary UHF connector, the braid and foil can remain together and will end up inside the connector. All you can really solder is the braid anyway without melting the center insulation.

Hope this helps.
Bob M.
======

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C8D0659.5194C1CC@IEEE.org...
> Ed Laughery wrote:
> > With coax that is constructed with center conductor, a foil inner
shield,
> > followed by a braid outer shield, should the inner foil shield be
grounded
> > as well as the outer shield or should it be allowed to float.
>
> If the inner foil shield is touching the braid, just ignore the foil and
> treat the coax like RG-58.
> --
> cheers, CAM http://www.qsl.net/w5dxp
>

4985. Re: Homebrewing circuits for HF vs. VHF/UHF/microwave

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 03:49:53 UTC
From: JD <dyson@jdyson.com>
Message-ID: <OLej8.261$Mx3.66193@news1.iquest.net>
Source record: 146772
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

"John Miles" <jmiles@pop.removethistomailme.net> wrote in message
news:3C8D6814.440@pop.removethistomailme.net...
> Jason Hsu wrote:
> >
> > What does it take to homebrew circuits for VHF, UHF, and microwave
> > frequencies? From what I understand, the higher the frequency, the
> > greater the impact of stray capacitances and inductances as the
> > wavelength contracts to the point that it is no longer much larger
> > than the electronic components. I guess this is part of the reason
> > why there are fewer SWR meters and antenna analyzers commercially
> > available for VHF-and-up as compared to HF.
> >
> > What does it take to overcome the impact of stray capacitances and
> > inductances? More careful construction? Stripline? Anything else?
> >
> > Jason Hsu, AG4DG
> > jason_hsu_802701@@@yahoo.com
> > http://www.jasonhsu.com/ham_radio-technical.html
>
> Bob and Richard's advice is spot on. Solder components directly to bare
> copper board and minimize their lead lengths. Modularize everything
> (SMA jacks and the Hammond 1590-series boxes are your friends). And
> watch out for ground loops (I would not put a VCO in its own chassis,
> because you will NEVER get the ground currents out of the tuning line).
>
> Ugly construction is usable to 2 GHz easily. If you keep your
> connections under 1/10 wavelength or so (~1 cm at 2.4 GHz), then you can
> avoid a lot of the nasty transmission-line behavior that people usually
> worry about at these frequencies. Just rely on 50-ohm building blocks
> as much as you can (if Hammond is your friend, then
> http://www.minicircuits.com is your next-door-neighbor who works for
> Victoria's Secret), and plan to give up about 0.5 dB per device due to
> VSWR.
>
If you need just a bit higher performance than some of the minicircuits
stuff, you might want to try www.stanfordmicro.com. They even oem
some of the minicircuits stuff. Richardson in the US distributes their
stuff, and it is readily available.

One part of note provides about 1.6dB NF, and has better than 10mw output
power. It is also SiGe which will do better in some cases (e.g. LF noise)
than more aggresive PHEMTs.

There is a designers kit for Stanford micro stuff, that also includes some fabricated PC boards to build example circuits.

John

4986. Re: Double shield Coax connection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 04:09:41 UTC
From: Ed Laughery <laughery@bellsouth.net>
Message-ID: <n9fj8.45555$Nn6.2580918@e3500-atl2.usenetserver.com>
Source record: 146773

Hello All

Thanks for replies. I have a large roll of 10base Lan cable that has inner conductor, insulation, foil, insulation, outer braid, insulation. I'll make sure and tie both foil and braid together.

Regards
Ed L

"Bob M." <xxxxx@yyyy.zzz> wrote in message
news:SJej8.193271$pN4.11023528@bin8.nnrp.aus1.giganews.com...
> On some foil + braid coax, the foil is permanently bonded to the center
> insulator and is a real pain to remove. On others, it's wrapped loosely
and
> can be simply snipped off and unrolled. In either case, it _IS_ part of
the
> outer shield. If it's bonded, it should go INSIDE of a connector's shield
> connection; if it's just wrapped around, you can cut it off and put just
the
> braid on the OUTSIDE of the shield connection. Naturally, this depends on
> the type of connector being used. For example a mini-UHF crimp connector
> expects the braid and some outside insulation to go outside the outer
> shield, then a ferrule goes outside everything and crimps down. If the
foil
> is bonded, it can go inside the outer shield, leaving the braid and
outside
> insulation to be under the ferrule. If you're using an ordinary UHF
> connector, the braid and foil can remain together and will end up inside
the
> connector. All you can really solder is the braid anyway without melting
the
> center insulation.
>
> Hope this helps.
> Bob M.
> ======
>
> "CAM" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3C8D0659.5194C1CC@IEEE.org...
> > Ed Laughery wrote:
> > > With coax that is constructed with center conductor, a foil inner
> shield,
> > > followed by a braid outer shield, should the inner foil shield be
> grounded
> > > as well as the outer shield or should it be allowed to float.

> >
> > If the inner foil shield is touching the braid, just ignore the foil and
> > treat the coax like RG-58.
> > --
> > cheers, CAM http://www.qsl.net/w5dxp
> >
>
>

4987. Re: a link to an FCC graphic, does this make sense?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 04:30:50 UTC
From: "1.156" <rob@piovere.com>
Message-ID: <96AFB4A7922B242E.94E1E8D2A3E3268B.04CEB12AD59D63C4@lp.airnews.net>
Source record: 146775

Jim, thanks. A bandwidth for the measurement is required for it to be meaningful and in the ham case it may be 3kHz -- I'm not sure. My signal has a bandwidth of over 1GHz. The problem is that I can't find out for sure what the measurement bandwidth is in this FCC spec. I'm sure they know it and probably a lot of other folks know it who regularly deal with the FCC --but I not sure of it at all (I think it is 1MHz minimum).

Rob, W5VAH

JLB wrote:

> My guess would be that they are talking about the total power being
> emitted, which would be dBm, regardless of the type of signal.
>
> The same thing as saying that hams can't use more than x kW (depending
> on band), whether their bandwidth is 100Hz (cw), 3 kHz (SSB), 6 kHz
> (AM), 15 kHz (FM), etc. It all must add up to less than x kW.
>
> Jim
> N8EE
>
> "1.156" <robXX@piovere.com> wrote in message
news:<D9471A8BFD50E087.53B37814C9776BD2.E7710C4F8799C143@lp.airnews.net>...
> > Recently the FCC issued a preliminary ruling, changing the part 15 limits for emissions
from
> >
> > ground penetrating radars and similar things. Here's a single graphic showing the
limits they
> >
> > propose:
> >
> > http://www.wavebounce.com/images/UWB%20limits%20prelim%2002Feb.gif
> >
> > My problem is that the vertical axis of the graph is in dBm. I'm trying to figure out
what
> >
> > meaning this can have when it's plotted vs. frequency. I'm used to seeing plots like
this showing
> >
> > spectral density (dBm/Hz) power levels in dBm obtained by integrating between two
frequencies.
> >
> > For a wideband source, the bandwidth of the measuring device will determine how much
power is

> >
> > detected, centered at any given frequency. Is it possible that the FCC is simply assuming a
> >
> > bandwidth minimum, like 1MHz, which they do mention in various places in the part 15 rules?
> >
> > I would appreciate any comments on this --
> >
> > Email would be nice (please remove the xx in my return address) but I will be checking the ng.

4988. Re: ScrewDriver Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 04:37:41 UTC
From: Don Miller <brazzos@hotmail.com>
Message-ID: <a6k081$36d$1@iac5.navix.net>
Source record: 146774

Emery cloth could be also be used for cleaning up the copper. I also use an eraser or pencil eraser to assist, somewhat labor intensive, but make sure you clean up the residue. Tuner spray w/air works well. Good luck.

Don Miller
WN8IIJ

<lcox107nospam@comcast.net> wrote in message
news:U5Wi8.180912$7a1.15684091@bin5.nnrp.aus1.giganews.com...
> I would check the finger stock first. The coil should not be able to move
> around in the finger stock. It should be a snug fit. Be sure the copper
> coil is clean. use some very fine sandpaper and make it shine again.
Check
> with an ohm meter while running the coil up and down. (NOT TRANSMITTING).
> One lead on the body of the antenna and the other lead attached to the
whip.
> I think this will solve the problem!
> Les, AA4F
>
>
>
>
> "KF3DY" <hamop@repeater.net> wrote in message
> news:3c8b947f.410783@news.ptd.net...
> > A while back I took my ScrewDriver antenna off my full size 96
> > Extended cab GMC truck. This weekend we had super high winds and I
> > was going to try to work some of the Great Lakes QSO Party. The
> > antenna all ways worked fine no matter where I tuned it. I picked it
> > up at Dayton last year from a guy with a 9 call, I think from Ill. I
> > forgot his website URL but it was something like amatuerantennas.com
> > or something close. Now I can't get it to tune on 10,12,15,17 at all
> > the radio just got nuts. It will sometimes tune on 20 meters. It
> > always tunes on 30,40, and 75 without any problems. I am using an
> > Heathkit SB-1400 with an MFJ tuner set for direct only so that I can
> > see the SWR meter on it. I also tried my icom 746 with the same
> > results. I have a 54" whip on the top, and have been using it right
> > along....
> >
> > Any one have any ideas for me? I even took a pop can and put 4 loops
> > around it with the coax incase I had some RF feedback. Yes, before
> > someone asksI made sure it was grounded so that the matching unit was
> > working.
> >
> > Corey KF3DY
> >

>
>

4989. Re: Homebrewing circuits for HF vs. VHF/UHF/microwave

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 05:35:07 UTC
From: blackm00@cam.org
Message-ID: <6447bcd3.0203112135.3c381d8@posting.google.com>
Source record: 146777
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

jason_hsu@my-deja.com (Jason Hsu) wrote in message
news:<f7d9a152.0203110757.4243b7f0@posting.google.com>...
> What does it take to homebrew circuits for VHF, UHF, and microwave
> frequencies? From what I understand, the higher the frequency, the
> greater the impact of stray capacitances and inductances as the
> wavelength contracts to the point that it is no longer much larger
> than the electronic components. I guess this is part of the reason
> why there are fewer SWR meters and antenna analyzers commercially
> available for VHF-and-up as compared to HF.
>
> What does it take to overcome the impact of stray capacitances and
> inductances? More careful construction? Stripline? Anything else?
>
You're question is too broad. VHF is considered to start at 30MHz, right next door to HF. It's an arbitrary division. If you are working at 35MHz, or even 50MHz, construction will be almost identical to construction in the HF range. Of course, you can be sloppier at 3MHz than at 30MHz, and as you move upward in frequency, you have to be more careful. At 144MHz, you have to be more careful, but there is no real difference in construction techniques. It's only when you get up into UHF and more so microwave, do you start using radically different construction techniques.

I think over the years, the definition of difficult construction territory has move up in frequency. Forty years ago, you'd see people writing in the ham magazines about how difficult it was to build at 220MHz. But as the higher frequencies became more common, and devices improved, people would only start to say such things when dealing in 432MHz or higher. In the tube era, things were pretty bulk, not just the tubes but the peripheral components. When transistors came along, things became smaller, and the fact that transistors weren't as heavy as tubes and their peripheral components meant that it was easier to make things smaller. Even forty years ago, you'd have to struggle to get good noise figure in a UHF receiver, scrounging some special part and tweaking it. The devices have gotten better, so at the same frequencies less effort is needed to get to the same level.

As for commercial equipment, I don't think difficulty of construction is an issue. Far more people have traditionally been on HF, hence there's a bigger market. Even if there now may be more using VHF than HF, the needs are much simpler. There will be few working on really complicated antenna systems, so the market will be limited on fancy antenna test equipment.

They can give away cellphones if you sign
up for cellphone service, which should be an indication that it's
not all that much trouble to build at VHF and UHF. A cellphone is
much more complicated than antenna test equipment or a simple transmitter,
yet there is no problem in manufacturing them in enough quantities
that they are given away.

Michael VE2BVW

4990. Annoying, elusive, intermittent, persistant QRN: help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 06:21:49 UTC
From: Will White <googlyelmo@earthlink.net>
Message-ID: <3C8D9E7E.555C1AD9@earthlink.net>
Source record: 146778

I have a local noise problem I am hoping someone can help me track down. I hear

S-6 or 7 loud, 'coarse' has on all HF bands, on all frequencies, though the intensity of noise diminishes somewhat on higher bands. On 40M, my main band, it is all but intolerable, making QSOs with all but the loudest stations difficult, even at 12 WPM or so.

The noise comes on for exactly 2' 15", and goes off for exactly 1' 25". Over and

over. I have timed it many times over two weeks. The noise is only there after dark. Aha! But I have searched and searched for an intermittent streetlight, to no avail. I have gone about three blocks in all directions from the house in this search, and also looked for automatic driveway/porch lights nearby, but can't find any. What the &*%$ can this be!?? I am really puzzled by the exact timing, since it would seem that a streetlight malfunctioning wouldn't do this, and a driveway light might stay ON for a specific time, but not off! HELP!

--
Will White, KD7BFX
Seattle WA US
King County, Grid CN87tq
ITU Zone 6, CQ Zone 3
****
"The wireless telegraph is not difficult to understand.
The ordinary telegraph is like a very long cat.
You pull the tail in New York, and it meows in Los Angeles.
The wireless is the same, only without the cat."
- Albert Einstein
****

4991. Re: Screwdriver Autotuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 07:38:58 UTC
From: Barry <luminosity@madriver.com>
Message-ID: <3C8DB092.15657EDD@madriver.com>
Source record: 146776

Cecil,
That is what's referred to as a " minor miracle", back here
in Vermont.
-LOL
Barry/N1QWA

CAM wrote:

> I was listening to 75m the other night when I pulled into the grocery
> store parking lot. My screwdriver was set on 40m and I made a mental
> note to tune it to 75m when I finished grocery shopping. I came back
> to my pickup, put my groceries in the right hand part of the cab and
> started walking around the rear of the truck to get in on the driver's
> side. My screwdriver was busily tuning itself toward the 75m setting
> as if by magic. I got a weird feeling as I unlocked the driver's side
> door and looked to see what was going on. I had put a five liter box
> of wine down on the screwdriver control box.
> --
> cheers, CAM http://www.qsl.net/w5dxp

4992. Re: Annoying, elusive, intermittent, persistant QRN: help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 07:42:29 UTC
From: n2nrv <n2nrv@hotmail.com>
Message-ID: <Xns91CF1B9E463C3n2nrvhotmailcom@24.24.0.22>
Source record: 146779

Will White <googlyelmo@earthlink.net> wrote in
news:3C8D9E7E.555C1AD9@earthlink.net:

<snip>
> The noise comes on for exactly 2' 15", and goes off for exactly
> 1' 25". Over and over.
>
> I have timed it many times over two weeks. The noise is only
> there after dark. Aha! But I have searched and searched for an
> intermittent streetlight, to no avail. I have gone about three
> blocks in all directions from the house in this search, and also
> looked for automatic driveway/porch lights nearby, but can't
> find any. What the &*%$ can this be!?? I am really puzzled by
> the exact timing, since it would seem that a streetlight
> malfunctioning wouldn't do this, and a driveway light might stay
> ON for a specific time, but not off! HELP!
>
> **********

Just out of curiosity, do you have any traffic lights nearby. That
is the only item that comes to mind that would stay off for a
specific amount of time as well as on. Here in my neck of the
woods (upstate New York) we have some lights that switch between
timer and sensor depending on the time of day.

It would seem that you have a red light somewhere that is arcing.
Proving it to your local DOT may be more of a challenge than
finding the source of your noise

4993. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 08:33:04 UTC
From: mike.luther@ziplog.com
Message-ID: <u8rfa04snjjcd6@corp.supernews.com>
Source record: 146781

In <3C8D6C2C.7A85AAC8@IEEE.org>, CAM <Cecil.A.Moore@IEEE.org> writes:

Cam ,..

>I added 4 radials for a total of 8 and it still usually loses
>to my 75m dipole up at 40ft. A ham in Iowa checked into the
>Good Old Boy's II Net on Sunday night. I quickly switched over
>to the vertical to see the difference. He was S9 on the dipole
>and S7 on the vertical.

>cheers, CAM http://www.qsl.net/w5dxp

A dipole can easily be better than a vertical on 75 or 80, depending on what you are trying to accomplish with it! You 40 foot high dipole on 75 meters will make a wonderful antenna on 75 for Iowa from normal W5Land, especially if it is broadside to that place.

On the other hand, the likelihood that you will crack a pileup for Bouvet Island on 75 meters from W5Land with it before you will with the vertical and a decent ground is another issue altogther. The same will likely hold true with woring JT1CO on 80CW, as well.

Each of these two antennas has different strengths and weaknesses on 80 meters. Lumping all verticals, dipoles, paths, directions, and especially those with low take-off and arrival angles together, are simply not a fair comparison or an answer to which one is better.

You have to specify what you want to do with them, and to where you wish to communicate to really do a fail job of making the decision on which one to use.

--> Sleep well; OS/2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

4994. Re: Homebrewing circuits for HF vs. VHF/UHF/microwave

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 09:39:43 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <suhr8uc3qan5f6e1eq9ko7kivko3aseen8@4ax.com>
Source record: 146782
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 11 Mar 2002 07:57:30 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>What does it take to homebrew circuits for VHF, UHF, and microwave
>frequencies? From what I understand, the higher the frequency, the
>greater the impact of stray capacitances and inductances as the
>wavelength contracts to the point that it is no longer much larger
>than the electronic components.

Fortunately, the component size has been reduced over the years from
tubes to discrete transistors and the surface mount components. Since
there is no longer a need to mount leads through the PCB, the stray
inductance can be greatly reduced, thus, more or less traditional
designs can be used well into the UHF range.

>I guess this is part of the reason
>why there are fewer SWR meters and antenna analyzers commercially
>available for VHF-and-up as compared to HF.

On HF, where the feed line losses are quite low, there is not much
interest in tuning the actual antenna, but instead try to resonate the
combination of the antenna itself, the feedline and the antenna tuner
as a single unit. If you measure the complex impedance at the lower
end of the line, it does not tell much about the antenna terminal
complex impedance, unless you know the exact feedline electrical
length in wavelengths for that particular frequency, due to the
impedance transformation of the unmatched feedline.

On VHF/UHF, in which the feedline loss is usually considerable, the
SWR meter will give smaller indications at the low end of the
transmission than at the antenna terminal, so you must know the
feedline losses to compensate for it. Anyway, due to the considerable
feedline loss is, part of the forward as well as reflected power is
dissipated (into heat) in the feedline, thus, it not a good idea to
match the VHF/UHF antenna with an antenna tuner down in the shack. The
proper way is to match the antenna itself, which requires that you are
able to measure the actual impedance at the antenna terminals. Thus, a
proper VHF/UHF antenna analyzer would have an outdoor unit at the
antenna (a directional coupler with rectifiers) and in-house unit for
displaying of the measured values.

>What does it take to overcome the impact of stray capacitances and
>inductances? More careful construction? Stripline? Anything else?

If you are used to working with complex antenna impedances, adapting to micro striplines should not be too hard. Various stubs can be constructed from sections of PCB tracks. The velocity factor of glass fiber boards are about 0.5, so a quarter wave section is about 90 mm at 432 MHz and 30 mm at 1.3 GHz, so it should be quite easy to work with these. At 432 MHz, the dimensions are of course a bit bulky for portable applications.

An low power amplifier with both 50 ohm input and output impedance can be constructed by first making a 50 ohm strip and cutting it into 4 parts with three cuts. Across the first and last cut, install SMD DC blocking capacitors and at the middle cut, install e.g. a MAR-x series MMIC amplifier and a bias resistor to supply the operating current. Install SMA connectors at the ends of the stripline and you have a modular amplifier with 50 ohm input and output impedance.

Paul OH3LWR

4995. Re: Annoying, elusive, intermittent, persistant QRN: help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 09:40:24 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a6kie8$a05$5@quark.scn.rain.com>
Source record: 146783

Will White <googlyelmo@earthlink.net> wrote:

> The noise comes on for exactly 2' 15", and goes off for exactly 1' 25". Over and

> over. I have timed it many times over two weeks. The noise is only there after
> dark. Aha! But I have searched and searched for an intermittent streetlight, to

You are correct, it is unlikely to be a streetlight.

But there are other possibilities, such as a short cycling heating system,
a streetlight that is timer driven after dark, a defective security light
or anything else on a timer.

You might try taking a simple AM handheld radio, and seen if you can trace
the source.

--
Bill Nelson (billn@peak.org)

4996. Re: Learn NVIS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 10:20:29 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203120220.19b1565a@posting.google.com>
Source record: 146784
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

"K7JEB" <k7jeb@arrl.no_spam.net> wrote in message news:<indj8.3648
>
> Your experiences do mirror a very large volume of amateur
> radio observations and operating experience on 80 and 40
> meters accumulated over the past seven or eight decades.
> Not Really Important Stuff like MARS, but it does give one
> a feel for how the ionosphere boils and bubbles.

Probably 82% of my yik yaking is NVIS type propagation. I was once in airforce mars. But I never did anything important while in it. I think the highlight of my mars career was getting free junk like tubes, old GE radios, etc. Some got old collins KWM-2's, but you had to be a bigwig in mars, or be a good brown noser. :(I couldn't take the local politics of mars. Reminded me of romper room sometimes. You had a few that wanted to run the whole show, and got bent easy if you started encroaching on their marsdom. The HF mars was ok. Pretty boring most of the time though. MK

4997. Re: Annoying, elusive, intermittent, persistant QRN: help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 10:24:57 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203120224.305c0538@posting.google.com>
Source record: 146785

Will White <googlyelmo@earthlink.net> wrote in message I am really puzzled by the exact
> timing, since it would seem that a streetlight malfunctioning wouldn't do this,
> and a driveway light might stay ON for a specific time, but not off! HELP!

You will probably need to DF it with a portable radio. That sounds
like power line noise, but the timing seems a bit strange for that. MK

4998. Re: Half-Wave Half-Square

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 10:33:23 UTC
From: Unclaimed Mysteries <k4doh@mindspring.com>
Message-ID: <a6klfe$so9$1@nntp9.atl.mindspring.net>
Source record: 146786

"Dale Parfitt" <parinc@gte.net> wrote in message
news:3C8D3CD5.98081295@gte.net...
>
>
> ARDUJENSKI wrote:
>
> > A half-square is a pretty decent antenna. However would there be any
> > improvement with using 1/2 wave length verticals vs 1/4wl on 20m and
above?
> > Maybe the answeer is NO since folks would be doing it already but
curious why
> > not.
> > Alan KB7MBI
>
> > Alan KB7MBI
>
> I seee some problems with this. 1st, you could not feed it at a corner, as
this
> would now be a voltage loop. 2nd, the horizontal section would now be an
in
> phase 1/2 wave and would radiate- this is not the case for 1/4 wave legs
(where
> the 1/2 wave section is self cancelling)..
>

A couple of years ago, inspired by a W4RNL web article, I slapped together a 2-meter half square with pvc and aluminum angle stock. I was astonished at the deep nulls along the 1/2 wave element axis of this simple antenna. Would this behavior carry over to a practical HF design?

Corry
--

It Came From C. L. Smith's Unclaimed Mysteries.
http://www.unclaimedmysteries.net

"To improve the services it can offer you, Qwest may opt to expand its capabilities for obtaining information about users in the future." -Qwest

4999. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 10:43:53 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203120243.d8f9dec@posting.google.com>
Source record: 146787

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C8D6C2C.7A85AAC8@IEEE.org>...
> Mark Keith wrote:
> > Even at an 1/8 wave up 4 radials is only marginal. This is
> > why Cecils 40m ground plane never beats his dipole. :(It's too low
> > for the amount of radials used. "Unless he's changed it since I last
> > heard about it"
>
> I added 4 radials for a total of 8 and it still usually loses
> to my 75m dipole up at 40ft. A ham in Iowa checked into the
> Good Old Boy's II Net on Sunday night. I quickly switched over
> to the vertical to see the difference. He was S9 on the dipole
> and S7 on the vertical.

But isn't your antenna about 1/8 wave up? I had thought that was the height. Even 8 radials is not enough for 1/8 wave up. To equal 120 ground radials at 1/8 wave up, I think you need about 60 radials. On mine at 36 ft up, "1/4 wave" I needed only about 10 radials to equal 120 on the ground. My 4 radials were appx equal to 50-60 on the ground. Your 8, if at 1/8 wave are equal to about 16 or so if ground mounted. I think it's enough to make the difference. But also, Iowa is barely far enough to see a big difference many times. Try a CA. station. I was always 2 s units better to CA. on the vertical no matter what. If your's isn't , it's not working up to par. Trust me. I had times to the midwest when there wasn't much difference. But thats not really the antennas fault. It's just the crossover point where the vertical and dipole are about the same. It's about the same distance from Houston to El Paso as it is from Houston to Kansas City. You don't really think of either as long haul on 40m at night. When you get to about 1500 miles out is where the vertical should start to really shine. Here to CA is a good reliable test. MK

5000. Re: Half-Wave Half-Square

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 11:14:35 UTC
From: ardujenski@aol.com
Message-ID: <20020312061435.06076.00000984@mb-mc.aol.com>
Source record: 146788

>I was astonished at
>the deep nulls along the 1/2 wave element axis of this simple antenna. Would
>this behavior carry over to a practical HF design?

I have measured about 2 S-units rejection off ends of half-square on 20m. I have been using a rotatable half square on 20m for CW sprints using two 20ft fishing poles (Black Widows) on 5ft tripods. Mine is actuallyan Inverted half square with the horizontal wire at the base and fed in the corner. Makes it easy to redirect by moving one of the tripods.
Alan KB7MBI

5001. Re: Homebrewing circuits for HF vs. VHF/UHF/microwave

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 13:31:03 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <FBCXJTDXMgj8EAgs@ifwtech.com>
Source record: 146789
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

John Miles wrote:

> Modularize everything (SMA jacks and the Hammond 1590-series boxes are
>your friends). And watch out for ground loops

Grounding is a potential problem with diecast boxes because the edges of the board cannot be effectively grounded to the box [1]. Often there are multiple ground paths through the ground lugs of coax connectors and the metal mounting pillars.

Why not mount the board flat down on the base of the box? Because it's generally good VHF/UHF/microwave practice to keep the RF and DC components on opposite sides of the board, using feedthrough capacitors to provide DC power to the RF side. If you don't have access to the back of the board, you have to take much more care to keep RF out of the DC wiring.

Much better are the tinplate boxes we can get in Europe, which have removable top and bottom lids. The PC board is cut to size and mounted part-way up the walls, so you can easily get to both sides. The groundplane is soldered all round the walls so that grounding is excellent. RF connectors come straight through the walls and onto the board, with zero lead length.

The boxes are available in a wide range of sizes to suit various kinds of RF modules, and are mostly made by a small German firm called Otto Schubert GmbH. I don't know if these boxes are imported into the USA, but most European VHFers wouldn't use anything else.

[1] If you really have to, you can bolt a large number of bent-over solder lugs to the box, and solder them directly to the groundplane of the board... that will work, but it's better to avoid it.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5002. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 13:52:37 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203120552.7d293cc5@posting.google.com>
Source record: 146790

"Jim Weir" <jim@rst-engr.com> wrote in message news:<u8qb8081ll1v9b@corp.supernews.com>...
> > > Loran C antennas consist of an 8 foot whip and either a matching coil or
> > > a 100 KHz resonant LC circuit, usually with a built in pre-amp.
> >
> > Funny....The Cessna 172 I fly has a Loran receiver in it, and I don't
> > recall seeing a 8 foot whip anywhere.
>
> That is because Brother Blair is used to marine installations. There is no
> such thing as a "resonant" antenna for Loran. All you do is stick a
> **vertical** whip into the air as long as you think reasonable. For marine,
> this may indeed be 8'. For aviation, it is generally 24" or less. Mine is
> 18" of brass brazing rod epoxied into a BNC connector.
>

Sorry...Should have put a wink in there ;-).

I realized that was what he was talking about. You see plenty of them
on the Great Lakes ore freighters.

I have a little digital clock about 4 inch x 3 inch x 1 inch that runs
off of WWVB on 60 kHz. No visible antenna, so it must use an internal
loop.

Jim
N8EE

5003. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 15:43:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8E222D.B5517D24@IEEE.org>
Source record: 146791

mike.luther@ziplog.com wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> writes:
> >I added 4 radials for a total of 8 and it still usually loses
> >to my 75m dipole up at 40ft. A ham in Iowa checked into the
> >Good Old Boy's II Net on Sunday night. I quickly switched over
> >to the vertical to see the difference. He was S9 on the dipole
> >and S7 on the vertical.
>
> A dipole can easily be better than a vertical on 75 or 80, depending on
> what you are trying to accomplish with it!

The comparison is between a 1/4WL vertical on 40m with eight radials
elevated 1/8WL and a 75m dipole used on 40m.

> Each of these two antennas has different strengths and weaknesses on 80
> meters. Lumping all verticals, dipoles, paths, directions, and
> especially those with low take-off and arrival angles together, are
> simply not a fair comparison or an answer to which one is better.

40m DX is generally too weak to copy on both antennas.
--
cheers, CAM http://www.qsl.net/w5dxp

5004. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 15:55:05 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8E24D9.7372B9BD@IEEE.org>
Source record: 146792

Mark Keith wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C8D6C2C.7A85AAC8@IEEE.org>...
> > Mark Keith wrote:
> > > Even at an 1/8 wave up 4 radials is only marginal. This is
> > > why Cecils 40m ground plane never beats his dipole. :(It's too low
> > > for the amount of radials used. "Unless he's changed it since I last
> > > heard about it"
> >
> > I added 4 radials for a total of 8 and it still usually loses
> > to my 75m dipole up at 40ft. A ham in Iowa checked into the
> > Good Old Boy's II Net on Sunday night. I quickly switched over
> > to the vertical to see the difference. He was S9 on the dipole
> > and S7 on the vertical.
>
> But isn't your antenna about 1/8 wave up?

Yep.

> Try a CA.
> station. I was always 2 s units better to CA. on the vertical no
> matter what.

My 130ft dipole is pointed at CA and always beats the vertical in
that direction on 40m. SSB DX on 40m is usually too weak to read on
both antennas. I have never heard any signal where the vertical had
a distinct advantage. I'm considering taking it down because I never
use it except to compare and lose to the dipole. One other
consideration at my QTH is that the ground is pretty bad as can
be seen from the ARRL ground conditions graph.
--
cheers, CAM http://www.qsl.net/w5dxp

5005. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 16:10:18 UTC
From: Gary Tait <taitg@hurontel.on.ca>
Message-ID: <0Hpj8.31379$X2.315298@nnrp1.uunet.ca>
Source record: 146793

JLB <jim.bolinger@lintek.aeroflex.com> wrote in message
news:8d5ec8a2.0203111355.679a5f9b@posting.google.com...
> G Blair <gblair@sympatico.ca> wrote in message
news:<3C8CCB40.F7AEAA22@sympatico.ca>...
> > Gary Tait wrote:
> > >
> > > Where, on the web, can I find some simple plans for an easy to build,
half
> > > decent VLF/LORAN C antenna?
> >
> > There aren't any.
> >
> > Loran C antennas consist of an 8 foot whip and either a matching coil or
> > a 100 KHz resonant LC circuit, usually with a built in pre-amp.
>
> Funny....The Cessna 172 I fly has a Loran receiver in it, and I don't
> recall seeing a 8 foot whip anywhere.
>
> What would be wrong with a multiturn loop? A foot or two in diameter,
> resonated with a capacitor?

Would a loop not be directional?

> For fixed operation it should work fine. If you are mobile you would
> want a whip.
>
> Jim
> N8EE

5006. Re: Screwdriver Autotuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 17:39:37 UTC
From: Alan White <alannc44@ix.netcom.com>
Message-ID: <t3rj8.48717$3O2.18131256@typhoon.southeast.rr.com>
Source record: 146806

As long as the corkscrew wasn't used...
Alan
--
Windsurfing Club: http://www.ibscc.org
Homepage: http://pw1.netcom.com/~alannc44/qsl.htm

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C8D6DE3.FFA09369@IEEE.org...
> I was listening to 75m the other night when I pulled into the grocery
> store parking lot. My screwdriver was set on 40m and I made a mental
> note to tune it to 75m when I finished grocery shopping. I came back
> to my pickup, put my groceries in the right hand part of the cab and
> started walking around the rear of the truck to get in on the driver's
> side. My screwdriver was busily tuning itself toward the 75m setting
> as if by magic. I got a weird feeling as I unlocked the driver's side
> door and looked to see what was going on. I had put a five liter box
> of wine down on the screwdriver control box.
> --
> cheers, CAM http://www.qsl.net/w5dxp

5007. Re: WANTED: how to homebrew a better SWR noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 17:52:28 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <o4gs8u8ep3pd4l9feei3unn6ouvtanrflg@4ax.com>
Source record: 146794
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 11 Mar 2002 14:14:04 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>Richard Clark <kb7qhc@attbi.com> wrote in message
news:<jqpp8us6canh75nbmn9v28ob9umi93ulv8@4ax.com>...
>>
>> Turn off AGC/AVC.
>>
>What is AGC/AVC? (I'm not even sure if my radio has it.)

Automatic Gain/Volume Control. When engaged, it compresses the audio
volume range of signals received so that weak performers and
powerhouses sound nearly the same. This answers your complaint of the
tepid response to otherwise serious change in levels, but is unlikely
to satisfy. Keep the AGC on and observe the S-Meter instead (the
S-Meter is a direct reading of AGC potential in many sets).

>
>> >I want my homebrewed SWR noise bridge to have its own speaker, which I
>> >guess would be less sensitive and would be driven by the SWR ratio and
>> >NOT connected to the antenna or transmission line. An alternative is
>> >to use a series of light bars/LEDs, analog meters, or a digital
>> >display to show the SWR.
>>
>> This goes wholly beyond the scope of the instrument; this is the
>> source, after-all, not the load.
>>
>OK, I can see that a white noise generator wouldn't work here. I
>guess some type of miniature signal generator (with a knob or other
>control on the device) is needed to ensure transmission at just one
>frequency.

Nope, not at all. The white noise generator is perfectly suited -
that is the point of the "noise" in Noise Bridge. It is a source,
nothing else, the remainder of your system already presents the
necessary bridge configuration.

>
snip
>> on. The white noise source on the other hand provides a fixed level
>> signal at ALL frequencies that is usually greater than over the air
>> signal levels.
>>
>The white noise signal isn't always much greater than over-the-air
>signals. The over-the-air signals can be significant on 40m and 80m

>at night. And while my radio does have an attenuator, this affects
>the white noise AND the on-air noise.

Hi Jason,

And as well it should. This suggests you would feel better with a higher amplitude white noise source. As I said, designing and building a linear amp will test your self challenge. It is not such a difficult first assignment, and neither is it a brush-off.

73's
Richard Clark, KB7QHC

5008. Antenna for portable sw radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 17:56:31 UTC
From: stevedelen@rocketmail.com
Message-ID: <59a8cbbd.0203120956.1209352d@posting.google.com>
Source record: 146795

Greetings,
I bought the new inexpenssive Grundig mini world 100 sw radio
(not bad for 29.95)
portable and want to make it more effective for listening to
the sw talk shows accross the U.S., is there a few choices
for antenna boosters etc to help increase the signal catch,
I have the radio shack sw wire wind up-job that comes on that
pully, it doesn't do much even hanging near the window,
thanks for some suggestions. any active antennas etc or something when
I travel or drive in my car or at home. thanks. even antenna suggestions
for other better portable sw radios.
Steve
stevedelen@rocketmail.com

5009. Re: Learn NVIS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 17:58:54 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C877B1F.66FF73D0@worldnet.att.net>
Source record: 146796
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

John Passaneau wrote:

> Most likely "Crazy George" couldn't get his antenna very high.
>

That certainly was the case with my Novice station in the 50's. But my dipole, which was never more than 10 feet up at the HIGH end, worked well, and from my home in Missouri I worked stations on both coasts on 40 meters running 30 watts input.

Dick

>
> >
> > What's the difference between skywave and Skywave? See the cloud burners
> > section of W4RNL's web site if you really want to try to understand what
> is
> > going on. If the ionosphere doesn't cooperate, it doesn't matter what you
> > call it, it won't propagate signals from point A to point B. I was
> working
> > what you now call NVIS back in the 50s on 75 and 40 meters. Should I have
> > gotten permission first?
> >
> > --
> > Crazy George
> > Remove NO and SPAM from return address
> >
> >

5010. Re: Annoying, elusive, intermittent, persistant QRN: help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 18:02:28 UTC
From: goofy <dbeard@aoc.nrao.edu>
Message-ID: <a6lfrpqed1@chaos.aoc.nrao.edu>
Source record: 146797

Dang that is frustrating! I had a changing buzz I tracked down to a
neighbors
lovely display of hanging Christmas tree lights from a coat hanger. Seems
that Martha Stewart talked them into it. It was the kind of lights that
changed
blinking and fading sequence and until I sat in a chair by the window with a
radio on and watched their lights, I didn't know where the hey it was
coming from.

Try walking around with a small transistor radio. Use it like a tricorder.
When the trouble is located, change the offending chunks back into a gas.
di di di dahhhhhh!

KC0KZE
D.J. Beard
National Radio Astronomy Observatory
Very Long Baseline Array
North Liberty, Iowa

Will White <googlyelmo@earthlink.net> wrote in message
news:3C8D9E7E.555C1AD9@earthlink.net...
> I have a local noise problem I am hoping someone can help me track down.
I hear

5011. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 18:36:07 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C8E4A97.F6306B3C@crosslink.net>
Source record: 146798

CAM wrote:
>
> My 130ft dipole is pointed at CA and always beats the vertical in
> that direction on 40m. SSB DX on 40m is usually too weak to read on
> both antennas. ...

Hmmm... I put up a 40m (2x33.5')dipole for my XYL and it proved even deafer than I am. It was perforce pointed into the Dakotas and So. Atlantic, so I replaced it with a Butternut (vertical), with the dipole's elements part of the ground plane. That worked FB on all bands until one day after a hard rain the SWR went postal, cooking the tubes in her RF amp. So I took the Butternut down for testing and reinstalled the dipole to tide her over. She didn't know a 2x33' dipole didn't work on 20m so she used it with a tuner on 20m to make 72 DX contacts in about 4 hours!! My guess is that the too-long dipole has a cloverleaf pattern on 20 that covers the good DX spots but what do I know? I didn't even know that all DX on 40m was weak til now.

;o) 73 KA3DWW

5012. Re: Annoying, elusive, intermittent, persistant QRN: help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 18:38:30 UTC
From: "owen.home" <owen.home@ntlworld.com>
Message-ID: <_%rj8.38055$y76.4028677@news6-win.server.ntlworld.com>
Source record: 146799

Will
It could be the duty cycle of a motor driven device, a washing machine reversing or a tumble dryer in "anti crease" mode? - modern units use DC motors with electronic controllers but it could still be a bad case of brush noise.
Do you think it's radiated or supply borne - is the problem reduced on a battery receiver?
Good luck
John

"Will White" <googlyelmo@earthlink.net> wrote in message news:3C8D9E7E.555C1AD9@earthlink.net...
> I have a local noise problem I am hoping someone can help me track down. I hear
>
> S-6 or 7 loud, 'coarse' has on all HF bands, on all frequencies, though the
> intensity of noise diminishes somewhat on higher bands. On 40M, my main band,
> it is all but intolerable, making QSOs with all but the loudest stations
> difficult, even at 12 WPM or so.
>
> The noise comes on for exactly 2' 15", and goes off for exactly 1' 25". Over and
>
> over. I have timed it many times over two weeks. The noise is only there after
> dark. Aha! But I have searched and searched for an intermittent streetlight, to
> no avail. I have gone about three blocks in all directions from the house in
> this search, and also looked for automatic driveway/porch lights nearby, but
> can't find any. What the &*%$ can this be!?? I am really puzzled by the exact
> timing, since it would seem that a streetlight malfunctioning wouldn't do this,
> and a driveway light might stay ON for a specific time, but not off! HELP!
>
> --
> Will White, KD7BFX
> Seattle WA US
> King County, Grid CN87tq
> ITU Zone 6, CQ Zone 3

> **
> "The wireless telegraph is not difficult to understand.
> The ordinary telegraph is like a very long cat.
> You pull the tail in New York, and it meows in Los Angeles.
> The wireless is the same, only without the cat."
> - Albert Einstein
> **
>
>

5013. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 18:47:05 UTC
From: CJ <chas@hotmail.com>
Message-ID: <u8sj9eglbp2s0c@corp.supernews.com>
Source record: 146800

Here is a URL for owner reviews on over 120 vertical and wire antennas....

http://www.eham.net/reviews/products/13

--
Thanks for the nice Usenet message...

Charles Johnston
AB7SL - Ham Radio Pages
www.ab7sl.com

5014. Re: Annoying, elusive, intermittent, persistant QRN: help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 19:14:29 UTC
From: Larry Gauthier <larryg5099@chartermi.net>
Message-ID: <u8skt4d49c1laf@corp.supernews.com>
Source record: 146801

Will,

When you claim that the noise is "only at night" do you mean darkness, or night-time? In other words, have you noticed that the noise is starting later and later as the days get longer? If the latter's the case, then it is something driven from an outdoor photocell. Otherwise, it may be some time-dependent activity like the wireless car alarm on the guy across the street who gets home at 6:00pm each night...

Build yourself a coat-hanger RDF antenna and go fox-hunting.

Oh, and be sure to report back when you find it - you've captured my curiosity.

-larry
K8UT
"owen.home" <owen.home@ntlworld.com> wrote in message
news:_%rj8.38055$y76.4028677@news6-win.server.ntlworld.com...
> Will
> It could be the duty cycle of a motor driven device, a washing machine
> reversing or a tumble dryer in "anti crease" mode? - modern units use DC
> motors with electronic controllers but it could still be a bad case of
brush
> noise.
> Do you think it's radiated or supply borne - is the problem reduced on a
> battery receiver?
> Good luck
> John
>
> "Will White" <googlyelmo@earthlink.net> wrote in message
> news:3C8D9E7E.555C1AD9@earthlink.net...
> > I have a local noise problem I am hoping someone can help me track down.
> I hear
> >
> > S-6 or 7 loud, 'coarse' has on all HF bands, on all frequencies, though
> the
> > intensity of noise diminishes somewhat on higher bands. On 40M, my main
> band,
> > it is all but intolerable, making QSOs with all but the loudest stations
> > difficult, even at 12 WPM or so.
> >
> > The noise comes on for exactly 2' 15", and goes off for exactly 1' 25".
> Over and
> >
> > over. I have timed it many times over two weeks. The noise is only

there
> after
> > dark. Aha! But I have searched and searched for an intermittent
> streetlight, to
> > no avail. I have gone about three blocks in all directions from the
house
> in
> > this search, and also looked for automatic driveway/porch lights nearby,
> but
> > can't find any. What the &*%$ can this be!?? I am really puzzled by the
> exact
> > timing, since it would seem that a streetlight malfunctioning wouldn't
do
> this,
> > and a driveway light might stay ON for a specific time, but not off!
HELP!
> >
> > --
> > Will White, KD7BFX
> > Seattle WA US
> > King County, Grid CN87tq
> > ITU Zone 6, CQ Zone 3
> > **********
> > "The wireless telegraph is not difficult to understand.
> > The ordinary telegraph is like a very long cat.
> > You pull the tail in New York, and it meows in Los Angeles.
> > The wireless is the same, only without the cat."
> > - Albert Einstein
> > **********
> >
> >
>
>

5015. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 19:39:15 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8E5963.8D5ECD46@IEEE.org>
Source record: 146802

Vito wrote:
> She didn't know a 2x33' dipole didn't work
> on 20m so she used it with a tuner on 20m to make 72 DX contacts in
> about 4 hours!!

It has some of the characteristics of an EDZ, i.e. better gain than
a 1/2WL dipole.

> I didn't even know that all DX on 40m was weak til now.

Guess you're not old enough to be going deaf, eh? Eh? EH?
--
cheers, CAM http://www.qsl.net/w5dxp

5016. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 19:39:54 UTC
From: Francis Pinson <F6BLP@wanadoo.fr>
Message-ID: <a6llhu$m8q$1@wanadoo.fr>
Source record: 146803

Using Eagle Antenna....very bad antenna....out of ham bands....bad construction...poor service from GAP products...

Frank

F6BLP

"J. B. Wood" <wood@itd.nrl.navy.mil> a crit dans le message de news: wood-0603020809240001@jbw-mac.itd.nrl.navy.mil...
> Hello, everyone. Does anyone have any experience with antennas from Gap
> Antenna Products (www.gapantenna.com)? Are we looking at vendor claims
> here ala the Crossed-Field Antenna? Thanks for your commment. Sincerely
> & 73s,
>
> John Wood (Code 5551) e-mail: wood@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

5017. Re: Gap Antenna Products

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 19:52:53 UTC
From: Dave <ws2l@optonline.net>
Message-ID: <p0tj8.11731$u72.3414325@news02.optonline.net>
Source record: 146804

I was using the Challenger about a year ago and to be honest I think it is the worst vertical I have ever used. There customer service was very poor at best, it was an overall terrible experience with the antenna. I know there are allot of people out there who use GAP products and are very happy with them but this is one ham who will never go with GAP again.

Dave
WS2L

5018. Re: vertical antenna opinions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 20:00:01 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203121200.40f6aeef@posting.google.com>
Source record: 146805

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C8E24D9.7372B9BD@IEEE.org>...
> Mark Keith wrote:
> >
> > CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C8D6C2C.7A85AAC8@IEEE.org>...
> > > Mark Keith wrote:
> > > > Even at an 1/8 wave up 4 radials is only marginal. This is
> > > > why Cecils 40m ground plane never beats his dipole. :(It's too low
> > > > for the amount of radials used. "Unless he's changed it since I last
> > > > heard about it"
> > > >
> > > > I added 4 radials for a total of 8 and it still usually loses
> > > > to my 75m dipole up at 40ft. A ham in Iowa checked into the
> > > > Good Old Boy's II Net on Sunday night. I quickly switched over
> > > > to the vertical to see the difference. He was S9 on the dipole
> > > > and S7 on the vertical.
> > >
> > > But isn't your antenna about 1/8 wave up?
> >
> > Yep.
> >
> > > Try a CA.
> > > station. I was always 2 s units better to CA. on the vertical no
> > > matter what.
> >
> > My 130ft dipole is pointed at CA and always beats the vertical in
> > that direction on 40m. SSB DX on 40m is usually too weak to read on
> > both antennas. I have never heard any signal where the vertical had
> > a distinct advantage. I'm considering taking it down because I never
> > use it except to compare and lose to the dipole. One other
> > consideration at my QTH is that the ground is pretty bad as can
> > be seen from the ARRL ground conditions graph.

That would be all the more reason I think you don't have enough
radials for the height. I can't believe you never hear dx. I worked dx
on both type antennas. I think you are just not on at the right times,
or places. I guess you can only get it so high at your qth, but it's
too bad because the vertical has never gotten a fair shake. It seems
that going to a 1/4 wave up in height must make a pretty good
difference if you use only a small amount of radials. Heck, when I was
working far off dx, my vertical was usually 4 s units better, not 2,
like when working only 1500 miles. I used to talk to VK land two or
three times a week for a while. The vertical got the same reports time
after time. Always 3 to 4 s units over the dipole. And I was usually
S9 plus. Of course, I was running a KW though. I was working a guy in

Tokyo one time. With the vertical and a KW I was 20 over 9. With the dipole and a KW I was about S8 to S9. Reports from VK were usually about the same. Too bad you couldn't bump it up to 35 ft. I used a rat shack pushup mast to support mine at 36 ft. My comparison dipole, which was 40 meter and coax fed, was on a different mast at the same appx height. I once ran the same 1/4 wave antenna ground mounted with about 24 radials, and I had about the same results as you . Upping it to 36 ft with only 4 radials was like flipping a switch from night to day. MK

5019. The 'talkin'est antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 20:12:23 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <Tptj8.48566$Yd.2779563@e3500-atl1.usenetserver.com>
Source record: 146807

If you are in the market for a screwdriver mobile antenna, then I invite your attention to the
Carolina Cyclone shown on my website below. The difference in the Carolina Cyclone and
some of the others is in materials, workmanship, and price. Often, increases in signal strength
are achieved by increasing the size of the inductor, wire size, and spacing. This is what I have done with the Carolina Cyclone. Cyclone I, for example, is 2 1/2" dia compared to
only 2" for the DK3 clones and uses #14 wire spaced at 8 turns per inch for a better form
factor. Materials are black Nylon, the same materials used for Nyloc bolts, to handle high
power, and give rugged service for years and years. The result is 800 watts power handling
power (conservative) for Cyclone I and a full 1500 watts SSB for the Cyclone II, which is
a full 3" diameter to give the same "Q" as the famous Texas Bugcatchers. You will find that
you will be most successful with DX and pileups with the Carolina Cyclone series of antennas. AND the prices are well under those of most of the competition. For more details, please visit www.qsl.net/k4kwh .

5020. Re: Screwdriver Autotuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 20:41:21 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a6lp5c$s62$1@slb6.atl.mindspring.net>
Source record: 146808

Heh, heh... wine is for Executives, now Engineers prefer...

Cecil, just imagine what a keg of draft might have done!

--Peter K1PO

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C8D6DE3.FFA09369@IEEE.org...
> I was listening to 75m the other night when I pulled into the grocery
> store parking lot. My screwdriver was set on 40m and I made a mental
> note to tune it to 75m when I finished grocery shopping. I came back
> to my pickup, put my groceries in the right hand part of the cab and
> started walking around the rear of the truck to get in on the driver's
> side. My screwdriver was busily tuning itself toward the 75m setting
> as if by magic. I got a weird feeling as I unlocked the driver's side
> door and looked to see what was going on. I had put a five liter box
> of wine down on the screwdriver control box.
> --
> cheers, CAM http://www.qsl.net/w5dxp

5021. Re: Homebrewing circuits for HF vs. VHF/UHF/microwave

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 22:35:58 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3C8E830E.2919@pop.removethistomailme.net>
Source record: 146809
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Ian White, G3SEK wrote:
>
> [1] If you really have to, you can bolt a large number of bent-over
> solder lugs to the box, and solder them directly to the groundplane of
> the board... that will work, but it's better to avoid it.
>

Or just drill screw holes every few inches when you mount the board in
the bottom of the chassis. In practice, I usually find that 6-8 around
the periphery of a 4x2 board is fine. The screws, plus the grounding
lugs of any SMA jacks and feedthrough caps you're using, will generally
be enough.

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

5022. Re: Newbie with an ATAS 100, what mount is best?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 23:10:56 UTC
From: "Fredric J. Einstein" <feinstei@earthlink.net>
Message-ID: <r47r8ug5e6qr2290kfbio7i7iaodc6c6fm@4ax.com>
Source record: 146810

I use a quad mag-mount successfully on all bands from 440 MHz to 40 meters with the ATAS-100 and my Yaesu FT-847. I have been using this configuration successfully on a Ford Explorer, a Ford Expedition, a Ford Taurus, and a Lincoln Navigator. I have had excellent signal reports and the ATAS tunes successfully on all bands without auxiliary grounding. I just stick the antenna on top of the mag-mount and it seems to work just fine.

Fred
N8UC -- Detroit

5023. Re: Screwdriver Autotuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-12 23:47:17 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c8e93a5$1_1@news.iglou.com>
Source record: 146811

Don't let a llittle wine drive you to troll.

--
Steve Ellington N4LQ.
"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C8D6DE3.FFA09369@IEEE.org...
> I was listening to 75m the other night when I pulled into the grocery
> store parking lot. My screwdriver was set on 40m and I made a mental
> note to tune it to 75m when I finished grocery shopping. I came back
> to my pickup, put my groceries in the right hand part of the cab and
> started walking around the rear of the truck to get in on the driver's
> side. My screwdriver was busily tuning itself toward the 75m setting
> as if by magic. I got a weird feeling as I unlocked the driver's side
> door and looked to see what was going on. I had put a five liter box
> of wine down on the screwdriver control box.
> --
> cheers, CAM http://www.qsl.net/w5dxp

5024. Icom AH-4 auto tuner in attic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 01:22:26 UTC
From: ATD <capt-tripps@comcast.net>
Message-ID: <3C8EA9D4.B22FFA56@comcast.net>
Source record: 146812
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Can the Icom (or any) auto tuner be used in a hot ventilated attic?
I've seen many posts from people who have done so. I live in Maryland,
the summers are hot, and I can't help but believe attic temperatures can
be excessive to the microprocessor in the tuner.

TIA.

Andy N3LCW

5025. Icom AH-3/AH-4 compatible?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 01:26:22 UTC
From: ATD <capt-tripps@comcast.net>
Message-ID: <3C8EAABD.EBF4BC03@comcast.net>
Source record: 146813
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

I have an Icom 728 HF rig which can work with the AH-3 tuner. Is the
AH-4 interface the same?
TIA.

Andy N3LCW

5026. Re: Icom AH-4 auto tuner in attic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 01:40:42 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8EAE1A.D148254C@IEEE.org>
Source record: 146814
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

ATD wrote:
> Can the Icom (or any) auto tuner be used in a hot ventilated attic?
> I've seen many posts from people who have done so. I live in Maryland,
> the summers are hot, and I can't help but believe attic temperatures can
> be excessive to the microprocessor in the tuner.

What does the operating specs say? I don't think you would have a problem
in Maryland.
--
cheers, CAM http://www.qsl.net/w5dxp

5027. Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 02:03:56 UTC
From: Sam.Yang@csiro.au
Message-ID: <4b8ff9bc.0203121803.717f603c@posting.google.com>
Source record: 146815

My question is simple: Is there a good multi-band vertical HF antenna without using a ground? If yes, how a "groundless" antenna compares with a "grounded" antenna?

Regards,

Sam.Yang@csiro.au

5028. Re: Annoying, elusive, intermittent, persistant QRN: help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 02:08:41 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c8eb8d7_2@news1.prserv.net>
Source record: 146816

Will:

While I am a little puzzled by the exact timing, I can tell you from personal experience that a non-functioning Sodium Vapor light* has exactly the characteristic you describe, while remaining dark. I have second hand information that a mercury vapor light** does the same, but I am not sure about it remaining dark while emitting noise. The trick is to ignore illuminated lamps and look for those not on.

The noise producing mechanism is the starter attempting to fire a non-responding lamp and thermally cycling off, then cooling and starting over.

Someone else asked whether this is starting later as sunset gets later. This will define whether it is photocell or timer operated. If you can hear it on VHF at all, get yourself a VHF AM receiver and directional antenna and go after it. FM won't work. Trying to find it on HF will drive you nuts, as the antenna characteristics of whatever wiring is connected to it vary for many reasons, and the strongest signal will not necessarily be anywhere near the actual source.

*HF receiver site near Corea, Maine, 1995
**Ch. 5 TV C-band downlink, San Antonio, TX, 1992
--
Crazy George
Remove NO and SPAM from return address
Will White <googlyelmo@earthlink.net> wrote in message news:3C8D9E7E.555C1AD9@earthlink.net...
> I have a local noise problem I am hoping someone can help me track down. I hear
>
> S-6 or 7 loud, 'coarse' has on all HF bands, on all frequencies, though the
> intensity of noise diminishes somewhat on higher bands. On 40M, my main band,
> it is all but intolerable, making QSOs with all but the loudest stations
> difficult, even at 12 WPM or so.
>
> The noise comes on for exactly 2' 15", and goes off for exactly 1' 25". Over and
>
> over. I have timed it many times over two weeks. The noise is only there after
> dark. Aha! But I have searched and searched for an intermittent streetlight, to

> no avail. I have gone about three blocks in all directions from the house
in
> this search, and also looked for automatic driveway/porch lights nearby,
but
> can't find any. What the &*%$ can this be!?? I am really puzzled by the
exact
> timing, since it would seem that a streetlight malfunctioning wouldn't do
this,
> and a driveway light might stay ON for a specific time, but not off! HELP!
>
> --
> Will White, KD7BFX
> Seattle WA US
> King County, Grid CN87tq
> ITU Zone 6, CQ Zone 3
> **********
> "The wireless telegraph is not difficult to understand.
> The ordinary telegraph is like a very long cat.
> You pull the tail in New York, and it meows in Los Angeles.
> The wireless is the same, only without the cat."
> - Albert Einstein
> **********
>
>

5029. Re: Icom AH-4 auto tuner in attic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 02:27:16 UTC
From: laborkei <laborkeiNOSPAM@hotmail.com>
Message-ID: <3c8ebcd8$1_3@nopics.sjc>
Source record: 146817
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

I have seen the AH-4 mounted on the outside of a motor home on ladders,
in the trunk of a car, and at the bottom of an antenna tower.
In all examples the issue may be with temperatures.
I would check the manual or send Icom an email and
see what they think.

I don't think I would put it in my attic here in Atlanta, Georgia
with temperatures that reach over 120 degrees..

Keith - WD5BJQ

"ATD" <capt-tripps@comcast.net> wrote in message
news:3C8EA9D4.B22FFA56@comcast.net...
> Can the Icom (or any) auto tuner be used in a hot ventilated attic?
> I've seen many posts from people who have done so. I live in Maryland,
> the summers are hot, and I can't help but believe attic temperatures can
> be excessive to the microprocessor in the tuner.
>
> TIA.
>
> Andy N3LCW
>
>

5030. Re: Icom AH-4 auto tuner in attic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 03:37:36 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <1caOPFIubMrhFylQa05tDgexjlw+@4ax.com>
Source record: 146818

ATD <capt-tripps@comcast.net> wrote:

>Can the Icom (or any) auto tuner be used in a hot ventilated attic?
>I've seen many posts from people who have done so. I live in Maryland,
>the summers are hot, and I can't help but believe attic temperatures can
>be excessive to the microprocessor in the tuner.

Well, if you could locate the tuner close to a soffit vent around the edge of
the roof, and you have decent exhaust vents above that to get some circulation
going, it should be okay. Put some ridge vents in, if you can, and you shouldn't
have a problem at all.

Bob
k5qwg
>
>TIA.
>
>Andy N3LCW
>

5031. Mounting Outbacker Perth

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 04:30:03 UTC
From: David Hawkins <kb5wk@NOSPAM.hotmail.com>
Message-ID: <3c8ed378_1@newsa.ev1.net>
Source record: 146719

I'm going to be installing my Perth outbacker mobile antenna to my 98 Ford Ranger truck. I have two options that seem best to me. Mounting it to my rear bumper near the corner. Or, mounting it to my trailer hitch receiver, by removing the ball. Making an adaptor plate and mounting the OB-SB perth mount in place of the ball.

Any comments or suggestions to what would be the best option to mount this antenna and OB-SB mount to my truck. Thanks in advance.

Email: kb5wk@hotmail.com
--
73's
David Hawkins, KB5WK
Plano Texas USA

5032. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 04:35:37 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C8ED6E1.9E07D43A@shaw.ca>
Source record: 146720

Sam Yang wrote:
>
> My question is simple: Is there a good multi-band vertical HF antenna
> without using a ground? If yes, how a "groundless" antenna compares
> with a "grounded" antenna?
>
> Regards,
>
> Sam.Yang@csiro.au

I run a Cushcraft R-7 vertical (40 thru 10m) which is a half
wave
configuration and does not require a ground. I'm very
pleased with
it. I picked it up used very cheap -- check around.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5033. Re: Mounting Outbacker Perth

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 05:02:58 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8EDD82.3A52AED2@IEEE.org>
Source record: 146721

David Hawkins wrote:
>
> I'm going to be installing my Perth outbacker mobile antenna to my 98 Ford
> Ranger truck. I have two options that seem best to me. Mounting it to my
> rear bumper near the corner. Or, mounting it to my trailer hitch receiver,
> by removing the ball. Making an adaptor plate and mounting the OB-SB perth
> mount in place of the ball.
>
> Any comments or suggestions to what would be the best option to mount this
> antenna and OB-SB mount to my truck. Thanks in advance.

Personally, I would mount a Perth inside my garbage can. :-) What I did for
my screwdriver is to mount some 5/8" threaded stock into the trailer hitch
hole and fasten the antenna mount to that threaded rod.
--
cheers, CAM http://www.qsl.net/w5dxp

5034. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 08:37:31 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8u3ub840gd9c0@corp.supernews.com>
Source record: 146722

My thought was to try a CB top loaded whip for 6 meters, which might be
close to a 1/2 wave with some trimming.
Have not had the chance to test that yet.

--
Wayne. <|:^)>
KG6KFE@charter.nospam.net
http://www.wayneleake.net

"Irv Finkleman" <finkirv@shaw.ca> wrote in message
news:3C8ED6E1.9E07D43A@shaw.ca...
> Sam Yang wrote:
> >
> > My question is simple: Is there a good multi-band vertical HF antenna
> > without using a ground? If yes, how a "groundless" antenna compares
> > with a "grounded" antenna?
> >
> > Regards,
> >
> > Sam.Yang@csiro.au
>
> I run a Cushcraft R-7 vertical (40 thru 10m) which is a half
> wave
> configuration and does not require a ground. I'm very
> pleased with
> it. I picked it up used very cheap -- check around.
> --
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> --------------------
> Visit my FINALLY UPDATED website at
> http://members.shaw.ca/finkirv/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

5035. Re: Icom AH-4 auto tuner in attic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 08:38:42 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8u40mmg0d9le5@corp.supernews.com>
Source record: 146723
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

If you knew just how hot it can get in some of those attics.
Now, if he put in a ventilating fan, maybe...

--
Wayne. <|:^)>
KG6KFE@charter.nospam.net
http://www.wayneleake.net

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C8EAE1A.D148254C@IEEE.org...
> ATD wrote:
> > Can the Icom (or any) auto tuner be used in a hot ventilated attic?
> > I've seen many posts from people who have done so. I live in Maryland,
> > the summers are hot, and I can't help but believe attic temperatures can
> > be excessive to the microprocessor in the tuner.
>
> What does the operating specs say? I don't think you would have a problem
> in Maryland.
> --
> cheers, CAM http://www.qsl.net/w5dxp

5036. Re: Radioamateur Chat!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 08:45:50 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u8u4dtr26pg4a5@corp.supernews.com>
Source record: 146724

For chatting, I simply use my IC-2000H...

--
Wayne. <|:^)>
KG6KFE@charter.nospam.net
http://www.wayneleake.net

"Ja" <ja@ja.com> wrote in message
news:llfq8u8o58r6s573m8a8q30kgtr5eenh1f@4ax.com...
> http://www.qsl.net/9a8ra/
> 73..

5037. Re: Radioamateur Chat!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 09:02:36 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C8F15AC.8B82EC32@coqui.net>
Source record: 146725

Wayne wrote:
>
> For chatting, I simply use my IC-2000H...

And what does it say when you chat to it?

-ex

5038. traps or no traps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 10:18:17 UTC
From: IronHead <slipkid@kwiknet.net>
Message-ID: <IHFj8.161$Ejt2.10223638@news2.randori.com>
Source record: 146726

I have to purchase a new vertical HF antenna. I was looking into the hustler 5BTV. I'm hearing alot about loss in a trap design antenna. Can any tell me acually how much signal will be lost if I use a trap vs. non-trap design. Any suggestions on antenna choice is appreciated also.
KC2FYP

5039. FA: Autopatch

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 10:41:08 UTC
From: aokd5fxt@cs.com
Message-ID: <20020313054108.21394.00001300@mb-cv.news.cs.com>
Source record: 146727

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1338883231&ssPageName=A

Thanks for looking and making the counter move!!

Bill

5040. Re: Mounting Outbacker Perth

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 11:22:46 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3C8F3686.1DDD94B5@bloomer.net>
Source record: 146728

Now I don't know why you would mount it in a garbage can as that would tend to shield the RF and screw up the wonderful DX properties of the antenna. I have mine mounted onto the crossmember of my aluminum ladder rack on an Astro van and I work Europe, Africa, Japan, etc. with ease with only 100 Watts. The Perth (Plus) has even given my Alaska on 60M with 50 Watts. If you dont mind holes, you might mount it on one of the siderails of the box near the rear to keep it as far from the cab as possible. I can send you a picture of my Astro setup if you wish. I think the best is to keep it as high and in the clear as possible. If you have a topper, you could add some aluminum ladder racks, one on the cab and one on the topper. Put the antenna on the one on the cab and drill a small hole in the roof to attach the ground wire directly to the top of the cab with a 6-32 or 8-32 machine screw/washer/lockwasher/nut. Be sure to mount it as far to one side or the other so you can reach it to unscrew it to change bands!

Scott
N0EDV

CAM wrote:
>
> David Hawkins wrote:
> >
> > I'm going to be installing my Perth outbacker mobile antenna to my 98 Ford
> > Ranger truck. I have two options that seem best to me. Mounting it to my
> > rear bumper near the corner. Or, mounting it to my trailer hitch receiver,
> > by removing the ball. Making an adaptor plate and mounting the OB-SB perth
> > mount in place of the ball.
> >
> > Any comments or suggestions to what would be the best option to mount this
> > antenna and OB-SB mount to my truck. Thanks in advance.
>
> Personally, I would mount a Perth inside my garbage can. :-) What I did for
> my screwdriver is to mount some 5/8" threaded stock into the trailer hitch
> hole and fasten the antenna mount to that threaded rod.
> --
> cheers, CAM http://www.qsl.net/w5dxp

--
Scott
http://corbenflyer.tripod.com/
Building RV-4
Gotta Fly or Gonna Die!

5041. Re: traps or no traps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 12:03:32 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c8f3d73_4@corp.newsgroups.com>
Source record: 146729

"IronHead" <slipkid@kwiknet.net> wrote in message
news:IHFj8.161$Ejt2.10223638@news2.randori.com...
> I have to purchase a new vertical HF antenna. I was looking into the
hustler
> 5BTV. I'm hearing alot about loss in a trap design antenna. Can any tell
me
> acually how much signal will be lost if I use a trap vs. non-trap design.
> Any suggestions on antenna choice is appreciated also.
> KC2FYP
>
>
I can't tell you exactly the amount of loss per trap but there is some.. I
would more worry about the losses in the radial system . You did not mention
how you plan to mount the antenna Ground or above ground? I would take a
look at the Butternut verticals. Also we could give more accurate advise if
you mentioned what your goals in operating are do you just want to get on
the air.. or are you more interested in 80/160M DX .
73 Dave kc1di always qrp..
P.S. I avoid traps as much as possible but then I use 2watts or less power
if your running a Kilowatt traps may be fine for you. Also some of the non
trap designs can be just as lossy.

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.336 / Virus Database: 188 - Release Date: 3/11/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5042. Re: Icom AH-4 auto tuner in attic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 12:18:56 UTC
From: Harold Burton <hwburton@swbell.net>
Message-ID: <QsHj8.65612$Xk.2348481553@newssvr30.news.prodigy.com>
Source record: 146730
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

"ATD" <capt-tripps@comcast.net> wrote in message
news:3C8EA9D4.B22FFA56@comcast.net...
> Can the Icom (or any) auto tuner be used in a hot ventilated attic?
> I've seen many posts from people who have done so. I live in Maryland,
> the summers are hot, and I can't help but believe attic temperatures can
> be excessive to the microprocessor in the tuner.

Lots of heat in attic all right. As an example, I floored a portion of my
attic for storage years ago (when I was relatively young). It was summertime
and hot enough up there to rouse my curiosity. I brought up a thermometer to
see what temp I was working in and it was running 130 degrees. This was in
north Texas,
but on an august day in Anywhere, USA I'd expect pretty high temps.

5043. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 13:18:28 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203130518.bdfcd8e@posting.google.com>
Source record: 146731

[snipped]

"Gary Tait" <taitg@hurontel.on.ca> wrote in message
news:<0Hpj8.31379$X2.315298@nnrp1.uunet.ca>...
> > What would be wrong with a multiturn loop? A foot or two in diameter,
> > resonated with a capacitor?
>
> Would a loop not be directional?
>
> > For fixed operation it should work fine. If you are mobile you would
> > want a whip.

Yes, it would. That is why I said it would be OK for fixed operation.
You could orient it to give the best signals. This would be an
inconvenience for mobile operation.

Loran C is used for other things besides navigation. It is also used
as a frequency and timing reference and gives better results in some
parts of the world than if you used WWV. I have seen small loops (2-3
feet across) used for this.

Going from best to worst, the timing and frequency references
available for the home experimenter (that is, they are 'affordable')
are GPS (UHF), Loran C/WWVB (LF/VLF), and WWV (HF).

Since WWVB upgraded their station a few years ago, they are alleged to
have a good signal over the entire USA and most of Canada. If I were
to homebrew a frequency/timing reference I would use WWVB.

Jim
N8EE

5044. Re: Double shield Coax connection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 13:34:03 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203130534.59d8de1c@posting.google.com>
Source record: 146732

[snipped]

"Ed Laughery" <laughery@bellsouth.net> wrote in message
news:<n9fj8.45555$Nn6.2580918@e3500-atl2.usenetserver.com>...
> Hello All
>
> Thanks for replies. I have a large roll of 10base Lan cable that has inner
> conductor, insulation, foil, insulation, outer braid, insulation. I'll make
> sure and tie both foil and braid together.
>

Hmmm, interesting. The two shields are insulated

I think it depends on the application.

I have seen cases where the inner shield is connected to 'circuit
ground' and the outer is connected to chassis ground, and sometimes
the outer is connected to chassis at one end only. This helps
eliminate circulating currents and external noise pickup on the
'circuit ground'. This applies to both coax and twisted pairs.

If you are going to use it as a cheap source of coax for radio use,
just connect them both together.

Jim
N8EE

5045. Re: References on Half wave end fed top loaded vertical ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 13:42:23 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203130542.2828139@posting.google.com>
Source record: 146733

[snipped]

"KA9CAR" <nospam@nospam.usa> wrote in message news:<a6b0qe$r2u$1@news1.tribune.com>...
> I would like to read that article. I checked the ARRL members only web
> site, and as far as I can tell, you have to order hard copies of articles.
> Is there some place they are posted on line that I missed?
>
> John
>
>

I looked at the article again. No web references.

After studying the pictures a bit I will attempt another ASCII picture
of the feed point. This is a close up of the feed area in my other
post.

```
---------------------+----------+
| |
ccccccccccccccccccc |
s | |
-----------------s---(----------+----------------
| |
| |
| |
---------------------+----------+
```

S is the shield of the coax and is connected to the mast at the feed
point.

The center conductor is connected to the downward hanging wires, all
four of them even only 2 are shown here. The center conductor is not
connected directly to the mast.

Jim
N8EE

5046. antron 99 tower mounted?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 13:52:39 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C8F58FA.32BB8170@tampabay.rr.com>
Source record: 146734

hey everyone
i am considering side mounting my A99 on the side of my 50 foot tower
and i was wondering just how far away from the side of the tower it
needsto be and not have any reaction with antenna performance

5047. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 14:41:24 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <oyJj8.6690$tP2.621266@bgtnsc05-news.ops.worldnet.att.net>
Source record: 146735

In discussing receiving antennas for Loran-C, the subject turned to loops and whether their bidirectional response would be a problem. Jim, N8EE, wrote:

> Yes, it would. That is why I said it would be OK
> for fixed operation. You could orient it to give
> the best signals. This would be an inconvenience
> for mobile operation.

I wonder if the crossed loops used for LF direction-finding might work as a non-directional magnetic antenna for this application. The outputs from the two loops would have to be phase-shifted 90 degrees relative to each other before being summed together, but the result would be similar to that obtained with crossed horizontal dipoles phased to produce a turnstile antenna.

The obvious problems are: (1) How to achieve the desired phase shift over the considerable bandwidth of the Loran-C signals without degrading the waveforms and (2) How to get enough sensitivity from the loops since they will have to be untuned to span the instantaneous bandwidth of the signal with no phase distortion. Both of these problems can be addressed with conventional circuit design techniques.

An aircraft implementation could take the form of crossed ferrite loopstick antennas, or orthogonal windings on a single rectangular slab of ferrite. These could be placed in a shallow cavity in the bottom of the airframe with an opening to the outside world through a radome, again, following established practice with LF RDF antennas.

Somebody probably already makes such a beast, I suppose, but I haven't seen any discussion of it.

--
Jim Bromley, K7JEB k7jeb @ arrl.net
Glendale, Arizona

5048. Digital Communications : Modulation Recognition and frequency spectrum

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 14:51:35 UTC
From: john_james@email.com
Message-ID: <237340ff.0203130651.245799d9@posting.google.com>
Source record: 146736
Cross-posted to:
comp.dsp,rec.radio.amateur.digital.misc,sci.electronics.basics,rec.radio.amateur.antenna,aus.radio.amateur.digital

Hi,
I am looking for a practical approach of modulation recognition of a signal using its frequency spectrum. I need a practical approach but any help in theoretical areas will be welcomed too.
Bests,
John

5049. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 14:57:04 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a6npc0ill1@serra.unipi.it>
Source record: 146737

Roy Lewallen <w7el@eznec.com> wrote:
> Last time I tuned in, a group of credible Italian hams were getting set
> to actually run some reasonably well controlled and documented tests on
> a real EH antenna. What happened to that? If it hasn't taken place, does
> anyone know when it will?

I am supposed to be part of that group.
Unfortunately we've not yet found an agreement between us about how we should do the tests and what we actually can reasonably do.
Another thing that is slowing the whole test setup is the fact that the ones of us that tried to build the EH found that it isn't working as claimed (or we are just unable to build it), so the interest isn't so high after all.
I'm sorry to say this, but I admit that probably I'm not the right person who can set up a well made test. However if anyone wants to help, please contact me.

73

Francesco IZ5DWF

5050. Re: Digital Communications : Modulation Recognition and frequency spectrum

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 15:26:46 UTC
From: Markus L <uo9oew@lnubb.pbz>
Message-ID: <3c8f6f9b$0$225$4d4ebb8e@read-nat.news.nl.uu.net>
Source record: 146738
Cross-posted to:
comp.dsp,rec.radio.amateur.digital.misc,sci.electronics.basics,rec.radio.amateur.antenna,aus.radio.amateur.digital

Get the sound samples of all common digi modes from
http://www.geocities.com/CapeCanaveral/Cockpit/2800/digital/
and convert them into spectra using any FFT software!

73, Markus HB9BRJ
--
e-mail address is ROT13 encoded. Decode before replying.

"John" <john_james@email.com> wrote in message
news:237340ff.0203130651.245799d9@posting.google.com...
> Hi,
> I am looking for a practical approach of modulation recognition of a
> signal using its frequency spectrum. I need a practical approach but
> any help in theoretical areas will be welcomed too.
> Bests,
> John
>

5051. HF Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 16:12:43 UTC
From: Hartmut <hartmut.d@cww.de>
Message-ID: <3c8f7a7b$0$224$a9611f8e@news.cityweb.de>
Source record: 146739

I'm going to buy a new HF Vertical thie summer.

Many hams suggested to buy a butternut HF-9V, but I'm not able to install
the radials
this antenna needs.
Others said they would prefer the GAP Titan or the HyGain AV-640.
Which one is better?

Thank you in advance

Hartmut; DL4YDH

5052. Re: traps or no traps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 16:15:38 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C8F7B21.46ED996C@icok.net>
Source record: 146741

IronHead,
I wouldn't worry about it. No matter how you do it,
by using a discrete trap or some other method, you will
have approximately the same losses. Most of the 'trap-
losses' you hear about are advertising 'hype'...
'Doc

5053. Re: WANTED: how to homebrew a better SWR noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 16:15:45 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203130815.5c6546bf@posting.google.com>
Source record: 146740
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Richard Clark <kb7qhc@attbi.com> wrote in message
news:<o4gs8u8ep3pd4l9feei3unn6ouvtanrflg@4ax.com>...
>
> Automatic Gain/Volume Control. When engaged, it compresses the audio
> volume range of signals received so that weak performers and
> powerhouses sound nearly the same. This answers your complaint of the
> tepid response to otherwise serious change in levels, but is unlikely
> to satisfy. Keep the AGC on and observe the S-Meter instead (the
> S-Meter is a direct reading of AGC potential in many sets).
>
I have been using the S-meter more than my ear, as it takes a low SWR
to make the difference clearly audible. But I don't like the S meter
on my Kenwood TS-430S. It resembes a shrunken version of the
speedometers of some 1960s and 1970s GM vehicles like the one on this
1969 Cadillac
(http://kevingilligan.tripod.com/sitebuildercontent/sitebuilderpictures/inst.jpg).
Imagine that the Cadillac speedometer is shrunk so that it is just 1
inch in diameter. Then imagine that the marks for x5 mph (05, 15, 25,
35, etc.) are taken out. You'd have difficulty telling whether you
were driving 53 or 57 mph. This should show you why I don't like the
S meter on my rig. S5 to S9 is the middle of my S meter, and the
marks are so close together and make it difficult to notice subtle
changes. The area beyond S9 is difficult to read, because each
marking represents a 20 dB change instead of the 6 dB typical for the
S1 to S9 area.

With the 20 dB attenuator on, I usually find that the noise bridge
gives me an S9 reading for a mismatch and an S5 to S7 reading for a
match. Because the bandwidth is so narrow on the lower bands, I
sometimes overshoot because I miss that QUICK null. If I had to rely
on the S meter, I'd rather have a mismatch correspond to S5 and a
match correspond to S1 to S3, as the meter is easier to read in this
region. Also, the audible noise level difference would be more
noticeable.
>
> And as well it should. This suggests you would feel better with a
> higher amplitude white noise source. As I said, designing and
> building a linear amp will test your self challenge. It is not such a
> difficult first assignment, and neither is it a brush-off.
>
OK, I see what you are getting at. I want an extra amplifier built-in
to strengthen the noise source. The reflected component of the
received signal resulting from the noise bridge would dwarf the low

band spikes I have been complaining about. I'd also want to put in an attenuator to avoid overloading the receiver. Since I'm stuck with my lame S meter (as I don't want to add the complexity of a frequency control to the noise bridge), I would also want to make the amount of amplification and attenuation adjustable. Thus, I can make S5 the mismatch noise level and S1 the match noise level instead of S9 and S5.

To distinguish between an SWR of 10 and an SWR of 100, I'll probably need some type of differential amplifier in the circuit. I have noticed from the equations that the reflected voltage for an SWR of 100 is not much higher than that associated with an SWR of 10. So I think I can use a toggle switch to activate such a differential amplifier. This will allow me to easily see that I'm getting closer to a match on 80m, even if my SWR is still 5-10 or more.

By the way, Richard, thanks for your comments. I have a better idea now of just how a noise bridge works.

Jason Hsu, AG4DG
jason_hsu_802701@@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

5054. Re: HF Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 16:24:15 UTC
From: CJ <chas@hotmail.com>
Message-ID: <u8uv9qfqg32h59@corp.supernews.com>
Source record: 146742

Hello Hartmut and others,
Here is a URL that has owner reviews of 129 different vertical and
wire Ham Radio antennas...

http://www.eham.net/reviews/products/13

--
Thanks for the nice Usenet message...

Charles Johnston
AB7SL - Ham Radio Pages
www.ab7sl.com

5055. Re: Icom AH-4 auto tuner in attic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 16:29:30 UTC
From: "A. Domonkos" <capt-tripps@comcast.net>
Message-ID: <3C8F7F93.6042423E@comcast.net>
Source record: 146743
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Thank you for your replies. It gets hot enough here in Maryland to make me think twice about installing a piece of electronics in an attic.

I think I'll continue feeding the antenna with ladder line and use the tuner outside near a ground mount.

Andy N3LCW

5056. Aftermarket HH antenna suggestion

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 16:51:33 UTC
From: Ben <bloggs374321@bloggs.com>
Message-ID: <1016038293.9426.0@eos.uk.clara.net>
Source record: 146744
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

I have a Kenwood TH-F7E handheld. It's built-in antenna seems reasonable but has anyone found an aftermarket aerial of similar size that will give me significant performance benefits on 144/440?

Thanks

Ben

5057. Re: WANTED: how to homebrew a better SWR noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 17:12:00 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <ALLj8.6938$tP2.636254@bgtnsc05-news.ops.worldnet.att.net>
Source record: 146745
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Jason Hsu, AG4DG, posted:

> I have been using the S-meter more than my ear, as it
> takes a low SWR to make the difference clearly audible.
> But I don't like the S meter on my Kenwood TS-430S....

> ....S5 to S9 is the middle of my S meter, and the
> marks are so close together and make it difficult to
> notice subtle changes. The area beyond S9 is difficult
> to read, because each marking represents a 20 dB change
> instead of the 6 dB typical for the S1 to S9 area....

Jason, my suggestion would be to connect a sensitive AC voltmeter across the speaker output of the TS-430 and do the following:

(1) Crank the RF Gain control completely counterclockwise (ie: full off)

(2) Crank the AF Gain control completely clockwise (ie: full on)

(3) Turn on the Noise Bridge and adjust the AC voltmeter sensitivity and RF Gain until you have full-scale meter deflection and a comfortable listening level.

(4) Tune for a null. A 6 dB reduction in bridge output will now correspond to a reduction in meter deflection to half scale. If, as you approach the null, you find you need more sensitivity, adjust the RF Gain upward so that the meter is once again at full scale and continue.

(5) Ignore the S-meter entirely (of course).

--
Jim Bromley, K7JEB k7jeb @ arrl.net
Glendale, Arizona

5058. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 17:49:30 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <e33v8uo5gj8mcajqvqrp2j235m5vn01a9h@4ax.com>
Source record: 146746

On Wed, 13 Mar 2002 14:57:04 +0000 (UTC), Francesco Messineo
<frank@ares.ccii.unipi.it> wrote:

>Another thing that is slowing the whole test setup is the fact that the
>ones of us that tried to build the EH found that it isn't working as claimed

Hi Francesco,

This is not news. The last discussion was that Stefano would PROVIDE
a working model. It comes as no surprise that he could not. No doubt
we will find him re-appearing with the same happy news of the
blessings and bounty that come to those who build one - which of
course ironically suggests that Stefano is un-happy, without blessing,
and impoverished (already admitted to, in fact).

As I put it to Stefano some time ago, he appears to be wholly unsuited
to the task of explaining, fixing, building, or championing the EH
antenna. His posing as an itinerant vegetable peddler with the homesy
aw shucks mentality to spin a yarn about the glories of this antenna
just doesn't cut it. I put it to him that he should instead step down
as spokesman to allow someone better educated in these matters and
certainly a better technician than him to do the job right.

Francesco, in spite of your self doubts about your ability to test
this, it appears that your intelligence easily eclipses the EH
community.

However, as a test at the most fundamental level, the EH clearly
failed:
>ones of us that tried to build the EH found that it isn't working as claimed
and the EH crowd could do nothing better. They have no one to blame
but themselves (if in fact they cannot accept their darling EH is
DOA). There seems no reason for you to pursue this further if they
cannot motivate themselves beyond braggadocio.

73's
Richard Clark, KB7QHC

5059. Re: Aftermarket HH antenna suggestion

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 18:11:22 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8F964A.1E45E502@IEEE.org>
Source record: 146747
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Ben wrote:
> I have a Kenwood TH-F7E handheld. It's built-in antenna seems reasonable but
> has anyone found an aftermarket aerial of similar size that will give me
> significant performance benefits on 144/440?

The Comet CH-72S is hard to beat.
--
cheers, CAM http://www.qsl.net/w5dxp

5060. Re: WANTED: how to homebrew a better SWR noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 18:33:38 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <cv4v8ukelv2bio7oilr97cpst9t7q69hos@4ax.com>
Source record: 146748
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 13 Mar 2002 08:15:45 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>I have been using the S-meter more than my ear, as it takes a low SWR
>to make the difference clearly audible. But I don't like the S meter
>on my Kenwood TS-430S. It resembes a shrunken version of the
>speedometers of some 1960s and 1970s GM vehicles like the one on this
>1969 Cadillac
(http://kevingilligan.tripod.com/sitebuildercontent/sitebuilderpictures/inst.jpg).
> Imagine that the Cadillac speedometer is shrunk so that it is just 1
>inch in diameter. Then imagine that the marks for x5 mph (05, 15, 25,
>35, etc.) are taken out. You'd have difficulty telling whether you
>were driving 53 or 57 mph. This should show you why I don't like the
>S meter on my rig. S5 to S9 is the middle of my S meter, and the
>marks are so close together and make it difficult to notice subtle
>changes. The area beyond S9 is difficult to read, because each
>marking represents a 20 dB change instead of the 6 dB typical for the
>S1 to S9 area.
>
snip
>
>Jason Hsu, AG4DG

Hi Jason,

I see no reason to add or use an attenuator, there is absolutely no problem with overloading the front end. Your source may effectively provide a fraction of a Watt in power, but the band pass filters of your TS-430s (same one of two HF rigs I have, the other is a Drake TR-7) easily pushes down the amount of power applied to the first mixer to a level of microWatts. In fact, it would be a paradox to build an amp for the white noise source and then attenuate it.

The simple solution would be to tap off that S-Meter voltage and feed it to a VCO in the audio range that in turn drives a separate speaker (or mix it back into the audio chain through a special switch). This is a very cheap design that could be accomplished with the venerable 555 timer chip, or with the already mentioned VCO's which would interface easier - perhaps.

This would give you a variable tone whose frequency is driven by the S-Meter level. By Adjusting the top end frequency and bottom end frequencies of the VCO to match full scale deflection and no deflection, you will find that your ear does far better in resolving differences that escape your notice by viewing any size meter.

As for your complaint that you sometimes miss the null because it is so sharp, you are arguing the opposite. When I use my TS-430 for bridge applications the nulls easily plunge 100dB; what you describe seems to be a tepid 30 or 40dB at best (if then). This is not your fault, it simply an illustration of balance, bandwidth and isolation (which you may be suffering from the lack of). If I were to use my own idea of the whistling S-Meter, the 100dB notch would sound like a low thump in a warble, as I traversed it. If I inverted the voltage to frequency conversion, it would be a quick high chirp, or click, in a field of rumbling. The occurence of either of these two indicators would be enough to cause you to tune back and peak the response. For anyone who has tuned SSB, it is more than obvious how much difference several 10's of Hertz can make. The ear is a very good discriminator. With a full scale equivalent at 1000Hz, this would be the log equivalent of less than 5% resolution, something entirely lost in a 1 inch meter.

73's
Richard Clark, KB7QHC

5061. Re: Double shield Coax connection

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 18:39:58 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <227v8u0aqft07329p981ud9l5ilat4qt8u@4ax.com>
Source record: 146749

On 13 Mar 2002 05:34:03 -0800, jim.bolinger@lintek.aeroflex.com (JLB)
wrote:

>[snipped]
>
>"Ed Laughery" <laughery@bellsouth.net> wrote in message
news:<n9fj8.45555$Nn6.2580918@e3500-atl2.usenetserver.com>...
>> Hello All
>>
>> Thanks for replies. I have a large roll of 10base Lan cable that has inner
>> conductor, insulation, foil, insulation, outer braid, insulation. I'll make
>> sure and tie both foil and braid together.
>>
>
>Hmmm, interesting. The two shields are insulated
>
>I think it depends on the application.
>
>I have seen cases where the inner shield is connected to 'circuit
>ground' and the outer is connected to chassis ground, and sometimes
>the outer is connected to chassis at one end only. This helps
>eliminate circulating currents and external noise pickup on the
>'circuit ground'. This applies to both coax and twisted pairs.
>
>If you are going to use it as a cheap source of coax for radio use,
>just connect them both together.
>
>Jim
>N8EE

Hi Jim,

Often when there are two shields provided for in a circuit, one is
driven to increase the input stability. However, this is not a
suitable application for our interests (such designs rarely emerge
above 1MHz in instrumentation applications).

Two shields are often used to isolate grounds without losing
shielding. This is exceptionally difficult if other grounding issues
are not resolved (this technique is the fine tuning, not the
powerhouse solution). As such, recommendations to connect the shields
together at both ends is best.

73's
Richard Clark, KB7QHC

5062. Antennas in mobile communications

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 18:41:17 UTC
From: Ivan Turk <haha@hotmail.com>
Message-ID: <a6o6gikou3@sunce.iskon.hr>
Source record: 146750

Hi,

I was searching some info about antennas used in mobile communications, but all I found was not good enough (not enough data). So, does anyone know what types of antennas are used in mobile communications, and where can I find some data (emmiting diagram, gain etc).

Thanks

5063. Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 19:21:22 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8FA6B2.7E330CB9@IEEE.org>
Source record: 146751

I can't find my last posting on this subject. The reason that I elevated my radials to 20 ft on my 40m vertical is that EZNEC indicates that is the point for maximum gain (0.13dB) at a low TOA (18 deg). As the radials are elevated above 20 ft, EZNEC sez that the major lobes assume larger take off angles (40-50 deg).

Based on my testing, my 33ft vertical with 8 radials elevated to 20ft very rarely beats my one wavelength dipole on 40m for contacts within the USA. That includes directly off the end of the dipole. In other words, for my applications, the vertical is virtually useless and is in danger of being taken down.
--
cheers, CAM http://www.qsl.net/w5dxp

5064. Re: Antennas in mobile communications

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 19:27:54 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C8FA834.C746B703@icok.net>
Source record: 146752

Ivan,
Probably the basis for almost all mobile antennas is
a 1/4 wave vertical, or a 'shortened' 1/4 wave vertical.
It depends on the frequency range of use. On the lower
HF bands, a shortened 1/4 wave antenna is the usually
antenna. Toward the high end of the HF bands a 'full'
length 1/4 wave is common. From VHF and higher, almost
any electrical length antenna can be used, or antenna
arrays.
For the radiation patterns, gain, etc., you might get
one of the antenna modeling programs and 'roll your own'.
Until you get into the VHF region, very few mobile antennas
have any gain (more like negative gain!). The radiation
patterns are so variable, depending on installation and
location, that a 'generic' pattern for a particular type
of antenna isn't even close at times.
Good luck with your research, and have fun...
'Doc

5065. 50ohm Coax + 6:1 Transformer or 300ohm Balanced Feeder?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 19:47:58 UTC
From: JRW <freeboy@ic24.net>
Message-ID: <u8vcav6tkgbc58@corp.supernews.com>
Source record: 146753

Hello,

I have, on my computer, designed a triangular loop antenna with a feedpoint impedence of 300ohms. In the position I want to install this antenna I have another antenna which I want to remove. The old antenna is fed with 50ohm coax.

The new antenna has an impedence of 300ohm at the feedpoint, I could therefore either feed it directly with 300ohm balanced line, or I could use the existing 50ohm coax feed with a 6:1 matching transformer OK?

Would the two methods work as well as each other or would the 6:1 transformer have greater losses than a straighforward 300ohm feed? By the way, the coax is RG58 and the length of coax is about 20ft.

The antenna is for 10m band and I intend to use a power of 10W PEP and occasionally use 100W PEP.

John

5066. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 20:25:53 UTC
From: dennis@wawa.juniper.net
Message-ID: <a6ockh$1217$1@heap.juniper.net>
Source record: 146754

JLB <jim.bolinger@lintek.aeroflex.com> wrote:
>[snipped]
>
>"Gary Tait" <taitg@hurontel.on.ca> wrote in message
>news:<0Hpj8.31379$X2.315298@nnrp1.uunet.ca>...
>> > What would be wrong with a multiturn loop? A foot or two in diameter,
>> > resonated with a capacitor?
>>
>> Would a loop not be directional?
>>
>> > For fixed operation it should work fine. If you are mobile you would
>> > want a whip.
>
>Yes, it would. That is why I said it would be OK for fixed operation.
> You could orient it to give the best signals. This would be an
>inconvenience for mobile operation.

?? Loran C consists of a bunch of transmitters located all over the world, so orienting a directional antenna to maximize signal strength from one transmitter would of necessity result in minimizing the signal strength from others. No matter what your application you almost always want to receive signals from several Loran C transmitters at once, which is why omnidirecitonal antennas are pretty much exclusively used.

>Loran C is used for other things besides navigation. It is also used
>as a frequency and timing reference and gives better results in some
>parts of the world than if you used WWV. I have seen small loops (2-3
>feet across) used for this.

While you could in principle extract frequency from a single Loran C transmitter, there are reasons why you are always better off tracking several. Any single transmitter can fail, or be taken off line for maintenance, so tracking several has a reliability advantage. There are also errors from propagation effects which can be at least partially mitigated by using ensemble averages of results from several signals taking several paths.

More that this, extracting really accurate, independent time-of-day information from Loran C inherently requires solving the navigation problem in any case. That is, navigation requires reception from at least three transmitters since it needs to solve for 3 unknowns (longitude, latitude and time), so determining time information is essentially the same problem as determining position. In fact if you want your clock to produce an accurate second pulse on-time with UTC you'll need to be tracking several chains (each chain has 3-to-5

transmitters) at once. All of this makes an omnidirectional antenna attractive even if you are sitting still.

So while I've seen a lot of Loran C receivers used for time synchronization in telecommunications networks (it was the standard method of doing this in the early 1990's, and is a frequent backup for GPS now) I've never seen one that used a directional loop, as opposed to a whip or a vertical H-field probe, as an antenna. I've seen loops used for WWVB a lot, but the quality of time and frequency from that source isn't even in the same league as Loran C. Loran C can provide near-GPS quality if processed correctly, and outside the US has the additional advantage that other countries often own their own Loran C transmitters while GPS is controlled by the military of a foreign power whose interests are not always guaranteed to closely match thier own. And while inspection of

http://www.locusinc.com
http://www.megapulse.com

shows that loops have become trendy for Loran C reception very recently they always use a pair of loops crossed at 90 degrees to retain the omnidirecitonal reception.

>Going from best to worst, the timing and frequency references
>available for the home experimenter (that is, they are 'affordable')
>are GPS (UHF), Loran C/WWVB (LF/VLF), and WWV (HF).
>
>Since WWVB upgraded their station a few years ago, they are alleged to
>have a good signal over the entire USA and most of Canada. If I were
>to homebrew a frequency/timing reference I would use WWVB.

I would too if I were homebrewing, because it is the simplest processing problem, though I'd still note that Loran C is likely to be a much easier reception problem. There are likely to be Loran C transmitters closer to you than WWVB, and because the duty cycle is so low the instantaneous transmitted power is huge (many Megawatts). I'd also point out if you draw these on a scale of quality of the result these would look much more like

|----|----|-----------------------|----------------------------|
GPS Loran CDMA WWVB WWV
C

That is, when absolute time accuracy on the order of 100 ns is routinely available, the several millisecond relative propagation delay difference between WWV day and night paths looks awfully sloppy. If I were buying I'd certainly buy GPS. Not only is it the best quality but most of the complexity has disappeared into ASICs that are very cheap in the volumes GPS sells at. Of course, the very easiest precise time and frequency source to buy and use is often CDMA (see

http://www.endruntechnologies.com

for example) since it requires no better antenna, and antenna placement,
than your cellphone does.

Dennis Ferguson

5067. Re: Digital Communications : Modulation Recognition and frequency spectrum

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 21:45:08 UTC
From: jrayala@hotmail.com
Message-ID: <18a9fced.0203131345.3ca6f7cb@posting.google.com>
Source record: 146755
Cross-posted to:
comp.dsp,rec.radio.amateur.digital.misc,sci.electronics.basics,rec.radio.amateur.antenna,aus.radio.amateur.digital

john_james@email.com (John) wrote in message
news:<237340ff.0203130651.245799d9@posting.google.com>...
> Hi,
> I am looking for a practical approach of modulation recognition of a
> signal using its frequency spectrum. I need a practical approach but
> any help in theoretical areas will be welcomed too.
> Bests,
> John

John,

If you are not too particular about algorithms based only on frequency spectrum, the following paper has a couple of algorithms using neural networks. The same authors also have a book on the subject (See the references). Hope this helps..

A. K. Nandi and E. E. Azzouz, "Algorithms for Automatic Modulation Recognition of Communication Signals," IEEE Trans. on Communications, vol 46, pp 431-436 April 1998.

Jitendra

5068. Re: antron 99 tower mounted?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 22:16:23 UTC
From: graywolf15222@yahoo.com
Message-ID: <a53b928c.0203131416.182aecef@posting.google.com>
Source record: 146756

Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
news:<3C8F58FA.32BB8170@tampabay.rr.com>...
> hey everyone
> i am considering side mounting my A99 on the side of my 50 foot tower
> and i was wondering just how far away from the side of the tower it
> needsto be and not have any reaction with antenna performance

I would try for at least a quarter wave, if possible. There is a
program called sidemount.exe that you can download at
www.rfglobalnet.com. The program simulates the effect of sidemount
antennas. It is a dos based program and you will need to register with
rfglobalnet to get it.

GW

5069. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 22:34:46 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <a6ojue$map@nntpb.cb.lucent.com>
Source record: 146757

I'm thinking of putting up a sloping dipole for 40 meters vs. a vertical for that band. The area I want to cover is the East Coast US from the West Coast US. Am I right to assume the sloping (In the direction of desired coverage) dipole will be a better radiator? Assuming the vertical at 20 feet and the dipole sloping from 40 feet to 15 feet?

Tony WA6LZH

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C8FA6B2.7E330CB9@IEEE.org...
> I can't find my last posting on this subject. The reason that I elevated
> my radials to 20 ft on my 40m vertical is that EZNEC indicates that
> is the point for maximum gain (0.13dB) at a low TOA (18 deg). As the
> radials are elevated above 20 ft, EZNEC sez that the major lobes assume
> larger take off angles (40-50 deg).
>
> Based on my testing, my 33ft vertical with 8 radials elevated to 20ft
> very rarely beats my one wavelength dipole on 40m for contacts within
> the USA. That includes directly off the end of the dipole. In other
> words, for my applications, the vertical is virtually useless and is
> in danger of being taken down.
> --
> cheers, CAM http://www.qsl.net/w5dxp

5070. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 22:52:07 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u8vm0dsjleo047@corp.supernews.com>
Source record: 146758

**** WARNING *****

Do NOT under any circumstances use Gary's designs for either GPS or Loran.
Everybody knows that he who has a Tait's is lost.

Jim

"Gary Tait" <taitg@hurontel.on.ca> wrote in message
news:0Hpj8.31379$X2.315298@nnrp1.uunet.ca...

5071. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 23:07:52 UTC
From: Gary Tait <taitg@hurontel.on.ca>
Message-ID: <IUQj8.32053$X2.324934@nnrp1.uunet.ca>
Source record: 146759

Jim Weir <jim@rst-engr.com> wrote in message
news:u8vm0dsjleo047@corp.supernews.com...
> **** WARNING *****
>
>
> Do NOT under any circumstances use Gary's designs for either GPS or Loran.
> Everybody knows that he who has a Tait's is lost.
>
>
> Jim
>

Care to elaborate, and justify that elaboration?

>
> "Gary Tait" <taitg@hurontel.on.ca> wrote in message
> news:0Hpj8.31379$X2.315298@nnrp1.uunet.ca...
>
>

5072. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 23:10:55 UTC
From: Gary Tait <taitg@hurontel.on.ca>
Message-ID: <bXQj8.32056$X2.325160@nnrp1.uunet.ca>
Source record: 146760

JLB <jim.bolinger@lintek.aeroflex.com> wrote in message
news:8d5ec8a2.0203130518.bdfcd8e@posting.google.com...
> [snipped]
>
> "Gary Tait" <taitg@hurontel.on.ca> wrote in message
news:<0Hpj8.31379$X2.315298@nnrp1.uunet.ca>...
> > > What would be wrong with a multiturn loop? A foot or two in diameter,
> > > resonated with a capacitor?
> >
> > Would a loop not be directional?
> >
> > > For fixed operation it should work fine. If you are mobile you would
> > > want a whip.
>
>
> Yes, it would. That is why I said it would be OK for fixed operation.
> You could orient it to give the best signals. This would be an
> inconvenience for mobile operation.
>
> Loran C is used for other things besides navigation. It is also used
> as a frequency and timing reference and gives better results in some
> parts of the world than if you used WWV. I have seen small loops (2-3
> feet across) used for this.
>
> Going from best to worst, the timing and frequency references
> available for the home experimenter (that is, they are 'affordable')
> are GPS (UHF), Loran C/WWVB (LF/VLF), and WWV (HF).
>
> Since WWVB upgraded their station a few years ago, they are alleged to
> have a good signal over the entire USA and most of Canada. If I were
> to homebrew a frequency/timing reference I would use WWVB.
>
> Jim
> N8EE

FWIW, I bought a nearly free marine Loran C receiver, and would like to
use it as a cheap-ass GPS, until Loran C gets shut down at least. Afterward,
I have a case,display and keypad to use for microcontroller projects.

5073. Re: Mounting Outbacker Perth

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 23:16:28 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C8FDDCC.5020809@sympatico.ca>
Source record: 146761

How about getting a piece of square steel tubing from a welding/
fabricating shop that will fit in the stake holes in the box. Have them
weld a plate to the top of it. You can paint it to suite, drill a hole
for the antenna mount. From there mount the antenna to it and put it in
one of the stake holes in the top of the box (may need shims to hold it
tight). Attach the coax and a ground wire for the antenna and your off
to the races. I would suggest you put a separate ground from the plate
to the box as well

Oh, you might want to look into guying the antenna if it wips around too
much, mine does.

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

David Hawkins wrote:

> I'm going to be installing my Perth outbacker mobile antenna to my 98 Ford
> Ranger truck. I have two options that seem best to me. Mounting it to my
> rear bumper near the corner. Or, mounting it to my trailer hitch receiver,
> by removing the ball. Making an adaptor plate and mounting the OB-SB perth
> mount in place of the ball.
>
> Any comments or suggestions to what would be the best option to mount this
> antenna and OB-SB mount to my truck. Thanks in advance.
>
> Email: kb5wk@hotmail.com
> --
> 73's
> David Hawkins, KB5WK
> Plano Texas USA
>
>
>

5074. DOES ANYONJE HAVE THE WIRING FOR A " ERW-4C " Data cable for the pc PLEASE>?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-13 23:27:34 UTC
From: kevin <kevin@kick.dynip.com>
Message-ID: <Xns91D0EEDDDD834psxglobalnetcouk@194.168.222.19>
Source record: 146762

.

5075. Re: ScrewDriver Help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 00:03:04 UTC
From: Gus <w6gus@aol.com>
Message-ID: <YMRj8.13277$P4.1141747@newsread2.prod.itd.earthlink.net>
Source record: 146763

It's probably the fingerstock. Screwdriver antennas with fingerstock are trouble. Next time, get one that is not made in someones garage.

73, Charlie

"KF3DY" <hamop@repeater.net> wrote in message news:3c8b947f.410783@news.ptd.net...
> A while back I took my ScrewDriver antenna off my full size 96
> Extended cab GMC truck. This weekend we had super high winds and I
> was going to try to work some of the Great Lakes QSO Party. The
> antenna all ways worked fine no matter where I tuned it. I picked it
> up at Dayton last year from a guy with a 9 call, I think from Ill. I
> forgot his website URL but it was something like amatuerantennas.com
> or something close. Now I can't get it to tune on 10,12,15,17 at all
> the radio just got nuts. It will sometimes tune on 20 meters. It
> always tunes on 30,40, and 75 without any problems. I am using an
> Heathkit SB-1400 with an MFJ tuner set for direct only so that I can
> see the SWR meter on it. I also tried my icom 746 with the same
> results. I have a 54" whip on the top, and have been using it right
> along....
>
> Any one have any ideas for me? I even took a pop can and put 4 loops
> around it with the coax incase I had some RF feedback. Yes, before
> someone asksI made sure it was grounded so that the matching unit was
> working.
>
> Corey KF3DY
>

5076. Re: The 'talkin'est antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 00:05:43 UTC
From: Gus <w6gus@aol.com>
Message-ID: <rPRj8.13282$P4.1142327@newsread2.prod.itd.earthlink.net>
Source record: 146764

Jerry, does your antenna use fingerstock. I've had nothing but trouble with fingerstock and won't buy another one because they just fall apart in a few months.

73, Gus

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message news:Tptj8.48566$Yd.2779563@e3500-atl1.usenetserver.com...
> If you are in the market for a screwdriver mobile antenna, then I invite
> your attention to the
> Carolina Cyclone shown on my website below. The difference in the
Carolina
> Cyclone and
> some of the others is in materials, workmanship, and price. Often,
increases
> in signal strength
> are achieved by increasing the size of the inductor, wire size, and
spacing.
> This is what I have done with the Carolina Cyclone. Cyclone I, for
example,
> is 2 1/2" dia compared to
> only 2" for the DK3 clones and uses #14 wire spaced at 8 turns per inch
for
> a better form
> factor. Materials are black Nylon, the same materials used for Nyloc
bolts,
> to handle high
> power, and give rugged service for years and years. The result is 800
watts
> power handling
> power (conservative) for Cyclone I and a full 1500 watts SSB for the
Cyclone
> II, which is
> a full 3" diameter to give the same "Q" as the famous Texas Bugcatchers.
> You will find that
> you will be most successful with DX and pileups with the Carolina Cyclone
> series of antennas. AND the prices are well under those of most of the
> competition. For more details, please visit www.qsl.net/k4kwh .
>
>
>
>
>

5077. Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 00:07:25 UTC
From: AC6V <ac6v@amsat.org>
Message-ID: <3C8FE9CC.B96CD801@amsat.org>
Source record: 146765

Fluidmotion Antennas -- Remote Adjustable Yagi -- covers SWL Too
http://www.fluidmotion.ws/index.htm
--
Force 12 a 9 Foot Vertical 20-10M - A shorty
http://force12inc.com/
--
GAP Super C Antenna - Came from outer space??
--
No pecuniary interest here -- just 3 unusual antennas

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm

5078. Three Veerrry Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 00:10:51 UTC
From: AC6V <ac6v@amsat.org>
Message-ID: <3C8FEA9A.5DFA6B7A@amsat.org>
Source record: 146766

Fluidmotion Antennas -- Remote Adjustable Yagi -- covers SWL Too
http://www.fluidmotion.ws/index.htm
--
Force 12 a 9 Foot Vertical 20-10M - A shorty
http://force12inc.com/
--
GAP Super C Antenna - Came from outer space??
http://www.gapantenna.com/

No pecuniary interest here -- just 3 unusual antennas

--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm

5079. Re: Three Veerrry Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 00:18:22 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <h%Rj8.18875$Yg2.1990250@news20.bellglobal.com>
Source record: 146767

"AC6V" <
> GAP Super C Antenna - Came from outer space??
> http://www.gapantenna.com/

From the above website...
"Very small footprint = 900% less than normal radial area"

Very small indeed...

5080. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 00:19:54 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C8FECAA.3940E6A8@IEEE.org>
Source record: 146768

Tony Angerame wrote:
>
> I'm thinking of putting up a sloping dipole for 40 meters vs. a vertical for
> that band. The area I want to cover is the East Coast US from the West Coast
> US. Am I right to assume the sloping (In the direction of desired coverage)
> dipole will be a better radiator? Assuming the vertical at 20 feet and the
> dipole sloping from 40 feet to 15 feet?

According to modeling, just about all sloping does is lower the gain and
increase the NVIS radiation in the direction of the slope. Most of the
radiation will still be broadside.
--
cheers, CAM http://www.qsl.net/w5dxp

5081. Re: Three Veerrry Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 00:27:17 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <g5rv8u811pec90n9de0m32jstmjblfnu03@4ax.com>
Source record: 146669

On Thu, 14 Mar 2002 00:10:51 GMT, AC6V <ac6v@amsat.org> wrote:

>Fluidmotion Antennas -- Remote Adjustable Yagi -- covers SWL Too
>http://www.fluidmotion.ws/index.htm

Hi Rod,

I saw this demonstrated at the Mike & Key Amateur Radio Swap Meet (Washington state) just last weekend. Fairly simple in concept without the added folderol of needing special math and new physics to explain its operation.

In a nutshell, it presents you with two fixed length non-conductive tubes as elements on a fixed length boom. The tubes allow a flexible copper bus strap to be fed into it by computer controlled stepper motors. Thus, all elements can be set to a specific length to match the requirements of operation. However, given that the boom and distance between the forward elements and back elements are all fixed, there is obviously some compromise on optimization.

I didn't ask the price, but their page reveals it is quite expensive.

73's
Richard Clark, KB7QHC

5082. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 01:02:33 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203131702.77bb5935@posting.google.com>
Source record: 146670

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C8FA6B2.7E330CB9@IEEE.org>...
> I can't find my last posting on this subject. The reason that I elevated
> my radials to 20 ft on my 40m vertical is that EZNEC indicates that
> is the point for maximum gain (0.13dB) at a low TOA (18 deg). As the
> radials are elevated above 20 ft, EZNEC sez that the major lobes assume
> larger take off angles (40-50 deg).

I don't think it's a problem until you start approaching a 1/2 wave or
so up. The pattern is quite nice at 1/4 wave up. And in many cases,
the "theory" about takeoff angles doesn't mean doodly in the real
world. If ground losses overshadow a better takeoff angle , then it's
a waste trying to get the "best angle". I've seen many ten meter
verticals that do better the higher you place them, no matter what
theory about high angle radiation at high heights say. But the main
problem you seem to have is not enough radials for the 1/8 wave
height. Thats really the only way I can explain the differences from
yours to the one I ran.I know from testing that the 4 radial GP at 1/4
wave works much better than at 1/8 wave. The reason I tried it was I
was doing antenna work, and had my mast lowered about halfway one
night, and I tried the antenna. It wasn't near as good.
>
> Based on my testing, my 33ft vertical with 8 radials elevated to 20ft
> very rarely beats my one wavelength dipole on 40m for contacts within
> the USA. That includes directly off the end of the dipole. In other
> words, for my applications, the vertical is virtually useless and is
> in danger of being taken down.

And it probably will continue in this vein when you run the equal of
about 16 radials on an equal ground mount system. You need about 30
radials to equal the antenna I used with only 4 radials. "at 36 ft
up". And my ground may be a tad better to boot. I wouldn't be worried
about it too much normally, but I'd hate to see people get the
impression that these antennas don't work just because you don't want
to use the proper number of radials for the low height. Or raise it up
to get by with a low number of radials. Obviously from the good
results I had, a 1/4 wave up must be a pretty good place to be, and
indeed the modeling shows it to be fairly clean with little high angle
stuff. But if I had my way, I'd be even higher, to heck with what
modeling says about it's high angles.I would be willing to bet money
in almost all cases the higher antenna will be best regardless. The
ground losses will be lower, thats a given. MK

5083. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 02:44:27 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c90123c_4@news1.prserv.net>
Source record: 146671

The big question is always the environment. After reading all about ground conductivity, I ask what about a grove of trees 50 feet tall which are heavily populated with leaves. Actually, many acres of trees, not just a grove, and with varying heights from 20 to 50 feet. Are they absorbers? A reflective surface? If so, where is the surface defined? At the extremities of the leaf ends? Or at the point of maximum RF conductivity? I know the Vietnam experience with HF below heavy vegetation was bad, but what about above? I can easily understand why no one wants to rigorously address the issue, but it makes answering questions about one antenna versus another impossible to answer in the general case.
--
Crazy George
Remove NO and SPAM from return address

CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C8FA6B2.7E330CB9@IEEE.org...
> I can't find my last posting on this subject. The reason that I elevated
> my radials to 20 ft on my 40m vertical is that EZNEC indicates that
> is the point for maximum gain (0.13dB) at a low TOA (18 deg). As the
> radials are elevated above 20 ft, EZNEC sez that the major lobes assume
> larger take off angles (40-50 deg).
>
> Based on my testing, my 33ft vertical with 8 radials elevated to 20ft
> very rarely beats my one wavelength dipole on 40m for contacts within
> the USA. That includes directly off the end of the dipole. In other
> words, for my applications, the vertical is virtually useless and is
> in danger of being taken down.
> --
> cheers, CAM http://www.qsl.net/w5dxp

5084. Re: DOES ANYONJE HAVE THE WIRING FOR A " ERW-4C " Data cable for the pc PLEASE>?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 03:27:16 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna9064j.rin.QSB@animas.frontier.net>
Source record: 146672

On Wed, 13 Mar 2002 23:27:34 GMT, kevin scribbled nothing.

And , you thought you'd ask that in the
"radio"-amateur"-"antenna" ng so that you would get *lots* of
knowledeble answers, ehhh?

5085. Re: WANTED: how to homebrew a better SWR noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 03:37:38 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203131937.315c528c@posting.google.com>
Source record: 146673
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Richard Clark <kb7qhc@attbi.com> wrote in message
news:<cv4v8ukelv2bio7oilr97cpst9t7q69hos@4ax.com>...
>
> Hi Jason,
>
> I see no reason to add or use an attenuator, there is absolutely no
> problem with overloading the front end. Your source may effectively
> provide a fraction of a Watt in power, but the band pass filters of
> your TS-430s (same one of two HF rigs I have, the other is a Drake
> TR-7) easily pushes down the amount of power applied to the first
> mixer to a level of microWatts. In fact, it would be a paradox to
> build an amp for the white noise source and then attenuate it.
>
I can explain this parodox. The amplifier would ensure that the
reflected voltage is strong enough that those darned noise spikes
don't foil my efforts to find the null. The attenuation would be
adjustable. I'd like the noise level corresponding to a mismatch to
be S5 instead of S9. The S1 to S5 part of the S meter is easier to
read than the S5 to S9 part.

> The simple solution would be to tap off that S-Meter voltage and feed
> it to a VCO in the audio range that in turn drives a separate speaker
> (or mix it back into the audio chain through a special switch). This
> is a very cheap design that could be accomplished with the venerable
> 555 timer chip, or with the already mentioned VCO's which would
> interface easier - perhaps.
>
You have a point, but I'd rather have everything in one package.

> This would give you a variable tone whose frequency is driven by the
> S-Meter level. By Adjusting the top end frequency and bottom end
> frequencies of the VCO to match full scale deflection and no
> deflection, you will find that your ear does far better in resolving
> differences that escape your notice by viewing any size meter.
>
This is an interesting idea - frequency changes instead of volume
changes. I'll have to think about this one.

> As for your complaint that you sometimes miss the null because it is
> so sharp, you are arguing the opposite. When I use my TS-430 for
> bridge applications the nulls easily plunge 100dB; what you describe
> seems to be a tepid 30 or 40dB at best (if then). This is not your
> fault, it simply an illustration of balance, bandwidth and isolation
> (which you may be suffering from the lack of). If I were to use my

> own idea of the whistling S-Meter, the 100dB notch would sound like a
> low thump in a warble, as I traversed it. If I inverted the voltage
> to frequency conversion, it would be a quick high chirp, or click, in
> a field of rumbling. The occurence of either of these two indicators
> would be enough to cause you to tune back and peak the response. For
> anyone who has tuned SSB, it is more than obvious how much difference
> several 10's of Hertz can make. The ear is a very good discriminator.
> With a full scale equivalent at 1000Hz, this would be the log
> equivalent of less than 5% resolution, something entirely lost in a 1
> inch meter.
>
OK, I guess I didn't express myself right when I said I missed the
null because it was so sharp. Actually, the null was VERY narrow.
When I tune on 80m, it's easy to miss the null. For my DK3
Screwdriver antenna, the SWR doesn't decline all the way to 1.0 on
80m. I can only get it down to 3-5, and the S meter doesn't move that
much to get here from high SWR values.

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com

5086. Re: WANTED: how to homebrew a better SWR noise bridge

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 04:07:07 UTC
From: Dan Tayloe <dtayloe@cox.net>
Message-ID: <3C9021E6.FDE36BC4@cox.net>
Source record: 146674
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I have not tried it, but I understand that pulsing the power to the
noise source a couple times a second makes the bridge noise more readily
distinguishable from the normal band background noise. This aids in
tuning for a better null, especially in the presence of band noise.

- Dan Tayloe, N7VE; Phoenix, Az; Az ScQRPions

K7JEB wrote:
>
> Jason Hsu, AG4DG, posted:
>
> > I have been using the S-meter more than my ear, as it
> > takes a low SWR to make the difference clearly audible.
> > But I don't like the S meter on my Kenwood TS-430S....
>
> > ....S5 to S9 is the middle of my S meter, and the
> > marks are so close together and make it difficult to
> > notice subtle changes. The area beyond S9 is difficult
> > to read, because each marking represents a 20 dB change
> > instead of the 6 dB typical for the S1 to S9 area....
>
> Jason, my suggestion would be to connect a sensitive AC
> voltmeter across the speaker output of the TS-430 and
> do the following:
>
> (1) Crank the RF Gain control completely counterclockwise
> (ie: full off)
>
> (2) Crank the AF Gain control completely clockwise (ie:
> full on)
>
> (3) Turn on the Noise Bridge and adjust the AC voltmeter
> sensitivity and RF Gain until you have full-scale
> meter deflection and a comfortable listening level.
>
> (4) Tune for a null. A 6 dB reduction in bridge output
> will now correspond to a reduction in meter deflection
> to half scale. If, as you approach the null, you
> find you need more sensitivity, adjust the RF Gain
> upward so that the meter is once again at full scale
> and continue.
>
> (5) Ignore the S-meter entirely (of course).
>

>
> --
> Jim Bromley, K7JEB k7jeb @ arrl.net
> Glendale, Arizona

5087. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 04:10:13 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C9022A5.A2AB4C7C@IEEE.org>
Source record: 146675

Mark Keith wrote:
> You need about 30
> radials to equal the antenna I used with only 4 radials.

That's 15 times as much copper as a dipole. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

5088. LOOPS square vs round and eggbeater too!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 04:29:58 UTC
From: JEEPMON <JEEPMON@HOTMAIL.COM>
Message-ID: <aHVj8.30856$702.14628@sccrnsc02>
Source record: 146676

Which is better for 6m 2m 440MHz?
A square loop or a round loop?
Is a square loop or a round loop just a dipole 'bent'?
What are the pros and cons of a horizontal vs. a vertical loop?
For a loop should the TOTAL length be 1/2 or a full wavelength?
How do you feed them (and not with food or your hands either please)!?
Why do some people insist the a Square loop should be 'fed' at a corner rather than in the middle if one 'side' of it?
How do I match 50 OHM coax to the loop?
What is the impedance of a loop and what changes it.
People talk about 'nulls' with loops but if the entire loop radiates why are there any nulls and how do you re-shape a loop to get rid of nulls?
What would change with a loop antenna if you added more 'sides' to it until it was a circle? IE- if the loop was 3 sided, than 4 sided (square), then 5 then 6 then 7 then 8 ect........? Would this affect the nulls or impedance?
If I make a square loop out of copper plumbing tubing does the wall thickness or diameter of the tubing affect the antenna?
I have seen 'eggbeater' antennas. Are the dipoles whose ends are bent (like a square or circular loop) but are not on the same plane?
If so is an eggbeater antenna directional.
All eggbeater antennas I have seen are vertical what if you 'lay' them on their side? (don't answer they goto sleep either!)
I need more info on loop antennas but when I search I find a bunch of 'receiving loop antennas' for short wave and none for transmitting also they are all several turns of wire around a form not just a single one I am looking for information about.
Please help me?
I know there are LOTS of antenna software out there but are there any specific for loops and helping me design them?

AND THANK GOD FOR NEWSGROUPS AND SPELLCHECKERS!

5089. WTB: Small 15M monobander

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 04:34:00 UTC
From: Paul Lonnquist <paul@dock.net>
Message-ID: <YKVj8.228$iV4.167649@monger.newsread.com>
Source record: 146677

Looking for a 3-4 element 15M monobander, light duty OK. Plan on using as my Field Day antenna, so looking for something relatively inexpensive, easily broken down and reassembled, light weight. No particular brand in mind, just something that can be tuned up and easily erected. Needs to be shippable unless you are in SoCal area.

Tnx es 73, NS6V

5090. Re: LOOPS square vs round and eggbeater too!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 04:42:04 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C90290C.36E71DAC@gte.net>
Source record: 146678

Traditional horizontal VHF/UHF loops are shortened dipoles bent into a circle or square. Because the current decreases out from the feedpoint (even when the dipole is capacitively loaded at its ends) the resulting pattern is eggshaped- typically by approx 3dB- whether it is a square or circle. A few years back a manufacturer released a full wave loop for 2M- a full wave loop has a pattern very similar to a dipole- i.e. 2 deep nulls- and a bit less gain than a dipole. It did not last long in the market.
One halo 6M antenna from several years back radiated as much from the feedline as it did the antenna- no balun.

Two antennas offer a nearly perfect omni patterns- big wheels and the PAR Omniangle- a .7 wavelength triangular antenna.

Dale W4OP

5091. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 05:27:26 UTC
From: mike.luther@ziplog.com
Message-ID: <u90d5upca8vm96@corp.supernews.com>
Source record: 146679

In <3C9022A5.A2AB4C7C@IEEE.org>, CAM <Cecil.A.Moore@IEEE.org> writes:

But ..

>Mark Keith wrote:

>> You need about 30
>> radials to equal the antenna I used with only 4 radials.

>That's 15 times as much copper as a dipole. :-)

>cheers, CAM http://www.qsl.net/w5dxp

Slightly cheaper on 80 meters, ususally, than, say, four 180 foot towers for what is really needed for some paths. Or even two such towers if only two general directions are really important.

Of course, there is also the issue of having only one such tower if you want to use it for the apex of a couple of decent inverted vee dipoles on 80, but, in general .. that still costs more than the radials, no?

You can do a BEAUTIFUL job on 80 with dipoles, W8JI is a wonderful example of that as well as a number of other very carefully thought out and well financed horizontal low-band antenna efforts which are designed for serious long-haul, low-angle requirements.

For the average person who wants long-haul other-side-of-the-world performance, those 30 radials are likely far more effective than any corresponding height horizontal array on 80. At least in most average medium ground conductivity locations that will be likely true.

It also may be that the horizontal lower array looks down over a wonderful valley broadside it on each side. That too makes a lot of difference!

It also holds true that low band HF in the middle of, say, the Sahara Dessert, is going to be a problem, no matter what, no? Even if you are on top of a delightful sand dune that looks down into a wonderful valley of more sand dunes for miles and miles and miles, no?

;)

--> Sleep well; OS/2's still awake! ;)

Mike.Luther@ziplog.com
Mike.Luther@f3001.n117.z1.fidonet.org

5092. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 06:05:25 UTC
From: Greg Knapp <gknapp@freshrain.org>
Message-ID: <F4Xj8.10098$A%3.83789@ord-read.news.verio.net>
Source record: 146680

Did you compare the EZNEC model of your 40 meter one wavelength dipole with the EZNEC model of your vertical? Are the actual results you are experiencing vary from what you expected based on the EZNEC model, or do your experiences confirm the EZNEC model? If they vary from the model, by how much do they vary, and what can be learned from that--not to trust the model? Or that the model is only a rough approximation? BTW, how high is the 40 meter dipole?

Greg, N6GK

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C8FA6B2.7E330CB9@IEEE.org...
> I can't find my last posting on this subject. The reason that I elevated
> my radials to 20 ft on my 40m vertical is that EZNEC indicates that
> is the point for maximum gain (0.13dB) at a low TOA (18 deg). As the
> radials are elevated above 20 ft, EZNEC sez that the major lobes assume
> larger take off angles (40-50 deg).
>
> Based on my testing, my 33ft vertical with 8 radials elevated to 20ft
> very rarely beats my one wavelength dipole on 40m for contacts within
> the USA. That includes directly off the end of the dipole. In other
> words, for my applications, the vertical is virtually useless and is
> in danger of being taken down.
> --
> cheers, CAM http://www.qsl.net/w5dxp

5093. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 06:12:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C903F5C.5FC698@eznec.com>
Source record: 146681

Why am I not surprised?

I was at the University of Colorado at the height of the "'60's" (which really got going about 1968). In the expansive spirit of the times and the general liberal attitude of the university and local community, the university sponsored a series of lectures to give "alternative" points of view a forum. I recall attending a lecture where a perpetual motion machine was presented. Magnets seem to be a perennial favorite of the perpetual motion crowd, since they can pull things without an obvious source of power, and this particular machine featured quite a number. They were along a long continuous belt, that turned a wheel as it moved. I recall that the lecturer was appropriately convincing with his almost-right science, but don't recall the details of operation. Anyway, came the demonstration, and gee, whiz, it slowed down and stopped after a pretty good initial run. Ah, but this is just a prototype, the inventor explained. All that's needed is enough funding to make a bigger one, with more powerful magnets. Because, you see, it almost works now, so all it needs is more powerful magnets, and then!

Well, I guess he never got his magnets, because here we are still paying good money for power.

So, best luck to Stefano in his search for more powerful magnets. Just a little more powerful, then we'll have it. Right?

Thanks, Francesco, for attempting to inject some rationality into this morass of bafflegab and hype. But you see, it's a fool's errand. My money says that like the perpetual motion machine inventor, Stefano won't ever find quite the right magnets.

Roy Lewallen, W7EL

Francesco Messineo wrote:
>
> Roy Lewallen <w7el@eznec.com> wrote:
> > Last time I tuned in, a group of credible Italian hams were getting set
> > to actually run some reasonably well controlled and documented tests on
> > a real EH antenna. What happened to that? If it hasn't taken place, does
> > anyone know when it will?
>
> I am supposed to be part of that group.
> Unfortunately we've not yet found an agreement between us about how we should
> do the tests and what we actually can reasonably do.
> Another thing that is slowing the whole test setup is the fact that the
> ones of us that tried to build the EH found that it isn't working as claimed
> (or we are just unable to build it), so the interest isn't so high after

> all.
> I'm sorry to say this, but I admit that probably I'm not the right person
> who can set up a well made test. However if anyone wants to help, please
> contact me.
>
> 73
>
> Francesco IZ5DWF

5094. Re: 50ohm Coax + 6:1 Transformer or 300ohm Balanced Feeder?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 08:53:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C906521.32DF13F@eznec.com>
Source record: 146682

If you've got a modern rig, you'll have to transform the impedance to 50 ohms somewhere, either at the antenna or at the rig. A decent balun will have negligible loss, so that's not an issue. Your choice is to put the balun at the antenna and use coax, or put it at the transmitter and use twinlead. I'd use coax, simply because I don't have to keep it away from metal objects or the ground, I can coil it up, run it through walls, or whatever. It'll have less loss than the twinlead when it's wet outside -- but it's wet outside a lot around here, and the amount of loss you'll get in 20 feet probably won't be noticeable with either feedline, wet or dry, anyway. So it's really a toss. Neither choice will be significantly better or worse than the other.

Roy Lewallen, W7EL

JRW wrote:
>
> Hello,
>
> I have, on my computer, designed a triangular loop antenna with a feedpoint
> impedence of 300ohms. In the position I want to install this antenna I have
> another antenna which I want to remove. The old antenna is fed with 50ohm
> coax.
>
> The new antenna has an impedence of 300ohm at the feedpoint, I could
> therefore either feed it directly with 300ohm balanced line, or I could use
> the existing 50ohm coax feed with a 6:1 matching transformer OK?
>
> Would the two methods work as well as each other or would the 6:1
> transformer have greater losses than a straighforward 300ohm feed? By the
> way, the coax is RG58 and the length of coax is about 20ft.
>
> The antenna is for 10m band and I intend to use a power of 10W PEP and
> occasionally use 100W PEP.
>
> John

5095. Re: Mounting Outbacker Perth

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 11:14:50 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3C90862A.53E7F96B@bloomer.net>
Source record: 146683

Oops, that was 6M, not 60M ;)

Scott wrote:
>
> Now I don't know why you would mount it in a garbage can as that would
> tend to shield the RF and screw up the wonderful DX properties of the
> antenna. I have mine mounted onto the crossmember of my aluminum ladder
> rack on an Astro van and I work Europe, Africa, Japan, etc. with ease
> with only 100 Watts. The Perth (Plus) has even given my Alaska on 60M
> with 50 Watts. If you dont mind holes, you might mount it on one of the
> siderails of the box near the rear to keep it as far from the cab as
> possible. I can send you a picture of my Astro setup if you wish. I
> think the best is to keep it as high and in the clear as possible. If
> you have a topper, you could add some aluminum ladder racks, one on the
> cab and one on the topper. Put the antenna on the one on the cab and
> drill a small hole in the roof to attach the ground wire directly to the
> top of the cab with a 6-32 or 8-32 machine screw/washer/lockwasher/nut.
> Be sure to mount it as far to one side or the other so you can reach it
> to unscrew it to change bands!
>
> Scott
> N0EDV
>
> CAM wrote:
> >
> > David Hawkins wrote:
> > >
> > > I'm going to be installing my Perth outbacker mobile antenna to my 98 Ford
> > > Ranger truck. I have two options that seem best to me. Mounting it to my
> > > rear bumper near the corner. Or, mounting it to my trailer hitch receiver,
> > > by removing the ball. Making an adaptor plate and mounting the OB-SB perth
> > > mount in place of the ball.
> > >
> > > Any comments or suggestions to what would be the best option to mount this
> > > antenna and OB-SB mount to my truck. Thanks in advance.
> >
> > Personally, I would mount a Perth inside my garbage can. :-) What I did for
> > my screwdriver is to mount some 5/8" threaded stock into the trailer hitch
> > hole and fasten the antenna mount to that threaded rod.
> > --
> > cheers, CAM http://www.qsl.net/w5dxp
>
> --
> Scott

> http://corbenflyer.tripod.com/
> Building RV-4
> Gotta Fly or Gonna Die!

--
Scott
http://corbenflyer.tripod.com/
Building RV-4
Gotta Fly or Gonna Die!

5096. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 12:29:23 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a6q533$2lh$1@serra.unipi.it>
Source record: 146684

Richard Clark <kb7qhc@attbi.com> wrote:
> On Wed, 13 Mar 2002 14:57:04 +0000 (UTC), Francesco Messineo
> <frank@ares.ccii.unipi.it> wrote:

> Hi Francesco,

> This is not news. The last discussion was that Stefano would PROVIDE
> a working model. It comes as no surprise that he could not. No doubt

Just to clarify, Stefano assured us that he will provide the working
EH. We just didn't find an agreement on how, where and when test
Stefano's antenna; again the missing agreement is between the
testers, not between us and Stefano. The test group itself is probably not
enough motivated, since home made antennas didn't show the claimed
behaviour. As full-time employee we often have spare time for our
hobby only during the weekend, so if something isn't enough
interesting probably we take too many weekends to get it done.
However I'm not saying that we aren't going to test the EH
made by Stefano, I didn't give up, not yet at least. I'm waiting
for spare time to be really "spare", and probably other "testers"
are in the same condition.

73
Francesco IZ5DWF

5097. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 12:38:46 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a6q5km$2lh$2@serra.unipi.it>
Source record: 146685

Roy Lewallen <w7el@eznec.com> wrote:

> Thanks, Francesco, for attempting to inject some rationality into this
> morass of bafflegab and hype. But you see, it's a fool's errand. My
> money says that like the perpetual motion machine inventor, Stefano
> won't ever find quite the right magnets.

Well, actually I didn't do anything yet. All I'm doing is gather a bunch
of persons, amateur radio operators hobbysts that also happen to work
in the electronic, telecommunication and physic field and test an EH
made directly by Stefano with our methods and instruments.
What's going wrong in this testing project (probably) is that some of these
persons already built EH prototypes and found nothing good with them.
Probably then these persons lost most of the interest in testing
a "real" EH.

73
Francesco IZ5DWF

5098. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 12:42:03 UTC
From: Val <nishikeit@zilch.com>
Message-ID: <3C909A9B.4FBC9514@zilch.com>
Source record: 146686

Let's clarify:

NO antenna can work without a ground. Period.
Not even in satellites (but, when one use the word "ground"
in this context people tends to get very confused..).

The question HERE is: Can I use a multi-band verical antenna
without countepoids. The answer is simple, but confusing:
No, You can NOT.

But, You can buy a vertical dipole (such as the Cushcraft R8),
where the couterpoid IS the lower (electrical) half of the, at
least in principle half-wave dipole. (think of it as a GP with
one radial, where you pint the radial dow instead of 90 degrees).
This antenna will work excellent. But a ground You have, but it is
the good ole earth ground, which You thread when You are out
trekking, or simply walk from Your door to Your car.

Now, let's talk about efficiency, and NOW it is getting tough.
The Cushcraft R7 will NOT work as good on the lower bands as
e.g. a Butternut (equiped with the correct counterpoids), even if
they had equal length. This is the price You pay for removing the
"earth plane". The R8 need to be shortened to a larger degree on
40 mtrs than the Butternut, in order to keep the size down- A non-
shortened dipole on 40 m is 20 m (approx 65 feet). A non-shordened
GP is 10m (approx 33 feet). The quota betwen the non-shortened length
and the actual shortened antenna length sets the efficiency of Your
antenna (not so easy to calculate as just the quota, though).

For example, the ultra-short MFJ1796 has an efficiency of about 11%
on 40 mtrs. 100W into the antenna is barely 11W radiated power (this
is of obvious reasons not printed in the MFJ catalogue...)

I am NOT working at marketing dept. Butternut. I am NOT telling You
not to buy a Cushcraft (or MFJ) antenna. They are GOOD antennas,
given their SIZE. I am a HAPPY owner of a Cushraft myself - it was
the best way to go QRV on 40, GIVEN NO COUNTERPOID SPACE AVAILABLE,
even if the efficency is about 50%. But I AM telling You: There IS
nothing like a free lunch. You have to pay the prize for putting up
an antenna with space restrictions, wether it is on height or counter-
poids.

[Of course one CAN use a CB top loaded whip for 6 mtrs. But I would
not do it. You'll have to feed it in on end, it would act as the
good ole "end-fed Zepp", but vertical. Some HF amateurs with very hard
restrictions use this kind of antenna (they simply pull out some

wire from the balcony, hanging DOWN, feeding it in the upper end)
The matching thingamajig would be, well, not the surpreme easy one
as the impedance of an End-fed Zepp in reconance is some 3000 ohms or
even more. The antenna will radiate to an extent also without counter-
poids, but my suggestion is to make eiter a verical dipole or GP]

73's
V.

Wayne wrote:
>
> My thought was to try a CB top loaded whip for 6 meters, which might be
> close to a 1/2 wave with some trimming.
> Have not had the chance to test that yet.
>
> --
> Wayne. <|:^)>
> KG6KFE@charter.nospam.net
> http://www.wayneleake.net
>
> "Irv Finkleman" <finkirv@shaw.ca> wrote in message
> news:3C8ED6E1.9E07D43A@shaw.ca...
> > Sam Yang wrote:
> > >
> > > My question is simple: Is there a good multi-band vertical HF antenna
> > > without using a ground? If yes, how a "groundless" antenna compares
> > > with a "grounded" antenna?
> > >
> > > Regards,
> > >
> > > Sam.Yang@csiro.au
> >
> > I run a Cushcraft R-7 vertical (40 thru 10m) which is a half
> > wave
> > configuration and does not require a ground. I'm very
> > pleased with
> > it. I picked it up used very cheap -- check around.
> > --
> > Diagnosed Type II Diabetes March 5 2001
> > Beating it with diet and exercise!
> > 297/215/210 (to be revised lower)
> > 58"/43"(!)/44" (already lower too!)
> > --------------------
> > Visit my FINALLY UPDATED website at
> > http://members.shaw.ca/finkirv/
> > --------------------
> > Irv Finkleman,
> > Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> > Calgary, Alberta, Canada

5099. Re: Antennas in mobile communications

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 12:48:21 UTC
From: Val <nishikeit@zilch.com>
Message-ID: <3C909C15.3EB5A58B@zilch.com>
Source record: 146687

http://www.allgon.se/products/index.asp

Klick "Antenna pattern"

rgrds/73
V

'Doc wrote:
>
> Ivan,
> Probably the basis for almost all mobile antennas is
> a 1/4 wave vertical, or a 'shortened' 1/4 wave vertical.
> It depends on the frequency range of use. On the lower
> HF bands, a shortened 1/4 wave antenna is the usually
> antenna. Toward the high end of the HF bands a 'full'
> length 1/4 wave is common. From VHF and higher, almost
> any electrical length antenna can be used, or antenna
> arrays.
> For the radiation patterns, gain, etc., you might get
> one of the antenna modeling programs and 'roll your own'.
> Until you get into the VHF region, very few mobile antennas
> have any gain (more like negative gain!). The radiation
> patterns are so variable, depending on installation and
> location, that a 'generic' pattern for a particular type
> of antenna isn't even close at times.
> Good luck with your research, and have fun...
> 'Doc

5100. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 12:51:35 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <r11k8.19293$Yg2.2267765@news20.bellglobal.com>
Source record: 146688

"Val"
> Let's clarify:
>
> NO antenna can work without a ground. Period.
> Not even in satellites (but, when one use the word "ground"
> in this context people tends to get very confused..).

If the antenna and feedline are completely balanced and symmetrical (like an ideal dipole fed with twinlead) and floating in interstellar space, then where is the 'ground' ?

5101. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 12:59:41 UTC
From: Dick Carroll <dickc58@worldnet.att.net>
Message-ID: <3C899895.3B926480@worldnet.att.net>
Source record: 146689

Jim Weir wrote:

> **** WARNING *****
>
> Do NOT under any circumstances use Gary's designs for either GPS or Loran.
> Everybody knows that he who has a Tait's is lost.

OWWWW!! Put that man on Comedy Central!

5102. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 13:02:32 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a6q72a$7ea$1@newsserver.cilea.it>
Source record: 146690

"Val" <nishikeit@zilch.com> ha scritto nel messaggio
news:3C909A9B.4FBC9514@zilch.com...
> Let's clarify:
>
> NO antenna can work without a ground. Period.
> Not even in satellites (but, when one use the word "ground"
> in this context people tends to get very confused..).

There is NO theoretical reason why the "ground" should be needed. Period.

Michele IZ2EAS

5103. Distance from feedpoint to choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 13:23:37 UTC
From: cprstn54zz@att.net
Message-ID: <3c90a2ca.158299640@news-server.optonline.net>
Source record: 146691

I will have 100 ft of RG-8X between my all-band dipole (Alpha Delta DX-LB+) and my TX. I will be installing a ferrite toroid with 10 turns of teflon coax as a choke. I was going to install the choke at the feed point, but this turns out to be a very inconvenient spot. Eight feet away from the feed point is much more convenient. Will moving the choke that far from the feedpoint compromise performance?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

5104. Re: Distance from feedpoint to choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 14:28:57 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c90b948_1@news1.prserv.net>
Source record: 146693

Well, It will act as an efficient quarter wave antenna on 10 meters, and
will have a significant aperture on 12M, 15M, 17M, and 20M, providing the
potential for radiation on all these bands from the feedline. Besides that,
it won't make much difference on 30, 40 or 75 meters.

--
Crazy George
Remove NO and SPAM from return address
Ken <cprstn54zz@att.net> wrote in message
news:3c90a2ca.158299640@news-server.optonline.net...
> I will have 100 ft of RG-8X between my all-band dipole (Alpha Delta
> DX-LB+) and my TX. I will be installing a ferrite toroid with 10
> turns of teflon coax as a choke. I was going to install the choke at
> the feed point, but this turns out to be a very inconvenient spot.
> Eight feet away from the feed point is much more convenient. Will
> moving the choke that far from the feedpoint compromise performance?
>
> Ken KC2JDY
>
> Ken
> (to reply via email
> remove "zz" from address)

5105. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 14:39:21 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <ErSQPPEJzrdfk=o9u7PwWKCnpW58@4ax.com>
Source record: 146692

Val <nishikeit@zilch.com> wrote:

>Let's clarify:

>nothing like a free lunch. You have to pay the prize for putting up
>an antenna with space restrictions, wether it is on height or counter-
>poids.

Is a counterpoid the same as a counterpoise? I haven't seen that word before.

Bob
k5qwg

5106. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 15:16:32 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C90BED0.EE4EE970@IEEE.org>
Source record: 146694

Greg Knapp wrote:
>
> Did you compare the EZNEC model of your 40 meter one wavelength dipole with
> the EZNEC model of your vertical? Are the actual results you are
> experiencing vary from what you expected based on the EZNEC model, or do
> your experiences confirm the EZNEC model? If they vary from the model, by
> how much do they vary, and what can be learned from that--not to trust the
> model? Or that the model is only a rough approximation? BTW, how high is
> the 40 meter dipole?

The dipole is 130 ft long up at 40 ft. On 40m, it is one wavelength long.
The vertical is 33 ft long with eight 33 ft radials sloping down from the
20 ft high feedpoint. I put up the vertical to fill in the gaps predicted
by EZNEC for the one wavelength dipole (off the ends). But that didn't
happen. The noise level using the vertical is two S-units higher than
the dipole. After months of comparing the two antennas, I have heard
two or three signals that were stronger on the vertical but they were
copyable on the dipole because of the lower noise level. On the average,
the signals using the dipole are two S-units higher than the vertical.
The vertical doesn't add anything to my capabilities.

I don't know why the one wavelength dipole performs so well off the
Northwest end. The fact that the land slopes downward toward the
Northwest from my QTH may have something to do with it. Ground
conductivity around here is supposed to be 4 millisiemens per
meter which is pretty low.

To answer your question: Either the one wavelength dipole is performing
better than EZNEC predicts or the vertical is performing worse than
EZNEC predicts (or both).
--
cheers, CAM http://www.qsl.net/w5dxp

5107. Re: Mounting Outbacker Perth

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 15:16:40 UTC
From: Bubba <Bubba@nbr1.com>
Message-ID: <s93k8.38554$q2.5437@sccrnsc01>
Source record: 146695

I have mine mounted/screwed on a large 3 magnet mount and it works just fine
on my Dodge Dakota.
The only problem I have it is difficult some times to get the magnet mount
off of my truck. It really holds well.

"Scott" <acepilot@bloomer.net> wrote in message
news:3C90862A.53E7F96B@bloomer.net...
> Oops, that was 6M, not 60M ;)
>
>
> Scott wrote:
> >
> > Now I don't know why you would mount it in a garbage can as that would
> > tend to shield the RF and screw up the wonderful DX properties of the
> > antenna. I have mine mounted onto the crossmember of my aluminum ladder
> > rack on an Astro van and I work Europe, Africa, Japan, etc. with ease
> > with only 100 Watts. The Perth (Plus) has even given my Alaska on 60M
> > with 50 Watts. If you dont mind holes, you might mount it on one of the
> > siderails of the box near the rear to keep it as far from the cab as
> > possible. I can send you a picture of my Astro setup if you wish. I
> > think the best is to keep it as high and in the clear as possible. If
> > you have a topper, you could add some aluminum ladder racks, one on the
> > cab and one on the topper. Put the antenna on the one on the cab and
> > drill a small hole in the roof to attach the ground wire directly to the
> > top of the cab with a 6-32 or 8-32 machine screw/washer/lockwasher/nut.
> > Be sure to mount it as far to one side or the other so you can reach it
> > to unscrew it to change bands!
> >
> > Scott
> > N0EDV
> >
> > CAM wrote:
> > >
> > > David Hawkins wrote:
> > > >
> > > > I'm going to be installing my Perth outbacker mobile antenna to my
98 Ford
> > > > Ranger truck. I have two options that seem best to me. Mounting
it to my
> > > > rear bumper near the corner. Or, mounting it to my trailer hitch
receiver,
> > > > by removing the ball. Making an adaptor plate and mounting the OB-SB
perth
> > > > mount in place of the ball.

> > > >
> > > > Any comments or suggestions to what would be the best option to
mount this
> > > > antenna and OB-SB mount to my truck. Thanks in advance.
> > >
> > > Personally, I would mount a Perth inside my garbage can. :-) What I
did for
> > > my screwdriver is to mount some 5/8" threaded stock into the trailer
hitch
> > > hole and fasten the antenna mount to that threaded rod.
> > > --
> > > cheers, CAM http://www.qsl.net/w5dxp
> >
> > --
> > Scott
> > http://corbenflyer.tripod.com/
> > Building RV-4
> > Gotta Fly or Gonna Die!
>
> --
> Scott
> http://corbenflyer.tripod.com/
> Building RV-4
> Gotta Fly or Gonna Die!

5108. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 15:33:03 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <Po3k8.10841$Ex5.1023584@bgtnsc04-news.ops.worldnet.att.net>
Source record: 146696

"Francesco Messineo" <frank@ares.ccii.unipi.it> wrote in message
news:a6q5km$2lh$2@serra.unipi.it...

> What's going wrong in this testing project (probably) is that some of
these
> persons already built EH prototypes and found nothing good with them.

What's wrong with this? A negative test result is just as valid as a
positive test result if the tests are done correctly.

The point here is that there is really nothing [new] to the EH antenna. The
tests do not validate the claims of the EH "inventor" because the claims are
not valid. Seems like a successful test to me.

Steve VE9SRB

5109. Re: Distance from feedpoint to choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 15:35:35 UTC
From: cprstn54zz@att.net
Message-ID: <3c90bf39.6112031@news-server.optonline.net>
Source record: 146697

On Thu, 14 Mar 2002 08:28:57 -0600, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

>Well, It will act as an efficient quarter wave antenna on 10 meters, and
>will have a significant aperture on 12M, 15M, 17M, and 20M, providing the
>potential for radiation on all these bands from the feedline. Besides that,
>it won't make much difference on 30, 40 or 75 meters.

Are you referring to the eight ft of coax between the feed point and
the choke? If so, is it bad to have a little radiation there? Will
it reduce the energy available to the dipole so much that overall
propagation will be reduced?

Will the possibility of resonance at 10M in that eight feet induce RF
current in the outside of the sheathing in the rest of the feed line
on the other side of the choke? It is that current on the ouside of
the sheathing that the choke is supposed to reduce.

I neglected to mention that the eight feet of coax will be at around
25 degrees off vertical. Also, it will be around 30 degrees off
perpendicular to the vertical plane of the dipole. This means that
some RF from the dipole would be induced in it anyway -- even with the
choke right at the feedpoint.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

5110. Re: Icom AH-3/AH-4 compatible?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 15:42:53 UTC
From: jwalkermi@aol.com
Message-ID: <20020314104253.07682.00001433@mb-cp.aol.com>
Source record: 146698

>I have an Icom 728 HF rig which can work with the AH-3 tuner. Is the AH-4 interface the same?

I have an Icom 725 interfaced with an AH-4 tuner. I assume the interface for the 728 is the same.

Jack
N8NSW

5111. Multiple antennas on one scanner?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 16:08:56 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020314110856.09406.00001331@mb-ml.aol.com>
Source record: 146699

I was wondering, if I use splitters to hook up multiple receiving antennas for a scanner, will I get good reception on the frequencies the antennas are designed for? I am particularly interested in having my Radio Shack mobile scanner antenna hooked up for general receive in the VHF band, as this seems to be the best portion of the spectrum for this antenna. I want to hook up an additional antenna for 800mhz by the use of a homemade spliter.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

5112. 800mhz listening antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 16:16:30 UTC
From: vhfradiobuff@aol.comspamsux
Message-ID: <20020314111630.09406.00001332@mb-ml.aol.com>
Source record: 146700

Can anyone recommend an antenna to listen to 800 mhz on a scanner? A mobile antenna would be prefered, with a magmount.

=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
Toms River, NJ USA! Grid FM29ww
http://vhfradiobuff.tripod.com
http://edfas.tripod.com

5113. Fraud Alert...KB9YTV bad trader

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 17:38:17 UTC
From: Presley Travis <presleytravis@nexet.net>
Message-ID: <3C90E009.FC46F6BD@nexet.net>
Source record: 146701

On January 28th I agreed to purchase an Alinco DR-M06 , 6 meter
tranceiver
from KB9YTV, Ian Ben Steimle, 1003 LIncoln St, Greebay, Wisconsin 54303.

I sent an Postal Money order Priority mail on Tuesday, January 29th
2002.

I received radio on Friday February 8th...not working

Februay 9th I notified Mr. Steimle and he agreed to refund the $185.00

February 11th I returned radio and he received it February 13th,
promising
overnight refund of $185.00

Several lies later we are without the refund a full month has passed and

emails have ceased from KB9YTV.

I have contacted the FBI Internet Fraud division and the Postal
Inspector...
and will continue to alert the Amateur Radio community...so that nobody
else falls prey to KB9YTV

Tnx & Vy 73,
KA4NNN
Presley Travis
324 Yanceyville Road
Louisa, Virginia 23093

My ebay ID is presleytravis@musician.org
if you would care to check my feedback.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5114. Re: Icom AH-3/AH-4 compatible?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 17:43:36 UTC
From: "A. Domonkos" <capt-tripps@comcast.net>
Message-ID: <3C90E30C.FD371F09@comcast.net>
Source record: 146702

It appears the interface is the same. Thanks to all replies.

Andy N3LCW

JWalkerMI wrote:

> >I have an Icom 728 HF rig which can work with the AH-3 tuner. Is the AH-4
> interface the same?
>
> I have an Icom 725 interfaced with an AH-4 tuner. I assume the interface for
> the 728 is the same.
>
> Jack
> N8NSW

5115. best antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 17:58:44 UTC
From: aristelapapaya@aol.com
Message-ID: <20020314125844.12537.00000914@mb-fw.aol.com>
Source record: 146703

can anybody tell me what is the best antenna
I have m400 dave made amp .
and a ranger 6300 radio on freihtliner truck and stargun antenna
I want to replace my antenna
I want to get the best antenna can anybody tell me

5116. Re: Interesting Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 18:08:31 UTC
From: me@nowwhere.com
Message-ID: <3C90E71D.D34E4F6D@swbell.net>
Source record: 146704

i ordered a 3 element beam from fluidmotion
last week. it should arrive in 2 - 3 weeks. i will
keep the group aware of my progress/results.

larry
kd5foy

AC6V wrote:

> Fluidmotion Antennas -- Remote Adjustable Yagi -- covers SWL Too
> http://www.fluidmotion.ws/index.htm
> --
> Force 12 a 9 Foot Vertical 20-10M - A shorty
> http://force12inc.com/
> --
> GAP Super C Antenna - Came from outer space??
> --
> No pecuniary interest here -- just 3 unusual antennas
>
> --
> 73 From AC6V, Rod In Oceanside, CA
> I doubt, therefore I might be!
>
> AC6V Mega Ham Index at http://ac6v.com
> AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm

5117. Re: LOOPS square vs round and eggbeater too!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 18:31:45 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C90EC87.B1F9F724@icok.net>
Source record: 146705

JEEPMON,
A loop antenna becomes more efficient as the area inside
the loop becomes larger; circle, square, triangle. When you
just say a 'loop', in general it's understood to mean a full
wave length. If it's a 1/2 wave length, then it's usually
stated as a '1/2 wave loop' (1/2, 1/4, etc.).
Horizontal loops are usually omnidirectional, vertical
loops are usually bidirectional (depending on height). The
'pros + cons' of polarization are like most other antennas,
radiation in no particular direction, or in some particular
direction.
The input impedance of a full wave loop depends to a
large extent on the 'shape' and height above ground. The
more area inside the loop, the lower the input impedance.
As a very broad 'rule', it's input impedance is something
on the order of about 100 ohms. The less area inside the loop
the higher the iompedance, eg: a 1/2 wave folded dipole's
input is about 300 ohms. Feedline a full wave loop at a corner
gives it a 'vertical' polarization (sort of). Feeding it
on a side makes it horizontally polarized (sort of).
There are a number of ways to feed a loop with 50 ohm
coax. Any matching system will work (gamma, delta, etc),
or using a 'matching section' of 75 ohm coax, or ladder
line and a tuner/balun will work. Just depends on your
preference as to which one to use.
Most antennas will have a 'null', depending on it's
oreintation, etc. A vertiaclly mounted loop tends to
have a radiation pattern like a 1/2 wave dipole,
bidirectional (depending on height). The easiest way of
getting rid of the 'nulls' is to lower the antenna (not
the best way, but the easiest). I'm sure if you 'played'
with it long enough, changing the shape of the loop may
affect the 'nulls' (I don't think you'd get rid of them,
but you might get more of them).
The size of the conductor making up an antenna does
have an affect on it's performance, usually making it
broader banded to a point, and a few other things. Pipe
would work just fine. You'd have to experiment with the
lenght for tuning, but that shouldn't be a problem.
Laying an 'egg beater' on it's side will surely have
some affect, but I have no idea what (you rulled out my
best answer).
You might try a search using "full wave loop" and see
what you get. There has to be some information available.

good luck with your antenna project! Getting there is
half the fun, so enjoy the trip...
'Doc

5118. 2 Element HB9CV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 18:58:48 UTC
From: Steve <steve@nospamstevego.demon>, co.uk
Message-ID: <1016132556.20025.0.nnrp-10.c2de4585@news.demon.co.uk>
Source record: 146706
Cross-posted to: rec.radio.amateur.antenna,alt.radio.scanner.uk,alt.ham-radio.vhf-uhf

Can anyone recommend where I can either buy, in the UK, (or get plans to make) a 2 element HB9CV antenna for 430MHz or 70cms?

Thanks

5119. Re: The 'talkin'est antenna!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 19:02:10 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <SP6k8.74608$Nn6.3763581@e3500-atl2.usenetserver.com>
Source record: 146707

Yes, but it isn't the flimsy little stuff on *most* of them. Each finger is
1/4" wide and is extra
HD in order to withstand normal use. Now I won't say you *can't* break it,
but my exper-
ience has shown that, under normal use, it tends to last a long time. Plus,
if you break it within a year from purchase, I'll replace it free.

Jerry
K4KWH
Gus <w6gus@aol.com> wrote in message
news:rPRj8.13282$P4.1142327@newsread2.prod.itd.earthlink.net...
> Jerry, does your antenna use fingerstock. I've had nothing but trouble
with
> fingerstock and won't buy another one because they just fall apart in a
few
> months.
>
> 73, Gus
>
>
> "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
> news:Tptj8.48566$Yd.2779563@e3500-atl1.usenetserver.com...
> > If you are in the market for a screwdriver mobile antenna, then I invite
> > your attention to the
> > Carolina Cyclone shown on my website below. The difference in the
> Carolina
> > Cyclone and
> > some of the others is in materials, workmanship, and price. Often,
> increases
> > in signal strength
> > are achieved by increasing the size of the inductor, wire size, and
> spacing.
> > This is what I have done with the Carolina Cyclone. Cyclone I, for
> example,
> > is 2 1/2" dia compared to
> > only 2" for the DK3 clones and uses #14 wire spaced at 8 turns per inch
> for
> > a better form
> > factor. Materials are black Nylon, the same materials used for Nyloc
> bolts,
> > to handle high
> > power, and give rugged service for years and years. The result is 800
> watts
> > power handling

> > power (conservative) for Cyclone I and a full 1500 watts SSB for the
> Cyclone
> > II, which is
> > a full 3" diameter to give the same "Q" as the famous Texas Bugcatchers.
> > You will find that
> > you will be most successful with DX and pileups with the Carolina
Cyclone
> > series of antennas. AND the prices are well under those of most of the
> > competition. For more details, please visit www.qsl.net/k4kwh .
> >
> >
> >
> >
> >
>
>

5120. Re: 2 Element HB9CV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 19:33:42 UTC
From: Graham Tanner <graham.tanner1@virgin.net>
Message-ID: <3C90FB16.2F34A4E2@virgin.net>
Source record: 146708
Cross-posted to: rec.radio.amateur.antenna,alt.radio.scanner.uk,alt.ham-radio.vhf-uhf

Steve wrote:
>
> Can anyone recommend where I can either buy, in the UK, (or get plans to
> make) a 2 element HB9CV antenna for 430MHz or 70cms?
>
> Thanks

Steve,

I've got a feeling that I've got one lying around here somewhere doing
nothing. If I can find it you can have it.
--
==========
Graham Tanner: graham.tanner1@virgin.net (London, UK)
==========

5121. Re: best antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 19:43:52 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C90FD76.1B1DDE0@tampabay.rr.com>
Source record: 146711

i assume this is a 10 meter ham rig
i would look into the hamstick antennas or the hustler resinators
since its on a semi truck i think i would lean toward the hustler RM10S
and the MO3 to mount it on its about half the lenght of the MO1 which
would be way to tall for that truck
go to www.newtronics.com and check them out

Aristelapapaya wrote:

> can anybody tell me what is the best antenna
> I have m400 dave made amp .
> and a ranger 6300 radio on freihtliner truck and stargun antenna
> I want to replace my antenna
> I want to get the best antenna can anybody tell me

5122. DIAMOND ANTENNA X-200

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 19:48:15 UTC
From: Antonio Tort <antonitort@wanadoo.es>
Message-ID: <a6qunfdqr1@news.wanadoo.es>
Source record: 146710

HELLO,I NEED KNOW THE ESQUEMATIC INTERNAL ABOUT THE DIAMOND ANTENNA X-200,OR
X-300(HAVE SOME INTERNAL BALUN)??
73'
EA3 AHW

5123. Re: DOES ANYONJE HAVE THE WIRING FOR A " ERW-4C " Data cable for the pc PLEASE>?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 19:50:07 UTC
From: kevin <kevin@kick.dynip.com>
Message-ID: <Xns91D1CA0727F0Cpsxglobalnetcouk@62.253.162.103>
Source record: 146709

Allodoxaphobia <QSB@QRM-QRN.net> wrote in
news:slrna9064j.rin.QSB@animas.frontier.net:

> On Wed, 13 Mar 2002 23:27:34 GMT, kevin scribbled nothing.
>
> And , you thought you'd ask that in the
> "radio"-amateur"-"antenna" ng so that you would get *lots* of
> knowledeble answers, ehhh?

No mate can't expect that kinda answer from YOU thats for sure! lol
just thought i'd ask in here as a last resort.
You didnt have to read it or even reply to it "IDIOT".

5124. Cellular Booster question-- NOT A SPAM!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 20:43:08 UTC
From: Patton Echols <pechols@greshamlaw.com>
Message-ID: <3C910B5C.1BD1C268@greshamlaw.com>
Source record: 146712

We have all seen these ads about the cellular "booster" antennas. you know, the dumb little stickers that are supposed to go between the battery and cell phone. The sellers claim . . . well you know what they claim unless you lead a very sheltered life.

These ads annoy me because, based on my assumption that there is no science that supports the claims made by the seller, they trick people into believing in magic disguised as science. Unfortunately, when the users discover that the "science" does not work, they learn to distrust real science as well.

Now I know very little about radio or electronics. But, A friend suggested that someone on this group might be able to help. I would like to be able to explain to people that these things are nothing more than so much snake oil. I have looked for and been unable to locate any authoritative source to which I can point the interested.

So, any takers? Specifically, I'm looking for an explanation that will work for the lay person or (Preferred) a net accessible article by an "authority" that will be recognized as such by a lay person.

Thank you for reading this far, and in advance for any thoughts you may have.
--
Patton

5125. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 20:52:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C910D83.A11A5E15@eznec.com>
Source record: 146713

That's a pretty strong statement, and I disagree with it. My dipoles work fine without any connection to ground. The signals they radiate do reflect off the ground, which modifies the pattern, but this unavoidable situation isn't necessary to their operation in any way. There's a very large class of antennas tht, like a dipole, don't need a ground connection to function properly.

Roy Lewallen, W7EL

Val wrote:
>
> Let's clarify:
>
> NO antenna can work without a ground. Period.
> Not even in satellites (but, when one use the word "ground"
> in this context people tends to get very confused..).
> . . .

5126. Re: VLF/LORAN C antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 20:56:10 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <K78k8.9260$tP2.813832@bgtnsc05-news.ops.worldnet.att.net>
Source record: 146714

> >Jim Weir wrote:

> > **** WARNING *****
> >
> > Do NOT under any circumstances use Gary's designs for either GPS or Loran.
> > Everybody knows that he who has a Tait's is lost.

> Dick Carroll, W0EX, sed:
> OWWWW!! Put that man on Comedy Central!

Even Comedy Central has its standards. A horrible
pun like that belongs on a very grainy re-run
of the 'Rocky and Bullwinkle Show'

K7JEB

5127. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 21:49:53 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <3a029ug8q1kglqcjem03car3qs8q007tm3@4ax.com>
Source record: 146715

On Thu, 14 Mar 2002 12:29:23 +0000 (UTC), Francesco Messineo
<frank@ares.ccii.unipi.it> wrote:

>Richard Clark <kb7qhc@attbi.com> wrote:
>> On Wed, 13 Mar 2002 14:57:04 +0000 (UTC), Francesco Messineo
>> <frank@ares.ccii.unipi.it> wrote:
>
>> Hi Francesco,
>
>> This is not news. The last discussion was that Stefano would PROVIDE
>> a working model. It comes as no surprise that he could not. No doubt
>
>Just to clarify, Stefano assured us that he will provide the working
>EH. We just didn't find an agreement on how, where and when test
>Stefano's antenna; again the missing agreement is between the
>testers, not between us and Stefano. The test group itself is probably not
>enough motivated, since home made antennas didn't show the claimed
>behaviour. As full-time employee we often have spare time for our
>hobby only during the weekend, so if something isn't enough
>interesting probably we take too many weekends to get it done.
>However I'm not saying that we aren't going to test the EH
>made by Stefano, I didn't give up, not yet at least. I'm waiting
>for spare time to be really "spare", and probably other "testers"
>are in the same condition.
>
>73
>Francesco IZ5DWF

Hi Francesco,

You are being more than fair. However, you make it quite obvious
that this motivation is lost to the poor performance of the EH. As
such, testing to that point merely confirms the status of the corpse:
still dead.

73's
Richard Clark, KB7QHC

5128. Re: best antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 22:26:17 UTC
From: aristelapapaya@aol.com
Message-ID: <20020314172617.12557.00000752@mb-fw.aol.com>
Source record: 146716

thanks for your reply. I will look into it.

5129. Re: Cellular Booster question-- NOT A SPAM!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 22:32:52 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <oy9k8.19110$vH1.8377@nwrddc01.gnilink.net>
Source record: 146717

I almost hate to admit it, because I always thought they were "snake oil" too. But, a while back I was given one as a promotion, and thought I'd try it just for "grins"

I live in a remote area of the Mohave Desert, and my cellular coverage is very marginal at my QTH. Before using this "magic antenna" I had no signal strength readings on my cell phone when inside the house. I had to go outside and down the street about 500 feet to pick up 1 bar on the signal strength meter. With at least 1 bar, I can make and receive calls.

After I put the "magic antenna" on my cell phone (an Audiovox CDM-135), I found that I was getting 1-2 bars signal strength readings from inside my house, and I can now make and receive calls from inside my house. I know it shouldn't work, and I can't explain why it makes any difference, but it does.

It doesn't do what the ad claims - give you full strength reception where none existed before - but if you are on the very edge of a coverage area, it might help somewhat (it did for me).

73 de W6DKN

"Patton Echols" <pechols@greshamlaw.com> wrote in message news:3C910B5C.1BD1C268@greshamlaw.com...
> We have all seen these ads about the cellular "booster" antennas. you
> know, the dumb little stickers that are supposed to go between the
> battery and cell phone. The sellers claim . . . well you know what they
> claim unless you lead a very sheltered life.
>
> These ads annoy me because, based on my assumption that there is no
> science that supports the claims made by the seller, they trick people
> into believing in magic disguised as science. Unfortunately, when the
> users discover that the "science" does not work, they learn to distrust
> real science as well.
>
> Now I know very little about radio or electronics. But, A friend
> suggested that someone on this group might be able to help. I would
> like to be able to explain to people that these things are nothing more
> than so much snake oil. I have looked for and been unable to locate any
> authoritative source to which I can point the interested.
>
> So, any takers? Specifically, I'm looking for an explanation that will
> work for the lay person or (Preferred) a net accessible article by an
> "authority" that will be recognized as such by a lay person.
>
> Thank you for reading this far, and in advance for any thoughts you may

> have.
> --
> Patton
> ---

5130. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 22:53:37 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203141453.3bbfad2e@posting.google.com>
Source record: 146718

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C9022A5.A2AB4C7C@IEEE.org>...
> Mark Keith wrote:
> > You need about 30
> > radials to equal the antenna I used with only 4 radials.
>
> That's 15 times as much copper as a dipole. :-)

True, but thats the price to pay for being low. My version with 4
radials was only about twice the wire of a dipole, but good for 2-4 S
units better signal to long haul stations both receive and transmit.
Pretty good payoff I think. My price to pay was having it at 36 ft.
But it was easy as my radiator is light and self supporting. MK

5131. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 23:21:19 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203141521.3a4beb8e@posting.google.com>
Source record: 146619

mike.luther@ziplog.com wrote in message news:<u90d5upca8vm96@corp.supernews.com>...
> In <3C9022A5.A2AB4C7C@IEEE.org>, CAM <Cecil.A.Moore@IEEE.org> writes:
>
> But ..
>
> >Mark Keith wrote:
>
> >> You need about 30
> >> radials to equal the antenna I used with only 4 radials.
>
> >That's 15 times as much copper as a dipole. :-)
>
> >cheers, CAM http://www.qsl.net/w5dxp
>
> Slightly cheaper on 80 meters, ususally, than, say, four 180 foot towers for
> what is really needed for some paths. Or even two such towers if only
> two general directions are really important.
>
> Of course, there is also the issue of having only one such tower if you
> want to use it for the apex of a couple of decent inverted vee dipoles
> on 80, but, in general .. that still costs more than the radials, no?
>
> You can do a BEAUTIFUL job on 80 with dipoles, W8JI is a wonderful
> example of that as well as a number of other very carefully thought out
> and well financed horizontal low-band antenna efforts which are designed
> for serious long-haul, low-angle requirements.

You can work dx thats for sure. I worked dx on 80m with a 35 ft high
dipole.
But I'd rather have the good vertical any day if I were really
serious. I don't work much dx on 80m. Thats my "regional" yik yak
band. I also remember W8JI talking about putting up high dipoles for
160m, and later considering them a waste of money compared to his
verticals. I think he also got the best reports on the verticals
overall. Haven't seen or heard him around much lately...He'd have to
comment on his 80m antennas...I'm more familiar with his 160m stuff.
>
> For the average person who wants long-haul other-side-of-the-world
> performance, those 30 radials are likely far more effective than any
> corresponding height horizontal array on 80. At least in most average
> medium ground conductivity locations that will be likely true.

The way I look at it is you can't grill a steak with a bic lighter. If
you want "very good" performance out of verticals, you have to have
the radials or the height to avoid so many of them. There is no way

around this unless you live on the beach. This has been shown to be true time and time again. Look at the radials under Seviks <sp> short vertical he made that's in the handbooks. I doubt he would have wasted all that time and wire if it wasn't needed. Sure, a few less radials will work, but expect performance to be mediocre. Even with a full 1/4 wave antenna. I ran the same 32 ft vertical on the ground with at least 24 radials, maybe more, and the performance never even came close to the one up at 36 ft. You would think you were comparing a bugcatcher to a thin hamstick, it was that much difference. And like Cecil, the one on the ground rarely beat the dipole at 36 ft. The GP at 36 ft never once lost to the dipole at anything over 1500 miles. I can't think of a single time. Only on shorter hops up into the midwest at 800-1200, etc miles were they close, or the dipole winning. Of course, the dipole was usually the best in the daytime to high angle stuff. I'm sure the far field ground conditions will have an effect also, but if I were in a location that were marginal, I would go overkill on the radials to help make up for it. Instead of the four I used at 1/4 wave up, I might use eight. When I was working VK, and pacific regularly, I went up against all kinds of antennas 3 times a week. We had quite a group. The only ones that could beat me to VK were using bobtail curtains or yagis. The dipoles and loops lost almost every time. Maybe every time, but I'll give them a benefit of a doubt and say it may be possible they beat me once...:) I don't remember it though.. MK

5132. Re: 2 Element HB9CV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 23:21:36 UTC
From: marula31@hootmail.com
Message-ID: <3c911bb2.1359181@news.freeserve.net>
Source record: 146620
Cross-posted to: rec.radio.amateur.antenna,alt.radio.scanner.uk,alt.ham-radio.vhf-uhf

On Thu, 14 Mar 2002 18:58:48 -0000, "Steve"
<steve@nospamstevego.demon,co.uk> wrote:

>Can anyone recommend where I can either buy, in the UK, (or get plans to
>make) a 2 element HB9CV antenna for 430MHz or 70cms?

Moonraker sell them.

--
J+

5133. Looking for variable cap

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-14 23:36:04 UTC
From: MD <ve3tmt@rac.ca>
Message-ID: <Etak8.20694$Yg2.2475817@news20.bellglobal.com>
Source record: 146621

Roughly 5-500pf at 5KV for small HF loop project. Please reply direct, thank you.

Max ve3tmt@rac.ca

5134. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 00:06:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C913B17.A9B86591@eznec.com>
Source record: 146622

I'm sure what Greg is asking, and the question that needs to be asked, is whether you compared the two antennas with EZNEC under the same conditions. The way to do this is to plot the pattern from one antenna and save the plot. Then plot the pattern from the other antenna, and superimpose the plot from the first antenna on it. This will cause them to be displayed at the same scale.

By default, EZNEC scales the pattern to put the highest field strength value, whatever it is, at the outside ring of the plot. (You can change this if you want by specifying a fixed outer ring value via the Plot menu 2D Outer Ring dB selection in the main window. This choice is saved with the description.) So if you retain the default behavior, one antenna can look better than another because of its pattern shape, but can in fact be inferior due to lower overall field strength. This is often the case when a vertical is being compared to a dipole.

In your original posting you tell how you've chosen one configuration over another on the basis of takeoff angle. As I've said several times before, FORGET ABOUT THE TAKEOFF ANGLE! Are you interested in the field strength at an elevation angle of 18 degrees? Then plot the dipole's pattern and look at the field strength in dBi at 18 degrees elevation. Then plot the vertical's pattern and look at its field strength in dBi at 18 degrees. Which is stronger? That's what counts. Likewise, judge your various elevated radial configurations using the same criteria -- not by what the takeoff angle is.

The first versions of ELNEC didn't report takeoff angle, because I felt that it was generally useless information, and was likely to mislead people. I was right. But customers asked for it. So I gave them what they want, not what they need.

If you find that the difference between a dipole and vertical is very different from what EZNEC predicts, it's possible that your estimate of effective ground conductivity is off. Remember, EZNEC assumes that the ground is homogeneous, so what it needs is a more-or-less average of the ground characteristics down to several skin depths. Although the estimate won't make much difference for a horizontally polarized antenna except at high elevation angles (it IS important for NVIS using horizontal antennas), it makes a large difference for vertically polarized waves. Note that the radiation off the end of a horizontal dipole or inverted vee is vertically polarized, so the ground characteristics can make a major difference to the pattern off the ends of these types of antennas.

Roy Lewallen, W7EL

CAM wrote:
>
> Greg Knapp wrote:
> >
> > Did you compare the EZNEC model of your 40 meter one wavelength dipole with
> > the EZNEC model of your vertical? Are the actual results you are
> > experiencing vary from what you expected based on the EZNEC model, or do
> > your experiences confirm the EZNEC model? If they vary from the model, by
> > how much do they vary, and what can be learned from that--not to trust the
> > model? Or that the model is only a rough approximation? BTW, how high is
> > the 40 meter dipole?
>
> The dipole is 130 ft long up at 40 ft. On 40m, it is one wavelength long.
> The vertical is 33 ft long with eight 33 ft radials sloping down from the
> 20 ft high feedpoint. I put up the vertical to fill in the gaps predicted
> by EZNEC for the one wavelength dipole (off the ends). But that didn't
> happen. The noise level using the vertical is two S-units higher than
> the dipole. After months of comparing the two antennas, I have heard
> two or three signals that were stronger on the vertical but they were
> copyable on the dipole because of the lower noise level. On the average,
> the signals using the dipole are two S-units higher than the vertical.
> The vertical doesn't add anything to my capabilities.
>
> I don't know why the one wavelength dipole performs so well off the
> Northwest end. The fact that the land slopes downward toward the
> Northwest from my QTH may have something to do with it. Ground
> conductivity around here is supposed to be 4 millisiemens per
> meter which is pretty low.
>
> To answer your question: Either the one wavelength dipole is performing
> better than EZNEC predicts or the vertical is performing worse than
> EZNEC predicts (or both).
> --
> cheers, CAM http://www.qsl.net/w5dxp

5135. Re: Cellular Booster question-- NOT A SPAM!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 00:10:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C913BE3.C3524B1C@eznec.com>
Source record: 146623

This is fascinating. While sitting or standing in the same spot, can you take out the gadget and see that the signal has dropped back down, put it in and see that it's gone up, and so forth?

Roy Lewallen, W7EL

W6DKN wrote:
>
> I almost hate to admit it, because I always thought they were "snake oil"
> too. But, a while back I was given one as a promotion, and thought I'd try
> it just for "grins"
>
> I live in a remote area of the Mohave Desert, and my cellular coverage is
> very marginal at my QTH. Before using this "magic antenna" I had no signal
> strength readings on my cell phone when inside the house. I had to go
> outside and down the street about 500 feet to pick up 1 bar on the signal
> strength meter. With at least 1 bar, I can make and receive calls.
>
> After I put the "magic antenna" on my cell phone (an Audiovox CDM-135), I
> found that I was getting 1-2 bars signal strength readings from inside my
> house, and I can now make and receive calls from inside my house. I know it
> shouldn't work, and I can't explain why it makes any difference, but it
> does.
>
> It doesn't do what the ad claims - give you full strength reception where
> none existed before - but if you are on the very edge of a coverage area,
> it might help somewhat (it did for me).
>
> 73 de W6DKN

5136. Re: Cellular Booster question-- NOT A SPAM!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 01:42:11 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c915196_1@news.iglou.com>
Source record: 146624

A friend of mine bought one for his Motorola Startek. He reported considerable improvement in what had been dead zones. I've ordered one for mine.

--
Steve Ellington N4LQ.
"W6DKN" <w6dkn@qsl.net> wrote in message news:oy9k8.19110$vH1.8377@nwrddc01.gnilink.net...
>
> I almost hate to admit it, because I always thought they were "snake oil"
> too. But, a while back I was given one as a promotion, and thought I'd try
> it just for "grins"
>
> I live in a remote area of the Mohave Desert, and my cellular coverage is
> very marginal at my QTH. Before using this "magic antenna" I had no signal
> strength readings on my cell phone when inside the house. I had to go
> outside and down the street about 500 feet to pick up 1 bar on the signal
> strength meter. With at least 1 bar, I can make and receive calls.
>
> After I put the "magic antenna" on my cell phone (an Audiovox CDM-135), I
> found that I was getting 1-2 bars signal strength readings from inside my
> house, and I can now make and receive calls from inside my house. I know
it
> shouldn't work, and I can't explain why it makes any difference, but it
> does.
>
> It doesn't do what the ad claims - give you full strength reception where
> none existed before - but if you are on the very edge of a coverage area,
> it might help somewhat (it did for me).
>
> 73 de W6DKN
>
>
> "Patton Echols" <pechols@greshamlaw.com> wrote in message
> news:3C910B5C.1BD1C268@greshamlaw.com...
> > We have all seen these ads about the cellular "booster" antennas. you
> > know, the dumb little stickers that are supposed to go between the
> > battery and cell phone. The sellers claim . . . well you know what they
> > claim unless you lead a very sheltered life.
> >
> > These ads annoy me because, based on my assumption that there is no
> > science that supports the claims made by the seller, they trick people
> > into believing in magic disguised as science. Unfortunately, when the
> > users discover that the "science" does not work, they learn to distrust

> > real science as well.
> >
> > Now I know very little about radio or electronics. But, A friend
> > suggested that someone on this group might be able to help. I would
> > like to be able to explain to people that these things are nothing more
> > than so much snake oil. I have looked for and been unable to locate any
> > authoritative source to which I can point the interested.
> >
> > So, any takers? Specifically, I'm looking for an explanation that will
> > work for the lay person or (Preferred) a net accessible article by an
> > "authority" that will be recognized as such by a lay person.
> >
> > Thank you for reading this far, and in advance for any thoughts you may
> > have.
> > --
> > Patton
> > ---
>

5137. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 01:57:24 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <5yck8.1297$R85.301509@news20.bellglobal.com>
Source record: 146625

> > NO antenna can work without a ground. Period.

I guess we should grant Val the 'One Humorous Truth' in his statement...

Without a 'ground reference' (as in a handy-dandy Small Blue Planet for example), how do you know if your vertical is really vertical ? Ha ha.

5138. INVERTED-L COMMENTS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 02:28:26 UTC
From: ardujenski@aol.com
Message-ID: <20020314212826.09235.00001427@mb-cs.aol.com>
Source record: 146626

INVERTED-L: I did want to pass along in trying to maximize a portable antenna, after sevral months of basic calcs and operational tests found the INVERTED-L to be an excellent compromise antenna. With the BLACK WIDOW 20ft fishing pole (20ft by 20ft wire) I am able to work 80-10m with only a set of 12 --15 ft radilals. With the DK9SQ (33ft telescoping mast) and same radials am able to work 160 thru 10m. I have recently discovered that in playing with lengths of vertical and horizontal lengths to get all band impedance under 800 ohms (for auto tuners) the W3EDP 87ft wire run up a DK9SQ and then out horizontal will give low impedances and allow you to reduce the radial/counterpoise to a single 20ft wire and a ground stake.

The advantage I found is that it has two basic lobe patterns (high and low) associated with the horizontal and vertical portions. For close in operations the high lobe is dominent whree for more distant stations the lower lobe becomes dominant. This is like having an automatic switch between two antennas having two lobe patterns working for you.

This will at times make the antenna a little bit noisier in that it is receiving both low and high angle noise sources but have a second antenna (vertical) for comparison and sometimes a quieter reception.

The INVERTED-L eliminated the need for lossy loading coils and gives me a a good portable and homestation antenna. I do work from 100 watts down to just 1 watt operations and SSB and CW. During the last 160m contest I was able to work 28 states and Japan with about 50 watts. Feedline is 300 ohm twin lead.

The programs i used were from Reg G4FGQ. I have had a few calculations run for me on various arrangements on EZNEC and found the values to be very close. Thes programs are at :

http://www.btinternet.com/~g4fgq.regp/page3.html#S301"

Just thought I woudl share with the group and see if others have had similar experiences with the INVERTED-L

Alan KB7MBI in Woodinville, WA

5139. Re: INVERTED-L COMMENTS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 02:58:08 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <a6ro4m$7nv$1@slb5.atl.mindspring.net>
Source record: 146627

Yes, the inverted L works and works well!

There are of course much better antennas, but for the money and backyard space consumed, it simply can't be beat!

-Peter K1PO

"ARDUJENSKI" <ardujenski@aol.com> wrote in message news:20020314212826.09235.00001427@mb-cs.aol.com...
> INVERTED-L: I did want to pass along in trying to maximize a portable antenna,
> after sevral months of basic calcs and operational tests found the INVERTED-L
> to be an excellent compromise antenna. With the BLACK WIDOW 20ft fishing pole
> (20ft by 20ft wire) I am able to work 80-10m with only a set of 12 --15 ft
> radilals. With the DK9SQ (33ft telescoping mast) and same radials am able to
> work 160 thru 10m. I have recently discovered that in playing with lengths of
> vertical and horizontal lengths to get all band impedance under 800 ohms (for
> auto tuners) the W3EDP 87ft wire run up a DK9SQ and then out horizontal will
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> 20ft wire and a ground stake.
>
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> associated with the horizontal and vertical portions. For close in operations
> the high lobe is dominent whree for more distant stations the lower lobe
> becomes dominant. This is like having an automatic switch between two antennas
> having two lobe patterns working for you.
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> This will at times make the antenna a little bit noisier in that it is
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> watt operations and SSB and CW. During the last 160m contest I was able to
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> 28 states and Japan with about 50 watts. Feedline is 300 ohm twin lead.
>
> The programs i used were from Reg G4FGQ. I have had a few calculations run
for
> me on various arrangements on EZNEC and found the values to be very close.
Thes
> programs are at :
>
> http://www.btinternet.com/~g4fgq.regp/page3.html#S301"
>
> Just thought I woudl share with the group and see if others have had
similar
> experiences with the INVERTED-L
>
> Alan KB7MBI in Woodinville, WA
>

5140. Re: LOOPS square vs round and eggbeater too!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 03:39:46 UTC
From: carkenord@juno.com
Message-ID: <4346b55e.0203141939.563f8f6e@posting.google.com>
Source record: 146628

> Which is better for 6m 2m 440MHz?
> A square loop or a round loop?
> Is a square loop or a round loop just a dipole 'bent'?
> What are the pros and cons of a horizontal vs. a vertical loop?
> For a loop should the TOTAL length be 1/2 or a full wavelength?

Mr. Cebik, W4RNL...has a good website. I suggest going there and reading thru his various "loop" topics....I am sure you will find some answers.

http://www.cebik.com/

And good luck to you.....loops are fun.

Lee Carkenord KA0FPJ

5141. Re: Distance from feedpoint to choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 04:11:42 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c917842_3@news1.prserv.net>
Source record: 146629

The purpose of the choke is to decouple the feedline from the antenna so the feedline doesn't re-radiate. Usually radiation from the outside of the shield is considered undesirable. If you want undefined radiation from the feedline, then that is what to expect. Depends on your goal. Maybe you want a weaker signal in more directions than a pure dipole will give you. Remember all the signal radiated by the coax is subtracted from the dipole signal. Or added sometimes if the phase is favorable, but Murphy usually makes sure that is not the case.

--
Crazy George
Remove NO and SPAM from return address
Ken <cprstn54zz@att.net> wrote in message
news:3c90bf39.6112031@news-server.optonline.net...
> On Thu, 14 Mar 2002 08:28:57 -0600, "Crazy George"
> <munschNO@attglobal.net.SPAM> wrote:
>
> >Well, It will act as an efficient quarter wave antenna on 10 meters, and
> >will have a significant aperture on 12M, 15M, 17M, and 20M, providing the
> >potential for radiation on all these bands from the feedline. Besides
that,
> >it won't make much difference on 30, 40 or 75 meters.
>
> Are you referring to the eight ft of coax between the feed point and
> the choke? If so, is it bad to have a little radiation there? Will
> it reduce the energy available to the dipole so much that overall
> propagation will be reduced?
>
> Will the possibility of resonance at 10M in that eight feet induce RF
> current in the outside of the sheathing in the rest of the feed line
> on the other side of the choke? It is that current on the ouside of
> the sheathing that the choke is supposed to reduce.
>
> I neglected to mention that the eight feet of coax will be at around
> 25 degrees off vertical. Also, it will be around 30 degrees off
> perpendicular to the vertical plane of the dipole. This means that
> some RF from the dipole would be induced in it anyway -- even with the
> choke right at the feedpoint.
>
> Ken KC2JDY
>
>
> Ken
> (to reply via email

```
> remove "zz" from address)
```

5142. Re: Cellular Booster question-- NOT A SPAM!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 04:40:01 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <BWek8.5900$Zh1.1319@nwrddc04.gnilink.net>
Source record: 146630

Yep, that was the first thing I tried, as everything I have learned about antenna told me it couldn't work and was probably just a coincidence. So I stood in the exact same spot in the house where it was reading 1-2 bars on the signal strength meter with the "snake oil antenna". Without moving, I took the battery off, and peeled the "antenna" off. Stuck the battery back on and powered it back up. No signal strength indicated and I couldn't make a call. Stuck the "antenna" back on, and again had 1-2 bars signal strength, and could make and receive calls. Go figure... :>)

I tried it on my brother's Samsung cell phone at my QTH. It didn't work before or after on his phone, but he was using a different phone as well as cell carrier, and generally cannot make calls in my area, so this was not surprising. Like I said earlier, it won't produce a signal where none is present (like they say in their ad), but in marginal/fringe reception areas it seems to help a bit.

(I just hope I don't end up having nightmares about Fractenna's now ... :>)

73 de W6DKN

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C913BE3.C3524B1C@eznec.com...
> This is fascinating. While sitting or standing in the same spot, can you
> take out the gadget and see that the signal has dropped back down, put
> it in and see that it's gone up, and so forth?
>
> Roy Lewallen, W7EL
>
> W6DKN wrote:
> >
> > I almost hate to admit it, because I always thought they were "snake
oil"
> > too. But, a while back I was given one as a promotion, and thought I'd
try
> > it just for "grins"
> >
> > I live in a remote area of the Mohave Desert, and my cellular coverage
is
> > very marginal at my QTH. Before using this "magic antenna" I had no
signal
> > strength readings on my cell phone when inside the house. I had to go
> > outside and down the street about 500 feet to pick up 1 bar on the
signal
> > strength meter. With at least 1 bar, I can make and receive calls.
> >

> > After I put the "magic antenna" on my cell phone (an Audiovox CDM-135),
I
> > found that I was getting 1-2 bars signal strength readings from inside
my
> > house, and I can now make and receive calls from inside my house. I
know it
> > shouldn't work, and I can't explain why it makes any difference, but it
> > does.
> >
> > It doesn't do what the ad claims - give you full strength reception
where
> > none existed before - but if you are on the very edge of a coverage
area,
> > it might help somewhat (it did for me).
> >
> > 73 de W6DKN

5143. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 04:45:03 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C917C4F.5C76F23F@IEEE.org>
Source record: 146631

Roy Lewallen wrote:
> I'm sure what Greg is asking, and the question that needs to be asked,
> is whether you compared the two antennas with EZNEC under the same
> conditions. The way to do this is to plot the pattern from one antenna
> and save the plot. Then plot the pattern from the other antenna, and
> superimpose the plot from the first antenna on it. This will cause them
> to be displayed at the same scale.

Yep, I did that for broadside to the dipole and off the end of the dipole.
The dipole beats the vertical broadside except for an insignificant
sliver. The vertical should beat the dipole by at least an S-unit off
the ends of the dipole for any arrival angle below 50 degrees but, in
practice, it doesn't seem to. I will post the graphs to my web page.

> In your original posting you tell how you've chosen one configuration
> over another on the basis of takeoff angle. As I've said several times
> before, FORGET ABOUT THE TAKEOFF ANGLE! Are you interested in the field
> strength at an elevation angle of 18 degrees? Then plot the dipole's
> pattern and look at the field strength in dBi at 18 degrees elevation.

Isn't an elevation angle the angle at which the RF takes off? Aren't
there an infinite number of takeoff angles each associated with a
certain gain? Couldn't one have a chart of gain Vs take-off-angle for
take off angles of 5, 10, 15, 20, 25, ... degrees?
--
cheers, CAM http://www.qsl.net/w5dxp

5144. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 05:38:30 UTC
From: Sam.Yang@csiro.au
Message-ID: <4b8ff9bc.0203142138.12519274@posting.google.com>
Source record: 146632

How about putting up a vertical on a tin roof? I have an extension
which has a tin roof of about 5m by 5m.

Regards,

Sam Yang
Sam.Yang@csiro.au

Bob Miller <bamiller@texas.net> wrote in message
news:<ErSQPPEJzrdfk=o9u7PwWKCnpW58@4ax.com>...
> Val <nishikeit@zilch.com> wrote:
>
> >Let's clarify:
>
> >nothing like a free lunch. You have to pay the prize for putting up
> >an antenna with space restrictions, wether it is on height or counter-
> >poids.
>
> Is a counterpoid the same as a counterpoise? I haven't seen that word before.
>
> Bob
> k5qwg

5145. Re: best antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 06:08:03 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <7dgk8.41207$q2.5459@sccrnsc01>
Source record: 146633

This radio is sold as a 10 meter rig but is easily (and most frequently)
modified for 11 meters. AM and FM only, no SSB. Comes stock with roger beep
and echo. Davemade amps are made for 11 meters. The man needs a dummy load.
not an antenna.
"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:3C90FD76.1B1DDE0@tampabay.rr.com...
> i assume this is a 10 meter ham rig
> i would look into the hamstick antennas or the hustler resinators
> since its on a semi truck i think i would lean toward the hustler RM10S
> and the MO3 to mount it on its about half the lenght of the MO1 which
> would be way to tall for that truck
> go to www.newtronics.com and check them out
>
> Aristelapapaya wrote:
>
> > can anybody tell me what is the best antenna
> > I have m400 dave made amp .
> > and a ranger 6300 radio on freihtliner truck and stargun antenna
> > I want to replace my antenna
> > I want to get the best antenna can anybody tell me
>

5146. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 06:18:54 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C91924E.43EE2354@IEEE.org>
Source record: 146634

CAM wrote:
> I will post the graphs to my web page.

Here's what EZNEC sez about my 130ft dipole Vs my 33ft vertical
with 8 elevated radials. Even off the ends, the dipole beats
the vertical for waves arriving at 45 degrees or higher.

http://www.qsl.net/w5dxp/dipvsver.htm
--
cheers, CAM http://www.qsl.net/w5dxp

5147. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 10:20:12 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a6shss$f04$2@serra.unipi.it>
Source record: 146635

VE9SRB <srbest@att.net> wrote:

> "Francesco Messineo" <frank@ares.ccii.unipi.it> wrote in message
> news:a6q5km$2lh$2@serra.unipi.it...

>> What's going wrong in this testing project (probably) is that some of
> these
>> persons already built EH prototypes and found nothing good with them.

> What's wrong with this? A negative test result is just as valid as a
> positive test result if the tests are done correctly.

Well, what's wrong with this is that the non working EH is home-made
by one of us, there's no guarantie that it's made in the "right way".
I think it's made according to the docs, probably someone else might
think it's not well done.
However the one who built this home made EH lost somehow part of the
interest in working for a more accurate test on a EH made by its
inventors. Again, I'm not saying that we won't try more tests,
I'm saying that these tests aren't our life's main goal.

73
Francesco IZ5DWF

5148. Re: Mounting Outbacker Perth

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 11:20:25 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3C91D8F9.DBBBF41A@bloomer.net>
Source record: 146636

Yes, I can imagine! Some of those magnet arrays look like you could
hoist the truck up to rotate all four tires at once ;)

Scott
N0EDV

Bubba wrote:
>
> I have mine mounted/screwed on a large 3 magnet mount and it works just fine
> on my Dodge Dakota.
> The only problem I have it is difficult some times to get the magnet mount
> off of my truck. It really holds well.
>
> "Scott" <acepilot@bloomer.net> wrote in message
> news:3C90862A.53E7F96B@bloomer.net...
> > Oops, that was 6M, not 60M ;)
> >
> >
> > Scott wrote:
> > >
> > > Now I don't know why you would mount it in a garbage can as that would
> > > tend to shield the RF and screw up the wonderful DX properties of the
> > > antenna. I have mine mounted onto the crossmember of my aluminum ladder
> > > rack on an Astro van and I work Europe, Africa, Japan, etc. with ease
> > > with only 100 Watts. The Perth (Plus) has even given my Alaska on 60M
> > > with 50 Watts. If you dont mind holes, you might mount it on one of the
> > > siderails of the box near the rear to keep it as far from the cab as
> > > possible. I can send you a picture of my Astro setup if you wish. I
> > > think the best is to keep it as high and in the clear as possible. If
> > > you have a topper, you could add some aluminum ladder racks, one on the
> > > cab and one on the topper. Put the antenna on the one on the cab and
> > > drill a small hole in the roof to attach the ground wire directly to the
> > > top of the cab with a 6-32 or 8-32 machine screw/washer/lockwasher/nut.
> > > Be sure to mount it as far to one side or the other so you can reach it
> > > to unscrew it to change bands!
> > >
> > > Scott
> > > N0EDV
> > >
> > > CAM wrote:
> > > >
> > > > David Hawkins wrote:
> > > > >
> > > > > I'm going to be installing my Perth outbacker mobile antenna to my
> 98 Ford

> > > > > Ranger truck. I have two options that seem best to me. Mounting
> it to my
> > > > > rear bumper near the corner. Or, mounting it to my trailer hitch
> receiver,
> > > > > by removing the ball. Making an adaptor plate and mounting the OB-SB
> perth
> > > > > mount in place of the ball.
> > > > >
> > > > > Any comments or suggestions to what would be the best option to
> mount this
> > > > > antenna and OB-SB mount to my truck. Thanks in advance.
> > > >
> > > > Personally, I would mount a Perth inside my garbage can. :-) What I
> did for
> > > > my screwdriver is to mount some 5/8" threaded stock into the trailer
> hitch
> > > > hole and fasten the antenna mount to that threaded rod.
> > > > --
> > > > cheers, CAM http://www.qsl.net/w5dxp
> > >
> > > --
> > > Scott
> > > http://corbenflyer.tripod.com/
> > > Building RV-4
> > > Gotta Fly or Gonna Die!
> >
> > --
> > Scott
> > http://corbenflyer.tripod.com/
> > Building RV-4
> > Gotta Fly or Gonna Die!

--
Scott
http://corbenflyer.tripod.com/
Building RV-4
Gotta Fly or Gonna Die!

5149. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 12:22:19 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a6sp2rta1@newsserver.cilea.it>
Source record: 146637
Cross-posted to: rec.radio.amateur.antenna,it.hobby.radioamatori

> Well, what's wrong with this is that the non working EH is home-made
> by one of us, there's no guarantie that it's made in the "right way".
> I think it's made according to the docs, probably someone else might
> think it's not well done.

Since I started this thread, please let me summarize my position on this
matter:

1) I don't understand the theory behind the EH antenna; the most possible
reason is that I am too stupid, but this is really not relevant here;
2) since I don't understant the theory, I would like to see the results of
PROPER measurements, before trying to spend some (or a lot of) time to
understand the theory;
3) Ted Hart was carrying out measurements under the supervision of
professional consultants; in principle, I would trust this approach;
4) the first test went wrong, and the blame was put on the "network"; this
was happening in October 2001.
5) early in January Stefano told us that some "amazing results" were going
to be published soon: we are now in mid March and we have heard nothing yet;
6) IF the EH antenna is able to work on 160 metres (and that's what we are
told), it MUST work on 1500 kHz as well.
- NOW:
I am NOT saying that the EH antenna is NOT working; I am saying that my
interest for this matter will "resuscitate" ONLY when I will see posted on
Ted Hart's Web site the results of the properly-made tests above, showing -
without any doubt - a behaviour that we cannot explain with the theories we
have at hand now.
A good contribution could come from Ted or Stefano, telling us WHEN those
"amazing" test results will be publised.
Till then, the EH antenna will be (for me) just another short dipole, and
all other bold statements will be just "noise". Period. And I don't think I
have been unfair with the EH antenna people.
(But, naturally, my opinion is only my opinion...)

73s,

Michele IZ2EAS

5150. Re: Fraud Alert...KB9YTV bad trader

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 12:27:08 UTC
From: Presley Travis <presleytravis@nexet.net>
Message-ID: <3C91E89C.E6696E0B@nexet.net>
Source record: 146638

update...

This is getting interesting, but not very...
Received an email from KB9YTV stating his bank
has an copy of an money order cashed by me that
he will soon have in his possession.
Totally false...

Regards,
KA4NNN
Presley Travis

Presley Travis wrote:

> On January 28th I agreed to purchase an Alinco DR-M06 , 6 meter
> tranceiver
> from KB9YTV, Ian Ben Steimle, 1003 LIncoln St, Greebay, Wisconsin 54303.
>
> I sent an Postal Money order Priority mail on Tuesday, January 29th
> 2002.
>
> I received radio on Friday February 8th...not working
>
> Februay 9th I notified Mr. Steimle and he agreed to refund the $185.00
>
> February 11th I returned radio and he received it February 13th,
> promising
> overnight refund of $185.00
>
> Several lies later we are without the refund a full month has passed and
>
> emails have ceased from KB9YTV.
>
> I have contacted the FBI Internet Fraud division and the Postal
> Inspector...
> and will continue to alert the Amateur Radio community...so that nobody
> else falls prey to KB9YTV
>
> Tnx & Vy 73,
> KA4NNN
> Presley Travis
> 324 Yanceyville Road
> Louisa, Virginia 23093
>
> My ebay ID is presleytravis@musician.org

> if you would care to check my feedback.
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5151. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 13:47:51 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C91FB87.3FFB4926@crosslink.net>
Source record: 146639

Sam Yang wrote:
>
> How about putting up a vertical on a tin roof? I have an extension
> which has a tin roof of about 5m by 5m.
>

I've been thinking the same thing. Since the 3-meter antenna on the roof of my truck works FB a 20 meter (or less) 1/4 wave should work equally well on your metal roof provided all the sections are electrically bonded. Try it and let us all know how it does. I'm going to cover my whole house with tin next fall then reinstall the Butternut and see how it works.
73, KA3DWW

5152. Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 15:28:23 UTC
From: Steve Crain <jscrain@tulsa.quik.com>
Message-ID: <rqok8.105$sS6.442@newsfeed.intelenet.net>
Source record: 146640

I'm putting up an SWL antenna on the roof of a ten story office building.
The coax feed to the receiver will be 150' long. I'm concerned about
electrical interference the feed line may pick up. Eventually I will be
transmitting from this location (HF only). What coax type would you use?
Thanks for imput.

Steve Crain
jscrain@easytel.com

5153. Re: 800mhz listening antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 15:55:33 UTC
From: AB2HR <ab2hr@arrl.net>
Message-ID: <pb049u4kbldofhhf8p9innp18kg7v0jmk0@4ax.com>
Source record: 146641

On 14 Mar 2002 16:16:30 GMT, vhfradiobuff@aol.comspamsux
(VHFRadioBuff) wrote:

>Can anyone recommend an antenna to listen to 800 mhz on a scanner? A mobile
>antenna would be prefered, with a magmount.
>=-
>73! de Andy KC2SSB (ex: KF4KHC/HL9HCT)
>Toms River, NJ USA! Grid FM29ww
>http://vhfradiobuff.tripod.com
>http://edfas.tripod.com

Ummmm, buy a 440MHz 1/4 mag mount and snip the whip? (Hell, why
bother, a 70 cm antenna should receive 800MHz real well....)

Ummm..... build one yourself?

Here are any number of sources for cheap mag mount bases or truck
mount bases with coax... Add a whip and you're all set... Seems like
about 10 or 15 minutes worth of work to fabricate one...

Raymond Sirois AB2HR
SysOp: The Lost Chord BBS
607-733-5745
telnet:\\thelostchord.dns2go.com:6000

5154. QUESTIONS on the noise generator in the ARRL's noise bridge circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 17:03:46 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203150903.3ebf48e5@posting.google.com>
Source record: 146642
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have some questions regarding the noise generator for the noise bridge circuit on page 27-25 in _The ARRL Antenna Book_ (layout at http://www.arrl.org/notes/hbk-templates/rxbridge.pdf). As you can see, the chief component of this is the NE555P chip (http://focus.ti.com/docs/prod/folders/print/ne555.html, http://www-s.ti.com/sc/ds/ne555.pdf).

The book says that this noise generator produces a 50% duty-cycle 1000-Hz square wave signal. This signal is applied to the cathode of the Zener diode and then sent on to the amplifier. So the NE555P chip produces the white noise and the Zener diode seems to be the mechanism on which this white noise is placed on a broadband RF carrier. I noticed that the port 4 (RESET) continuously receives 9V, presumably to ensure that the chip constantly resets and doesn't get stuck in one state (as some variation is needed to produce the pulses). Port 8, of course, needs 9V in order to keep the digital elements (flip-flop, BJT, and logic gates) running. Port 3, of course, is the output.

I wish the book described this circuit in more detail. My questions:
1. What does the 6800-ohm resistor between the VCC port and the DISCH port do? Does this influence the frequency of the white noise generator?
2. What is the purpose of the 6800 ohm resistor and two 1N914 diodes between the TRIG and DISCH ports? My guess is that it is part of a feedback network used to generate the square wave.
3. What is the purpose of the 1800 ohm resistor between port 3 and the D3 Zener diode?
4. How exactly does the D3 Zener diode modulate the output of the noise generator onto a broad range of RF frequencies?

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com

5155. Re: QUESTIONS on the noise generator in the ARRL's noise bridge circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 17:24:02 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C922E32.E7200727@dialpoint.net>
Source record: 146643
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

YOu need to read up on how the 555 IC works. The two 6800 resistors along with the capacitor determin the frequency the circuit oscillates. One resistor is the on time and the other is the off time. The 555 will not give an exect square wave output of equal on and off times. The diodes are placed in the circuit to help make the times nearly the same.

The 1800 resistor limits the current to the zener diode which is acting as a noise generator and also isolates the circuit so the biggest part of the noise will go to the output to the transistor amplifiers and not be shunt to the power source. The zener does not modulate the noise output but it is the noise generator. The 555 timer output is turning the zener noise off and on at around a 1000 hz rate.

Jason Hsu wrote:
>
> I have some questions regarding the noise generator for the noise
> bridge circuit on page 27-25 in _The ARRL Antenna Book_ (layout at
> http://www.arrl.org/notes/hbk-templates/rxbridge.pdf). As you can
> see, the chief component of this is the NE555P chip
> (http://focus.ti.com/docs/prod/folders/print/ne555.html,
> http://www-s.ti.com/sc/ds/ne555.pdf).
>
> The book says that this noise generator produces a 50% duty-cycle
> 1000-Hz square wave signal. This signal is applied to the cathode of
> the Zener diode and then sent on to the amplifier. So the NE555P chip
> produces the white noise and the Zener diode seems to be the mechanism
> on which this white noise is placed on a broadband RF carrier. I
> noticed that the port 4 (RESET) continuously receives 9V, presumably
> to ensure that the chip constantly resets and doesn't get stuck in one
> state (as some variation is needed to produce the pulses). Port 8, of
> course, needs 9V in order to keep the digital elements (flip-flop,
> BJT, and logic gates) running. Port 3, of course, is the output.
>
> I wish the book described this circuit in more detail. My questions:
> 1. What does the 6800-ohm resistor between the VCC port and the DISCH
> port do? Does this influence the frequency of the white noise
> generator?
> 2. What is the purpose of the 6800 ohm resistor and two 1N914 diodes
> between the TRIG and DISCH ports? My guess is that it is part of a
> feedback network used to generate the square wave.
> 3. What is the purpose of the 1800 ohm resistor between port 3 and
> the D3 Zener diode?
> 4. How exactly does the D3 Zener diode modulate the output of the
> noise generator onto a broad range of RF frequencies?

>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@yahoo.com

5156. Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 17:32:00 UTC
From: Deni <deni@gm3skn.fsnet.co.uk>
Message-ID: <a6tb6s$o5p$1@news5.svr.pol.co.uk>
Source record: 146644

What is the current informed opinion on wire antenna materials? Wire and insulators?
Solid copper versus stranded?
16 SWG copper. Covered or bare? If bare wire is used especially stranded does the inevitable corrosion on the copper strands cause any appreciable degradiation in perfomance?
PVC or similar covering insulaton invariably fails somewhere and then of course water enters and unseen corrosion takes place!
I wont even consider using any form of copperclad steel wires, bad experience with these!
I have constructed many wire antennas in the past with whatever I had available but right now I want to fit and forget the 'Ultimate low loss Doublet' using the best materials I can get, it also has to be rugged to survive weather and wind. It's to be around 132' top with open wire line feed, probably home brew line as I hate that 450 ohm copper clad steel windowline stuff!
Any comments or suggestions considered with much interest.

73, Deni, Gm3skn
Shetland Islands UK

5157. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 17:37:48 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <heb49u88ddsh5u0bma6inl873ljq2de82e@4ax.com>
Source record: 146645
Cross-posted to: rec.radio.amateur.antenna,it.hobby.radioamatori

On Fri, 15 Mar 2002 13:22:19 +0100, "Michele IZ2EAS"
<iz2eas@libero.it> wrote:

>
>> Well, what's wrong with this is that the non working EH is home-made
>> by one of us, there's no guarantie that it's made in the "right way".
>> I think it's made according to the docs, probably someone else might
>> think it's not well done.
>
>Since I started this thread, please let me summarize my position on this
>matter:
>
>1) I don't understand the theory behind the EH antenna; the most possible
>reason is that I am too stupid, but this is really not relevant here;
>2) since I don't understant the theory, I would like to see the results of
>PROPER measurements, before trying to spend some (or a lot of) time to
>understand the theory;
>3) Ted Hart was carrying out measurements under the supervision of
>professional consultants; in principle, I would trust this approach;
>4) the first test went wrong, and the blame was put on the "network"; this
>was happening in October 2001.
>5) early in January Stefano told us that some "amazing results" were going
>to be published soon: we are now in mid March and we have heard nothing yet;
>6) IF the EH antenna is able to work on 160 metres (and that's what we are
>told), it MUST work on 1500 kHz as well.
>- NOW:
>I am NOT saying that the EH antenna is NOT working; I am saying that my
>interest for this matter will "resuscitate" ONLY when I will see posted on
>Ted Hart's Web site the results of the properly-made tests above, showing -
>without any doubt - a behaviour that we cannot explain with the theories we
>have at hand now.
>A good contribution could come from Ted or Stefano, telling us WHEN those
>"amazing" test results will be publised.
>Till then, the EH antenna will be (for me) just another short dipole, and
>all other bold statements will be just "noise". Period. And I don't think I
>have been unfair with the EH antenna people.
>(But, naturally, my opinion is only my opinion...)
>
>73s,
>
>Michele IZ2EAS
>
>

Hi Michele,

You and Francesco both present an openness to allowing the EH group to present their ideas and their data. Your tolerance is commendable in their short-fall of that same data. Forgive our correspondent's inclination to be down-beat about the qualities of this design. We here on rec.radio.amateur.antenna have often been immersed in "novel designs that confound the experts." Commonly, revealed through extensive writing, it has been shown that the "inventors" were often the ones most confounded with making even the most elementary measurements.

I would point out that in response to your statement:
>1) I don't understand the theory behind the EH antenna
would be acceptable in light of a general lack of understanding, but not in a specific understanding. This is the one great failure of these barn-yard philosophers who cannot express their theories except in profundities and abstractions. Such hopelessly dense explanations coming from home-spun savants exposes the vacuity of their ideas.

If you had earlier followed the great fractal antenna debate here, you would have seen all the hallmarks of fake science at work, complete with fractal theories and fractal electromagnetics to support contrived and pompous claims that were laid to rest through standard means.

73's
Richard Clark, KB7QHC

5158. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 18:04:01 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <eoc49ugcdmm5c1sk779jgi8tlohien7l52@4ax.com>
Source record: 146646

On Fri, 15 Mar 2002 00:18:54 -0600, CAM <Cecil.A.Moore@IEEE.org>
wrote:

>CAM wrote:
>> I will post the graphs to my web page.
>
>Here's what EZNEC sez about my 130ft dipole Vs my 33ft vertical
>with 8 elevated radials. Even off the ends, the dipole beats
>the vertical for waves arriving at 45 degrees or higher.
>
>http://www.qsl.net/w5dxp/dipvsver.htm

Hi Cecil,

At the risk of playing specs-manship, I would point out that for
takeoff angles up to 10 degrees, you show the vertical is superior
(albeit in the most arguable fashion). And given that DX is
considered to be related to distance, the lower angles are the arbiter
of achieving that (as any sea side DXpedition seeks) goal.

However, reality does not confer automatic laurels to this particular
spec unless it supports it in propagation. Propagation may not allow
you to hit a distant spot with a take off angle of 5ï¿½ simply because
you may literally over shoot it. I would suggest those who enjoy
modeling antennas should also look into propagation modelers too to
observe just what payback is found in these issues.

I once posed a situation to VOACAP/WINCAP where I deliberately offered
it a truncated antenna file that launched at only one degree (not
literally 1ï¿½ above the horizon, more like at 10ï¿½ and ONLY 10ï¿½). When
that launched power hit the target, it was the size of a major state
in coverage. It would then only be an accident of layer height that
would allow me to hit a specific target.

On the other hand, pronouncements that the horizontal are better,
simply through the exhibition of generally great gain figures also
belies the reality of propagation. True, you may hit that distant
station better than the vertical, but were either of those two
actually aimed at it? Or was this simply the evidence of chance and
happenstance? The propagation modeler would expose just where ANY
design may shine and prevail over other designs (and equally expose
how little difference there is for the majority of power lost to
dormant receivers, ground, bedrock, or open sea).

73's
Richard Clark, KB7QHC

5159. Re: QUESTIONS on the noise generator in the ARRL's noise bridge circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 18:08:53 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <3c92360b.935873@news.freeserve.net>
Source record: 146647
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I believe you have it the wrong way round..
The Diode generates the 'noise' and the 555 interrupts the 'noise'.
In reality, the 555 switches the power to the noise generating diode,
generating a signal that can be crudely called Amplitude Modulation
(I would call it a simple PCM without the 'code').
A carrier pulsed on a 1:1 on/off state will appear to be modulated if
it happens at an audible rate.
In switching at this 'rapid rate' harmonics will be generated..and
accuracy will be diminished.
I could be wrong.. I usually am
atb Mike W
--
On 15 Mar 2002 09:03:46 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>I have some questions regarding the noise generator for the noise
>bridge circuit on page 27-25 in _The ARRL Antenna Book_ (layout at
>http://www.arrl.org/notes/hbk-templates/rxbridge.pdf). As you can
>see, the chief component of this is the NE555P chip
>(http://focus.ti.com/docs/prod/folders/print/ne555.html,
>http://www-s.ti.com/sc/ds/ne555.pdf).
>
>The book says that this noise generator produces a 50% duty-cycle
>1000-Hz square wave signal. This signal is applied to the cathode of
>the Zener diode and then sent on to the amplifier. So the NE555P chip
>produces the white noise and the Zener diode seems to be the mechanism
>on which this white noise is placed on a broadband RF carrier. I
>noticed that the port 4 (RESET) continuously receives 9V, presumably
>to ensure that the chip constantly resets and doesn't get stuck in one
>state (as some variation is needed to produce the pulses). Port 8, of
>course, needs 9V in order to keep the digital elements (flip-flop,
>BJT, and logic gates) running. Port 3, of course, is the output.
>
>I wish the book described this circuit in more detail. My questions:
>1. What does the 6800-ohm resistor between the VCC port and the DISCH
>port do? Does this influence the frequency of the white noise
>generator?
>2. What is the purpose of the 6800 ohm resistor and two 1N914 diodes
>between the TRIG and DISCH ports? My guess is that it is part of a
>feedback network used to generate the square wave.
>3. What is the purpose of the 1800 ohm resistor between port 3 and
>the D3 Zener diode?
>4. How exactly does the D3 Zener diode modulate the output of the

>noise generator onto a broad range of RF frequencies?
>
>Jason Hsu, AG4DG
>jason_hsu_802701@@@@yahoo.com

5160. Re: Cellular Booster question-- NOT A SPAM!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 18:11:09 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <v8e49us73irlm5th36f5jpv285r091jv53@4ax.com>
Source record: 146648

On Fri, 15 Mar 2002 04:40:01 GMT, "W6DKN" <w6dkn@qsl.net> wrote:

>Yep, that was the first thing I tried, as everything I have learned about
>antenna told me it couldn't work and was probably just a coincidence. So I
>stood in the exact same spot in the house where it was reading 1-2 bars on
>the signal strength meter with the "snake oil antenna". Without moving, I
>took the battery off, and peeled the "antenna" off. Stuck the battery back
>on and powered it back up. No signal strength indicated and I couldn't make
>a call. Stuck the "antenna" back on, and again had 1-2 bars signal
>strength, and could make and receive calls. Go figure... :>)
>
>I tried it on my brother's Samsung cell phone at my QTH. It didn't work
>before or after on his phone, but he was using a different phone as well as
>cell carrier, and generally cannot make calls in my area, so this was not
>surprising. Like I said earlier, it won't produce a signal where none is
>present (like they say in their ad), but in marginal/fringe reception areas
>it seems to help a bit.
>
>(I just hope I don't end up having nightmares about Fractenna's now ... :>)
>
>
>73 de W6DKN
>

Hi OM,

Now that you performed this essential test, consider another.

Is this the property of the design? Replace it with a similar size
sheet of tin foil (with A/B testing as before, or perhaps A/B/C
testing, keeping the mystery device in the group).

73's
Richard Clark, KB7QHC

5161. Re: Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 18:26:21 UTC
From: Sylvan Butler <Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna94f8r.vp6.Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 146665

On Fri, 15 Mar 2002 15:28:23 GMT, Steve Crain <jscrain@tulsa.quik.com> wrote:
> I'm putting up an SWL antenna on the roof of a ten story office building.
> The coax feed to the receiver will be 150' long. I'm concerned about

For HF, RG-8 is probably sufficient, but I prefer LMR-400 (it is
better but costs more). Either will handle any reasonable power
levels on transmit, and will protect against received interference.
The difference is in the signal loss, but at HF it is slight.

I'd recommend LMR-400 just in case you decide to start doing some
VHF or UHF work.

Try a google search for "rg-8 lmr-400 loss" (leave out the quotes).

sdb
--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

5162. Re: Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 18:30:25 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C923D67.3AC524EC@tampabay.rr.com>
Source record: 146649

steve
i would suggest either 9913f or LMR400
if it where me it would be the LMR400 its a better coax in my opnion
good luck

Steve Crain wrote:

> I'm putting up an SWL antenna on the roof of a ten story office building.
> The coax feed to the receiver will be 150' long. I'm concerned about
> electrical interference the feed line may pick up. Eventually I will be
> transmitting from this location (HF only). What coax type would you use?
> Thanks for imput.
>
> Steve Crain
> jscrain@easytel.com

5163. Re: QUESTIONS on the noise generator in the ARRL's noise bridge circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 18:34:51 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <dle49u8qkrqd3ti8c7n4uiavg9r43tf16e@4ax.com>
Source record: 146650
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On 15 Mar 2002 09:03:46 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>I have some questions regarding the noise generator for the noise
>bridge circuit on page 27-25 in _The ARRL Antenna Book_ (layout at
>http://www.arrl.org/notes/hbk-templates/rxbridge.pdf). As you can
>see, the chief component of this is the NE555P chip
>(http://focus.ti.com/docs/prod/folders/print/ne555.html,
>http://www-s.ti.com/sc/ds/ne555.pdf).
>
>The book says that this noise generator produces a 50% duty-cycle
>1000-Hz square wave signal. This signal is applied to the cathode of
>the Zener diode and then sent on to the amplifier. So the NE555P chip
>produces the white noise and the Zener diode seems to be the mechanism
>on which this white noise is placed on a broadband RF carrier. I
>noticed that the port 4 (RESET) continuously receives 9V, presumably
>to ensure that the chip constantly resets and doesn't get stuck in one
>state (as some variation is needed to produce the pulses). Port 8, of
>course, needs 9V in order to keep the digital elements (flip-flop,
>BJT, and logic gates) running. Port 3, of course, is the output.
>
>I wish the book described this circuit in more detail. My questions:
>1. What does the 6800-ohm resistor between the VCC port and the DISCH
>port do? Does this influence the frequency of the white noise
>generator?
>2. What is the purpose of the 6800 ohm resistor and two 1N914 diodes
>between the TRIG and DISCH ports? My guess is that it is part of a
>feedback network used to generate the square wave.
>3. What is the purpose of the 1800 ohm resistor between port 3 and
>the D3 Zener diode?
>4. How exactly does the D3 Zener diode modulate the output of the
>noise generator onto a broad range of RF frequencies?
>
>Jason Hsu, AG4DG
>jason_hsu_802701@@@@yahoo.com

Hi Jason,

Your best and cheapest source of information about the characteristics
and application of the 555 come from the manufacturer. Motorola's old
handbooks and application notes are superb in this regard and go to
considerable extent for this chip alone.

The 555 establishes the dominant low frequency characteristic as the pulse edges are the compelling feature of harmonic generation. The Zener is the source of MF/HF/VHF noise. If you want to focus on anything, it should be the Zener. As an experiment, you could remove the Zener and couple this pulse through a transformer (about 1:10 or greater) and fire an NE-2 bulb which will be harmonic rich too (gas tubes are very noisy). I don't imagine that it would show any greater noise field however, unless you contrive to dump more power through the tube (or Zener for that matter, in that regard, try biasing it into greater or less conduction).

Keep in mind that the purpose of a white noise generator is to spread the AVAILABLE power EVENLY across the spectrum. The same power applied to any noise generator can only replicate this characteristic (unless the substitute is not equally suited for the purpose of noise generation). Again, focus on both the power applied, and the noise generation mechanism (there are many candidates). A mercury wetted reed relay feeding an Ampere to a one ohm resistor will overload you with harmonics of the reed's drive frequency. The principle benefit of such a suggestion lies in the exceptionally fast rise and fall time (sub nanosecond) and power handling capability. I won't go into the environmental risk and the possibility of this device becoming a controlled substance by the way.

73's
Richard Clark, KB7QHC

5164. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 18:48:51 UTC
From: "i3hev, mario held" <marioheld@libero.it>
Message-ID: <3C924213.40800122@libero.it>
Source record: 146654
Cross-posted to: rec.radio.amateur.antenna,it.hobby.radioamatori

Richard Clark ha scritto:

> On Fri, 15 Mar 2002 13:22:19 +0100, "Michele IZ2EAS"
> <iz2eas@libero.it> wrote:
> > ....
> >1) I don't understand the theory behind the EH antenna; ....
>
> ....would be acceptable in light of a general lack of understanding, but
> not in a specific understanding. This is the one great failure of
> these barn-yard philosophers who cannot express their theories except
> in profundities and abstractions. ....

In the present case, the philosophers * did * express themselves in a rather crystal-clear fashion: trouble is, that what they expressed as nearly no significance, and so is tantamount to nihil, for anybody knowing the 101 of field theory....
Really, imho, for the moment there is no theory behind EH and, unless a serious set of measures, conducted like scientists use to make it, is disclosed, chances that someone confront the difficulties of theoretical analysis are very few...
:-)

Bye.
--
73 es 51 de i3hev, op. mario

http://digilander.iol.it/hamweb
http://digilander.iol.it/esperantovenezia

5165. Re: QUESTIONS on the noise generator in the ARRL's noise bridge circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 18:51:48 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.com>
Message-ID: <I1Bf0PBELkk8EA$B@ifwtech.com>
Source record: 146651
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jason Hsu wrote:
>I have some questions regarding the noise generator for the noise
>bridge circuit on page 27-25 in _The ARRL Antenna Book_ (layout at
>http://www.arrl.org/notes/hbk-templates/rxbridge.pdf). As you can
>see, the chief component of this is the NE555P chip
>(http://focus.ti.com/docs/prod/folders/print/ne555.html,
>http://www-s.ti.com/sc/ds/ne555.pdf).
>
>The book says that this noise generator produces a 50% duty-cycle
>1000-Hz square wave signal. This signal is applied to the cathode of
>the Zener diode and then sent on to the amplifier. So the NE555P chip
>produces the white noise and the Zener diode seems to be the mechanism
>on which this white noise is placed on a broadband RF carrier.

The 555 produces a chopped DC supply to the zener (actually, avalanche)
diode. The diode produces the broadband RF noise.

> I
>noticed that the port 4 (RESET) continuously receives 9V, presumably
>to ensure that the chip constantly resets and doesn't get stuck in one
>state (as some variation is needed to produce the pulses). Port 8, of
>course, needs 9V in order to keep the digital elements (flip-flop,
>BJT, and logic gates) running. Port 3, of course, is the output.
>
>I wish the book described this circuit in more detail. My questions:
>1. What does the 6800-ohm resistor between the VCC port and the DISCH
>port do? Does this influence the frequency of the white noise
>generator?
>2. What is the purpose of the 6800 ohm resistor and two 1N914 diodes
>between the TRIG and DISCH ports? My guess is that it is part of a
>feedback network used to generate the square wave.

For information on how the 555 works, take a look at a
practically-oriented electronics text such as 'The Art of Electronics'
by Horowitz and Hill.

>3. What is the purpose of the 1800 ohm resistor between port 3 and
>the D3 Zener diode?

To set the current through the diode, and also to act as an RF 'choke'.

>4. How exactly does the D3 Zener diode modulate the output of the
>noise generator onto a broad range of RF frequencies?
>
D3 *is* the broadband noise generator.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.com/g3sek

5166. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 18:59:55 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C9244AB.13507D49@IEEE.org>
Source record: 146652

Richard Clark wrote:
> At the risk of playing specs-manship, I would point out that for
> takeoff angles up to 10 degrees, you show the vertical is superior
> (albeit in the most arguable fashion). And given that DX is
> considered to be related to distance, the lower angles are the arbiter
> of achieving that (as any sea side DXpedition seeks) goal.

At my QTH the two extra S-units of noise on the vertical needs to
be taken into account. In any case, I was expecting the vertical
to perform better than the dipole off the ends of the dipole.
In actual practice, that is rarely the case. The dipole is a
pretty good NVIS antenna off the ends. I cannot seem to find
a use for the vertical. Phasing two verticals to get an additional
3dB wouldn't even overcome the 2 S-units of additional noise.
--
cheers, CAM http://www.qsl.net/w5dxp

5167. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 19:17:36 UTC
From: Bill Ogden <ogden@us.ibm.com>
Message-ID: <3C9248D0.A4312D6E@us.ibm.com>
Source record: 146653

I use a mixture of horizontal (dipole, quad) and vertical (ground mounted) antennas. The dipole is up only 20' and the quad is centered at 45'. I find that each has its place. As would be expected, the quad is usually better (on 20 - 10 meters), but not always. I can easily switch antennas without retuning, and it is interesting to watch polarization change over relatively short periods of time. Also, sometimes the vertical seems to hit a particular location better than the quad or dipole.

The quad is usually quieter (background noise) than the verticals. However, if my verticals were *always* two S units (assume 10 db) noiser, I would start looking for other problems.

I have the space (1 acre) for several antennas, and I enjoy having a selection. In my mind, the general question "which is better" is not a meaningful question.

Bill
W2WO

5168. Re: Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 20:18:59 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C925724.6AFF08BF@icok.net>
Source record: 146655

Steve,
Just depends on how much you want to spend. RG-213 would
be a good 'average' choice. Not a whole lot of loss in 150 feet
and available almost anywhere. '9913' would be nice, but a real
pain to run, stiff and heavy. I don't have any experience with
the 'LMR' series of cable, but it shouldn't be any worse than
most. Good luck.
'Doc
PS - Move to the top floor.

5169. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 20:24:55 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C925889.CF6E400D@icok.net>
Source record: 146656

Deni,
Despite your bad experience with it, the copper clad
steel wire is your 'best bet'. If reasonable care is
taken, it should last as long as you do.
Stranded wire, depending on the air polutants in your
area, tends to get 'noisy' after a while. Insulated stranded
wire takes longer to get 'noisy', but will eventually too.
'Doc

5170. Re: Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 20:47:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6tmm1$h379p$1@ID-124126.news.dfncis.de>
Source record: 146657

The "best" coax is 2" outer conductor diameter line, the outer conductor being formed from 6 longitudinal annealed copper or soft aluminium overlapping tapes, each tape having a thickness of 0.015".

The inner conductor being 0.5" diameter, solid copper conductor. With an extruded solid polyethylene insulant.

Forget about such things as SWR and dB per 100 feet and call CQ.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

Steve Crain <jscrain@tulsa.quik.com> wrote in message news:rqok8.105$sS6.442@newsfeed.intelenet.net...
> I'm putting up an SWL antenna on the roof of a ten story office building.
> The coax feed to the receiver will be 150' long. I'm concerned about
> electrical interference the feed line may pick up. Eventually I will be
> transmitting from this location (HF only). What coax type would you use?
> Thanks for imput.
>
> Steve Crain
> jscrain@easytel.com
>
>

5171. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 20:57:50 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a6tna6$gtbve$1@ID-124126.news.dfncis.de>
Source record: 146658

Solid copper, enamel-insulated, 16 or 14 gauge wire lasts for years and years. Try some. Its cheap enough. Obtain it in scrap reel lengths from electric motor and small power transformer repair works. Scrape off the enamel and it solders very nicely too.

5172. ffff

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 21:52:19 UTC
From: brassnads@charter.net
Message-ID: <u94r8jraklnmeb@corp.supernews.com>
Source record: 146659

```
fffffff
```

5173. antenna for Spectacom Netclock WWVB wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 21:54:56 UTC
From: brassnads@charter.net
Message-ID: <u94rdg81vjqt38@corp.supernews.com>
Source record: 146660

I need antenna for the Spectracom Netclock/2 WWVB

5174. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 22:42:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C9278F3.66FCD759@eznec.com>
Source record: 146661

The poster was from the Shetland Islands. I don't know how close he might be to the ocean, but I had one experience at my parents' house about 2 blocks from the Pacific on the Oregon coast. At that location, the wind in nearly always from the west (the ocean), and in contrast to its name, the Pacific is very seldom calm at that latitude. So good-sized waves are constantly breaking against the rocky shore, providing a steady source of atomized salt water. This is blown inland by the prevailing wind. The result is that the air constantly contains microscopic droplets of salt water. Here where I live about 100 km inland, the climate is very rainy but lacks the salt spray. I've had bare copper wires up for 20 years with nothing but a little oxide formation. But I once set up an antenna for a shortwave receiver at my parents' house at the coast, stringing some #14 or so stranded copper wire under the eaves of their house. In less than a year, the wire had turned completely into blue-green powder and was gone. I don't mean corroded, I mean gone. In that climate, even aluminum corrodes, but any copper that the air can contact is gone very quickly. So if the poster's climate is anything like that, then the only solutions I can see are stainless steel wire (which might be noticeably lossy), or copper wire with a very, very stout coating. If I were putting up an antenna in a climate like that, I think I'd try using TV twinlead or ladder line, with the conductors tied in parallel. The polyethylene coating is thick and rugged, and conforms to the wire very well, which should minimize moisture leakage at the ends. I'd use RTV or a similar compound liberally at the ends and wherever bare copper would otherwise be exposed. (I don't want to start another long thread about the alleged corrosive properties of RTV. I've used a number of brands of acetic-acid smelling stuff for purposes like this on many occasions without any corrosion problems. But suit yourself and use the less stinky stuff if you want, and if you can find it.) I don't, however, have any direct experience with constructing antennas intended to last a long time in a maritime climate. Maybe some people with experience on seagoing boats will share their knowledge. I also don't know if the poster's climate is like the one I described. If not, then just about any kind of copper wire would probably do. But just because "I've used bare copper for years without any problem" doesn't mean that everyone can get away with it.

I've had very good luck with Copperweld (a brand) of copper-clad steel wire. It has a very substantial copper content (perhaps 30% or so of the total thickness). Don't confuse it with something like copper plated electric fence wire, which has a very thin plated coating. Copperweld is as strong as steel and as good a conductor at RF as copper. It is a nuisance to work with because it's springy. But once up, it'll never

come down. Of course, it's bare copper on the outside, so isn't any more suitable for a maritime climate than solid copper.

Roy Lewallen, W7EL

5175. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 23:11:11 UTC
From: Deni <deni@gm3skn.fsnet.co.uk>
Message-ID: <a6tv2m$4lu$1@newsg2.svr.pol.co.uk>
Source record: 146662

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C9278F3.66FCD759@eznec.com...
> The poster was from the Shetland Islands. I don't know how close he
> might be to the ocean, but I had one experience at my parents' house
>

Hi Roy!
Great to read of your views on wire Antenna materials. I am indeed on the shores of the mighty Atlantic on the west coast with the great North Sea to my east so the crumbling green copper stuff is quite familiar to me.
The winds also demand great respect and a certain amount of 'over engineering' pays off when it comes to antennas!
I am most interested to hear of all views on this fascinating subject.

A spark of life on a wire from heaven!

73, Deni, Gm3skn

5176. Re: Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 23:15:20 UTC
From: k7itm@aol.com
Message-ID: <3200347.0203151515.476fc667@posting.google.com>
Source record: 146663

If it picks up interference, it will most likely be because you haven't properly de-coupled it from your antenna, and it's feeding signals up the outside of the line to where the antenna connects to it, and then down inside the line. It should not matter significantly whether you use extra-super-special shielding or standard RG-213 single-braid cable. (Though don't bundle it tightly with power wiring! That's asking for trouble no matter what else you do.)

Probably a bigger concern is the length. If you use "small" cable like RG-58-size, you'll end up with around 4dB of loss at 30MHz, assuming low SWR. I'd go with larger cable...RG-213 size drops the corresponding loss to under 2dB (for a line with low SWR, anyway), and some of the fancier lines that size or a bit larger drop it further. I'd personally go for the reduction from 4dB to 2dB, and say that anything lower than that wasn't worth my effort, at least for HF. If there's a chance you'd use it for work at 146MHz or 440MHz, that's a whole 'nuther story.

Another consideration is what environment it's exposed to. If it's exposed to UV (sunlight), be sure to use a line that will stand up to it. It may be worth putting a conduit around it just to protect it where it's in the open, as much as you reasonably can. And if you run it in an air duct, be sure it's rated for that--"plenum rated".

I'm sure others will have more specific recommendations about brands and stock numbers....

Cheers,
Tom

"Steve Crain" <jscrain@tulsa.quik.com> wrote in message
news:<rqok8.105$sS6.442@newsfeed.intelenet.net>...
> I'm putting up an SWL antenna on the roof of a ten story office building.
> The coax feed to the receiver will be 150' long. I'm concerned about
> electrical interference the feed line may pick up. Eventually I will be
> transmitting from this location (HF only). What coax type would you use?
> Thanks for imput.
>
> Steve Crain
> jscrain@easytel.com

5177. Re: Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-15 23:22:27 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c9285e2_1@news1.prserv.net>
Source record: 146664

Reg:
You don't think big enough. A number of years ago one of the nearby TV broadcast stations discovered they had a mis-manufactured feed line, and replaced it with new. Sold the old line for the price of scrap copper. Still relatively expensive, but it is 1200 feet of 6" outer diameter air insulated (erratically spaced teflon posts to avoid resonance) with a copper pipe center conductor of about 1.5". I could only afford 4 joints of it. Not very flexible, though, I have to admit.
--
Crazy George
Remove NO and SPAM from return address

Reg Edwards <g4fgq.regp@btinternet.com> wrote in message news:a6tmm1$h379p$1@ID-124126.news.dfncis.de...
> The "best" coax is 2" outer conductor diameter line, the outer conductor
> being formed from 6 longitudinal annealed copper or soft aluminium
> overlapping tapes, each tape having a thickness of 0.015".
>
> The inner conductor being 0.5" diameter, solid copper conductor. With an
> extruded solid polyethylene insulant.
>
> Forget about such things as SWR and dB per 100 feet and call CQ.
> ---
> ****************************
> Regards, Reg G4FGQ
> Free Radio Modelling Software
> Http://www.g4fgq.com
> ****************************
>
> Steve Crain <jscrain@tulsa.quik.com> wrote in message
> news:rqok8.105$sS6.442@newsfeed.intelenet.net...
> > I'm putting up an SWL antenna on the roof of a ten story office building.
> > The coax feed to the receiver will be 150' long. I'm concerned about
> > electrical interference the feed line may pick up. Eventually I will be
> > transmitting from this location (HF only). What coax type would you use?
> > Thanks for imput.
> >
> > Steve Crain
> > jscrain@easytel.com
> >
> >
>

>

5178. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 02:30:58 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <u95bjab0fs70ca@corp.supernews.com>
Source record: 146666

To supplement what Roy has said:
I have experience with Cu wire antennas in salt spray. Not having had any choices, I coated the wire with RTV (ironically, it was black RTV) where I could. Where I did not coat, the wire was black in a couple of days. When the project was over, the wire antenna was taken down. Latter examination found that the wire under the RTV looked like newly minted pennies. The project did not last long enough to learn how long it takes for the spray to get through the rubber. The hand coated wire is not good looking!
I too have not seen corrosive properties of the RTV that I have used. Yes, it had an acidic smell.
To last on the coast of GM land, one should be able to find heavily coated wire. Wire that is intended for high voltage applications. 73
Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net
Office: JCM@McLMcL.Com
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C9278F3.66FCD759@eznec.com...
> The poster was from the Shetland Islands. I don't know how close he
> might be to the ocean, but I had one experience at my parents' house
> about 2 blocks from the Pacific on the Oregon coast. At that location,
> the wind in nearly always from the west (the ocean), and in contrast
to
> its name, the Pacific is very seldom calm at that latitude. So
> good-sized waves are constantly breaking against the rocky shore,
> providing a steady source of atomized salt water. This is blown inland
> by the prevailing wind. The result is that the air constantly contains
> microscopic droplets of salt water. Here where I live about 100 km
> inland, the climate is very rainy but lacks the salt spray. I've had
> bare copper wires up for 20 years with nothing but a little oxide
> formation. But I once set up an antenna for a shortwave receiver at my
> parents' house at the coast, stringing some #14 or so stranded copper
> wire under the eaves of their house. In less than a year, the wire had
> turned completely into blue-green powder and was gone. I don't mean
> corroded, I mean gone. In that climate, even aluminum corrodes, but
any
> copper that the air can contact is gone very quickly. So if the
poster's
> climate is anything like that, then the only solutions I can see are
> stainless steel wire (which might be noticeably lossy), or copper wire
> with a very, very stout coating. If I were putting up an antenna in a

> climate like that, I think I'd try using TV twinlead or ladder line,
> with the conductors tied in parallel. The polyethylene coating is
thick
> and rugged, and conforms to the wire very well, which should minimize
> moisture leakage at the ends. I'd use RTV or a similar compound
> liberally at the ends and wherever bare copper would otherwise be
> exposed. (I don't want to start another long thread about the alleged
> corrosive properties of RTV. I've used a number of brands of
acetic-acid
> smelling stuff for purposes like this on many occasions without any
> corrosion problems. But suit yourself and use the less stinky stuff if
> you want, and if you can find it.) I don't, however, have any direct
> experience with constructing antennas intended to last a long time in
a
> maritime climate. Maybe some people with experience on seagoing boats
> will share their knowledge. I also don't know if the poster's climate
is
> like the one I described. If not, then just about any kind of copper
> wire would probably do. But just because "I've used bare copper for
> years without any problem" doesn't mean that everyone can get away
with
> it.
>
> I've had very good luck with Copperweld (a brand) of copper-clad steel
> wire. It has a very substantial copper content (perhaps 30% or so of
the
> total thickness). Don't confuse it with something like copper plated
> electric fence wire, which has a very thin plated coating. Copperweld
is
> as strong as steel and as good a conductor at RF as copper. It is a
> nuisance to work with because it's springy. But once up, it'll never
> come down. Of course, it's bare copper on the outside, so isn't any
more
> suitable for a maritime climate than solid copper.
>
> Roy Lewallen, W7EL

5179. Re: Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 02:48:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C92B29B.4DE1BE85@eznec.com>
Source record: 146667

You must subscribe to the philosophy that if enough is good, too much is better.

Roy Lewallen, W7EL

Crazy George wrote:
>
> Reg:
> You don't think big enough. A number of years ago one of the nearby TV
> broadcast stations discovered they had a mis-manufactured feed line, and
> replaced it with new. Sold the old line for the price of scrap copper.
> Still relatively expensive, but it is 1200 feet of 6" outer diameter air
> insulated (erratically spaced teflon posts to avoid resonance) with a copper
> pipe center conductor of about 1.5". I could only afford 4 joints of it.
> Not very flexible, though, I have to admit.
> --
> Crazy George
> Remove NO and SPAM from return address

5180. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 04:28:50 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <fcaSPD+cuPtUCKP3S20UdtDDvNEW@4ax.com>
Source record: 146582

"Deni" <deni@gm3skn.fsnet.co.uk> wrote:

>
>"Roy Lewallen" <w7el@eznec.com> wrote in message
>news:3C9278F3.66FCD759@eznec.com...
>> The poster was from the Shetland Islands. I don't know how close he
>> might be to the ocean, but I had one experience at my parents' house
>>
>
>Hi Roy!
>Great to read of your views on wire Antenna materials. I am indeed on the
>shores of the mighty Atlantic on the west coast with the great North Sea to
>my east so the crumbling green copper stuff is quite familiar to me.

It makes me wonder, then, what the communications guys use for dipoles on the big ocean liners, military ships, etectera that are constantly exposed to marine atmospherics. Might be something you could research on Google. (I'm currently reading "The French Atlantic Affair," about a ham who sneaks his transceiver aboad an ocean liner, and strings up a 20 meter dipole. Fascinating stuff.)

Bob
k5qwg

>The winds also demand great respect and a certain amount of 'over
>engineering' pays off when it comes to antennas!
>I am most interested to hear of all views on this fascinating subject.
>
>A spark of life on a wire from heaven!
>
>73, Deni, Gm3skn
>
>
>

5181. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 04:30:12 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c92cf39_1@news1.prserv.net>
Source record: 146668

I can be a little more specific about Reg's comments. I don't know what the UK equivalent is, but either "Formvar(TM)" insulation, or nylon overcoated enamel insulation are extremely resistant to abrasion, and therefore will last a long time before the weather gets to the copper.

On the other hand, I have a couple of observations: The Statue of Liberty wears a copper coat. I understand from reading in corrosion publications that it is not eroding, and the thickness does not decrease. Why not?

Then, in 1990, I personally examined AWG 10 bare hard drawn copper wire which was installed in 1969 within sight of the Atlantic Ocean on the island of Puerto Rico as a backscreen for a DF set. Approximately 100 feet long pieces. Brown in color, and as close as we could measure with a standard micrometer, the same diameter as it started out. No general green corrosion, some spots. The ground mat was AWG 10 Copperweld (TM). Installed at the same time. Rust showing on cut ends, but as far as could be measured in the lab on pieces we extracted, still the same coating thickness as when manufactured. When the site was destroyed by hurricane Georges in 1999(?) (didn't look up my records), what was left of the wires looked the same as they had in 1990. Failure was poorly welded bolts holding the upper boards to the support poles, which were supposed to be single piece bolts anyway. Installer cheated and got away with it for 30 years.

I have seen stranded copper wire turn to green dust as Roy reports, but I always wonder if it started out as an alloy for flexibility?

--
Crazy George
Remove NO and SPAM from return address

Deni <deni@gm3skn.fsnet.co.uk> wrote in message
news:a6tb6s$o5p$1@news5.svr.pol.co.uk...
> What is the current informed opinion on wire antenna materials? Wire and
> insulators?
> Solid copper versus stranded?
> 16 SWG copper. Covered or bare? If bare wire is used especially stranded
> does the inevitable corrosion on the copper strands cause any appreciable
> degradiation in perfomance?
> PVC or similar covering insulaton invariably fails somewhere and then of
> course water enters and unseen corrosion takes place!
> I wont even consider using any form of copperclad steel wires, bad
> experience with these!
> I have constructed many wire antennas in the past with whatever I had
> available but right now I want to fit and forget the 'Ultimate low loss
> Doublet' using the best materials I can get, it also has to be rugged to

> survive weather and wind. It's to be around 132' top with open wire line
> feed, probably home brew line as I hate that 450 ohm copper clad steel
> windowline stuff!
> Any comments or suggestions considered with much interest.
>
> 73, Deni, Gm3skn
> Shetland Islands UK
>
>

5182. Switchable amplifiers WITHOUT stray capacitance/inductance

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 04:58:40 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203152058.d5a6e84@posting.google.com>
Source record: 146569
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I would like to build a modified version of the SWR noise bridge shown on page 27-25 of _The ARRL Antenna Book_. The schematic is available at http://www.qsl.net/wq1rp/noisebrg.htm, as the New England QRP group sells a kit.

One of the modifications I would like to make is an extra RF amplifier. More forward power means more reflected power given the same SWR. I want the noise from the noise bridge to be stronger relative to RF picked up by the antenna, because noise spikes or strong signals can foil my attempts to minimize the SWR on 80m and 40m.

At the same time, I would like this extra power to be OPTIONAL so that I don't have to waste the battery. This requires use of a switch.

However, I understand that the variable resistor and capacitor in the original design of this circuit are sources of stray capacitance and inductance. Would using a switch have a similar effect? If so, what would it take to minimize this?

Jason Hsu, AG4DG
jason_hsu_802701@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

5183. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 05:37:43 UTC
From: dandowell@sprintmail.com
Message-ID: <fa58693a.0203152137.3e73d770@posting.google.com>
Source record: 146570

In regards to exposed copper wire. What if you sealed the wire with a couple of coats of polyurathane. Even in salty air I think that the poly would protect it.

Im new to the Amateur radio hobby, and I know nothing about antennas. But I do know about polyurathane.

Dan

5184. Re: HF Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 05:46:11 UTC
From: Harris H Leck <leckfam@attglobal.net>
Message-ID: <YVAk8.12686$uR5.26365@newsfeeds.bigpond.com>
Source record: 146571

You may want to look at the ground independent Force 12 shortened half wave
verticals. they don't require radials.
Harris VK4CWT/6
"Hartmut" <hartmut.d@cww.de> wrote in message
news:3c8f7a7b$0$224$a9611f8e@news.cityweb.de...
> I'm going to buy a new HF Vertical thie summer.
>
> Many hams suggested to buy a butternut HF-9V, but I'm not able to install
> the radials
> this antenna needs.
> Others said they would prefer the GAP Titan or the HyGain AV-640.
> Which one is better?
>
> Thank you in advance
>
>
> Hartmut; DL4YDH
>
>

5185. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 07:53:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C92FA03.5A3C1A55@eznec.com>
Source record: 146572

There are, unfortunately, two meanings of "takeoff angle". One is the elevation angle, as you say here. The other is as reported by EZNEC, and as you used it in your original posting, the elevation angle at which the pattern is maximum. When I say to ignore the takeoff angle, I mean to ignore the elevation angle at which the pattern is maximum.

Roy Lewallen, W7EL

CAM wrote:
> . . .
> Isn't an elevation angle the angle at which the RF takes off? Aren't
> there an infinite number of takeoff angles each associated with a
> certain gain? Couldn't one have a chart of gain Vs take-off-angle for
> take off angles of 5, 10, 15, 20, 25, ... degrees?
> --
> cheers, CAM http://www.qsl.net/w5dxp

5186. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 07:55:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C92FA80.7C1B8728@eznec.com>
Source record: 146573

That's a very strange pattern for a quarter wave vertical. Are you using
High-Accuray ground? If so, would you be so kind as to email me the
model?

Roy Lewallen, W7EL

CAM wrote:
>
> CAM wrote:
> > I will post the graphs to my web page.
>
> Here's what EZNEC sez about my 130ft dipole Vs my 33ft vertical
> with 8 elevated radials. Even off the ends, the dipole beats
> the vertical for waves arriving at 45 degrees or higher.
>
> http://www.qsl.net/w5dxp/dipvsver.htm
> --
> cheers, CAM http://www.qsl.net/w5dxp

5187. Re: Switchable amplifiers WITHOUT stray capacitance/inductance

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 07:59:11 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <32u59u4it9qa5khns3i4ud6pms6pho5909@4ax.com>
Source record: 146574
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On 15 Mar 2002 20:58:40 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>
>However, I understand that the variable resistor and capacitor in the
>original design of this circuit are sources of stray capacitance and
>inductance. Would using a switch have a similar effect? If so, what
>would it take to minimize this?
>
>Jason Hsu, AG4DG

Hi Jason,

There are many issues with this design, one of which is that it is a fixed bridge and may not meet your expectations (the bridge is balanced against the 100 Ohm resistor on the "unknown" port). In other words, the layout is not conducive to balancing the arms of the bridge, but rather seeking the balance of what is applied and changing it. It is presumed that the Hi-Z of the "unknown" presents only the 100 Ohm to balance against R1 and C1 is adjusted to compensate for stray capacitance at the "unknown" port (you will never eliminate strays, it is more meaningful to know how to balance them).

Your question about the switch should be immaterial to the operation of the bridge as the source sees only the receiver as a load with a balanced load of R1-C1 and "unknown" in parallel. That is, stray capacitance to ground may affect HF/VHF performance (sensitivity) but not accuracy of balance aside from severe imbalances due to stray coupling to ground or in the coupling from source to R1-C1 and the "unknown" port. In this last regard, the principal culprit is found in the bridge's transformer and the very near connections shown by the layout (not a good idea). This is a rather fine point, one where accuracy is jeopardized, but the authors treat this project as a low accuracy (but adequate) device. Don't project problems of low noise amplitude until you build it.

It is a good begining, but the authors' conjecture that phase angle can be found is dreaming in technicolor with surround sound.

73's
Richard Clark, KB7QHC

5188. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 08:08:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C92FD9A.73E06E3B@eznec.com>
Source record: 146575

That's a really good point about the Statue of Liberty and corrosion. A good brief description of copper's reaction to the environment can be found at http://w3.gsa.gov/web/p/hptp.nsf/035c614b995c0406852565d1006211b3/f0c205eec8a1107a852565c50054b3f8?OpenDocument.
(You might have to paste this URL back together.)

The Statue of Liberty is covered with sheets of pounded copper, which might not be too pure. But the link above indicates that even pure copper should develop a relatively nonporous coating preventing further corrosion. How about this for a theory -- the wire flexes in the wind, constantly cracking the patina and letting salt water penetrate deeper?

Roy Lewallen, W7EL

Crazy George wrote:
>
> I can be a little more specific about Reg's comments. I don't know what the
> UK equivalent is, but either "Formvar(TM)" insulation, or nylon overcoated
> enamel insulation are extremely resistant to abrasion, and therefore will
> last a long time before the weather gets to the copper.
>
> On the other hand, I have a couple of observations: The Statue of Liberty
> wears a copper coat. I understand from reading in corrosion publications
> that it is not eroding, and the thickness does not decrease. Why not?
>
> Then, in 1990, I personally examined AWG 10 bare hard drawn copper wire
> which was installed in 1969 within sight of the Atlantic Ocean on the island
> of Puerto Rico as a backscreen for a DF set. Approximately 100 feet long
> pieces. Brown in color, and as close as we could measure with a standard
> micrometer, the same diameter as it started out. No general green
> corrosion, some spots. The ground mat was AWG 10 Copperweld (TM).
> Installed at the same time. Rust showing on cut ends, but as far as could
> be measured in the lab on pieces we extracted, still the same coating
> thickness as when manufactured. When the site was destroyed by hurricane
> Georges in 1999(?) (didn't look up my records), what was left of the wires
> looked the same as they had in 1990. Failure was poorly welded bolts
> holding the upper boards to the support poles, which were supposed to be
> single piece bolts anyway. Installer cheated and got away with it for 30
> years.
>
> I have seen stranded copper wire turn to green dust as Roy reports, but I
> always wonder if it started out as an alloy for flexibility?
>
> --

> Crazy George
> Remove NO and SPAM from return address

5189. Verticals over sloping terrain?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 09:31:38 UTC
From: k3bu@aol.com
Message-ID: <20020316043138.06415.00002517@mb-fi.aol.com>
Source record: 146576

I have been with verticals at the ocean front and seen the benefits.

I have this question about the verticals installed on the sloping terrain, like hillside. I wonder what the sloping hill would do to the vertical antenna performance.
What does it do to far field (Brewster) and radiation pattern at low angles?
Any practical experiences, measurements or clues from the terrain modeling out there?

Yuri, K3BU

5190. Re: Verticals over sloping terrain?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 11:03:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C93268D.1B6A88CA@eznec.com>
Source record: 146577

What you need is Brian Beezley's TA (Terrain Analysis) program. It takes as its input a free-space elevation pattern from EZNEC or from one of Brian's programs, lets you make the ground any shape you want, and tells you what the resulting pattern looks like. I've used it for several years to evaluate Field Day sites, and feel it's reasonably accurate. It's amazing how much field strength you can gain by picking the right location and placing your antenna at the best spot for the location. I think you can contact Brian at k6sti@n2.net.

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
>
> I have been with verticals at the ocean front and seen the benefits.
>
> I have this question about the verticals installed on the sloping terrain, like
> hillside. I wonder what the sloping hill would do to the vertical antenna
> performance.
> What does it do to far field (Brewster) and radiation pattern at low angles?
> Any practical experiences, measurements or clues from the terrain modeling out
> there?
>
> Yuri, K3BU

5191. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 11:51:00 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C9331A4.6BDE8104@coqui.net>
Source record: 146578

Crazy George wrote:
>

> On the other hand, I have a couple of observations: The Statue of Liberty
> wears a copper coat. I understand from reading in corrosion publications
> that it is not eroding, and the thickness does not decrease. Why not?

I think the layer of oxidation inhibits (not prevents) further
corrosion.
>
> Then, in 1990, I personally examined AWG 10 bare hard drawn copper wire
> which was installed in 1969 within sight of the Atlantic Ocean on the island
> of Puerto Rico as a backscreen for a DF set.

Here at my QTH, (about 1000' from the sea) copper is the one metal that
DOES last. Granted I don't have regular damp salt spray and its very
dry here.

I recall the electrical system in one of the small islands here. They
insisted on staying with copper conductors, even for house service
wires, until just a few years ago when pricing and outside consultants
(sri Geo) finally dragged them kicking and sceaming into the ACSR world.

5192. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 11:55:32 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c93300c_3@corp.newsgroups.com>
Source record: 146579

"Deni" <deni@gm3skn.fsnet.co.uk> wrote in message
news:a6tb6s$o5p$1@news5.svr.pol.co.uk...
> What is the current informed opinion on wire antenna materials? Wire and
> insulators?
> Solid copper versus stranded?
> 16 SWG copper. Covered or bare? If bare wire is used especially stranded
> does the inevitable corrosion on the copper strands cause any appreciable
> degradiation in perfomance?
> PVC or similar covering insulaton invariably fails somewhere and then of
> course water enters and unseen corrosion takes place!
> I wont even consider using any form of copperclad steel wires, bad
> experience with these!
> I have constructed many wire antennas in the past with whatever I had
> available but right now I want to fit and forget the 'Ultimate low loss
> Doublet' using the best materials I can get, it also has to be rugged to
> survive weather and wind. It's to be around 132' top with open wire line
> feed, probably home brew line as I hate that 450 ohm copper clad steel
> windowline stuff!
> Any comments or suggestions considered with much interest.
>
> 73, Deni, Gm3skn
> Shetland Islands UK

For shorter antennas say 80m and up. I've used the Low voltage cable used by
accent lighting companies , It looks like heavy duty zip cord but has a much
tuffer jacket. If you weather proof all the connections it seems to hold up
very well in a salt water enviroment. Drawback is it's kind of expensive.
and I don't know if it's available in the U.K.
73 Dave KC1DI

>
>

Outgoing mail is certified Virus Free.
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Version: 6.0.338 / Virus Database: 189 - Release Date: 3/14/02

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5193. Re: Verticals over sloping terrain?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 12:07:55 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C93359B.7624A56F@coqui.net>
Source record: 146580

Yuri Blanarovich wrote:
>
> I have been with verticals at the ocean front and seen the benefits.
>
> I have this question about the verticals installed on the sloping terrain, like
> hillside. I wonder what the sloping hill would do to the vertical antenna
> performance.
> What does it do to far field (Brewster) and radiation pattern at low angles?
> Any practical experiences, measurements or clues from the terrain modeling out
> there?
>
> Yuri, K3BU

I once had a 40m vertical with plenty of radials on a hillside
overlooking the sea. It was about 80' in elevation. It performed
superbly for long haul DX in the direction of the slope but was very
deaf on the backside. I imagine the hill completely blocked it.
-Bill

5194. Re: 50ohm Coax + 6:1 Transformer or 300ohm Balanced Feeder?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 12:08:09 UTC
From: JRW <freeboy@ic24.net>
Message-ID: <u96f4gs2ikst6d@corp.supernews.com>
Source record: 146581

Thanks Roy, I'll stick with the coax then. Of course, my ATU which has the 300ohm output must have a matching transformer to convert 50ohm into 300ohm anyway so there is no difference really.

Thanks,

John
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3C906521.32DF13F@eznec.com...
> If you've got a modern rig, you'll have to transform the impedance to 50
> ohms somewhere, either at the antenna or at the rig. A decent balun will
> have negligible loss, so that's not an issue. Your choice is to put the
> balun at the antenna and use coax, or put it at the transmitter and use
> twinlead. I'd use coax, simply because I don't have to keep it away from
> metal objects or the ground, I can coil it up, run it through walls, or
> whatever. It'll have less loss than the twinlead when it's wet outside
> -- but it's wet outside a lot around here, and the amount of loss you'll
> get in 20 feet probably won't be noticeable with either feedline, wet or
> dry, anyway. So it's really a toss. Neither choice will be significantly
> better or worse than the other.
>
> Roy Lewallen, W7EL
>
> JRW wrote:
> >
> > Hello,
> >
> > I have, on my computer, designed a triangular loop antenna with a
feedpoint
> > impedence of 300ohms. In the position I want to install this antenna I
have
> > another antenna which I want to remove. The old antenna is fed with
50ohm
> > coax.
> >
> > The new antenna has an impedence of 300ohm at the feedpoint, I could
> > therefore either feed it directly with 300ohm balanced line, or I could
use
> > the existing 50ohm coax feed with a 6:1 matching transformer OK?
> >
> > Would the two methods work as well as each other or would the 6:1
> > transformer have greater losses than a straighforward 300ohm feed? By
the
> > way, the coax is RG58 and the length of coax is about 20ft.
> >

> > The antenna is for 10m band and I intend to use a power of 10W PEP and
> > occasionally use 100W PEP.
> >
> > John

5195. Re: QUESTIONS on the noise generator in the ARRL's noise bridge circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 14:21:45 UTC
From: Pete Gianakopoulos <n.gianakopoulos@worldnet.att.net>
Message-ID: <ZxIk8.12622$tP2.1084008@bgtnsc05-news.ops.worldnet.att.net>
Source record: 146583
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

This might be a little off topic, but I have taken the broadband noise circuit from one of the other ARRL handbooks, and added enough gain after the diode. The result is a noise generator that will put out 0dBm from 10KHz to 1.3GHz, with a flat output across this range. I would be glad to share the circuit, along with board layouts to interested parties. What I use this circuit for is characterizing RF filters, along with a spectrum analyzer.

Pete Gianakopoulos KE9OA

Ian White, G3SEK <G3SEK@ifwtech.com> wrote in message news:l1Bf0PBELkk8EA$B@ifwtech.com...
> Jason Hsu wrote:
> >I have some questions regarding the noise generator for the noise
> >bridge circuit on page 27-25 in _The ARRL Antenna Book_ (layout at
> >http://www.arrl.org/notes/hbk-templates/rxbridge.pdf). As you can
> >see, the chief component of this is the NE555P chip
> >(http://focus.ti.com/docs/prod/folders/print/ne555.html,
> >http://www-s.ti.com/sc/ds/ne555.pdf).
> >
> >The book says that this noise generator produces a 50% duty-cycle
> >1000-Hz square wave signal. This signal is applied to the cathode of
> >the Zener diode and then sent on to the amplifier. So the NE555P chip
> >produces the white noise and the Zener diode seems to be the mechanism
> >on which this white noise is placed on a broadband RF carrier.
>
> The 555 produces a chopped DC supply to the zener (actually, avalanche)
> diode. The diode produces the broadband RF noise.
>
> > I
> >noticed that the port 4 (RESET) continuously receives 9V, presumably
> >to ensure that the chip constantly resets and doesn't get stuck in one
> >state (as some variation is needed to produce the pulses). Port 8, of
> >course, needs 9V in order to keep the digital elements (flip-flop,
> >BJT, and logic gates) running. Port 3, of course, is the output.
> >
> >I wish the book described this circuit in more detail. My questions:
> >1. What does the 6800-ohm resistor between the VCC port and the DISCH
> >port do? Does this influence the frequency of the white noise
> >generator?
> >2. What is the purpose of the 6800 ohm resistor and two 1N914 diodes
> >between the TRIG and DISCH ports? My guess is that it is part of a
> >feedback network used to generate the square wave.
>

> For information on how the 555 works, take a look at a
> practically-oriented electronics text such as 'The Art of Electronics'
> by Horowitz and Hill.
>
> >3. What is the purpose of the 1800 ohm resistor between port 3 and
> >the D3 Zener diode?
>
> To set the current through the diode, and also to act as an RF 'choke'.
>
> >4. How exactly does the D3 Zener diode modulate the output of the
> >noise generator onto a broad range of RF frequencies?
> >
> D3 *is* the broadband noise generator.
>
> --
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.com/g3sek

5196. Re: Digital Communications : Modulation Recognition and frequency spectrum

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 14:34:48 UTC
From: john_james@email.com
Message-ID: <237340ff.0203160634.13537db8@posting.google.com>
Source record: 146584
Cross-posted to:
comp.dsp,rec.radio.amateur.digital.misc,sci.electronics.basics,rec.radio.amateur.antenna,aus.radio.amateur.digital

jrayala@hotmail.com (Jitendra Rayala) wrote in message
news:<18a9fced.0203131345.3ca6f7cb@posting.google.com>...
> john_james@email.com (John) wrote in message
news:<237340ff.0203130651.245799d9@posting.google.com>...
> > Hi,
> > I am looking for a practical approach of modulation recognition of a
> > signal using its frequency spectrum. I need a practical approach but
> > any help in theoretical areas will be welcomed too.
> > Bests,
> > John
>
> John,
>
> If you are not too particular about algorithms based only on frequency
> spectrum, the following paper has a couple of algorithms using neural
> networks. The same authors also have a book on the subject (See the
> references). Hope this helps..
>
> A. K. Nandi and E. E. Azzouz, "Algorithms for Automatic Modulation
> Recognition of Communication Signals," IEEE Trans. on Communications,
> vol 46, pp 431-436 April 1998.
>
> Jitendra

Jitendra,

Thank you for your answer. I need just a practical approach, depending
on frequency or even time domain charactristics. It is not important
if it is automatic or not, but I need to discover the modulation type
of a given signal. At present I don't have access to the book but I
have the paper. Although I have not read it completely but I think it
is not so practical. Any way, thank you very much for your help.

John

5197. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 14:36:11 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C93585B.74FEDF9D@IEEE.org>
Source record: 146585

Roy Lewallen wrote:
> There are, unfortunately, two meanings of "takeoff angle". One is the
> elevation angle, as you say here. The other is as reported by EZNEC, and
> as you used it in your original posting, the elevation angle at which
> the pattern is maximum. When I say to ignore the takeoff angle, I mean
> to ignore the elevation angle at which the pattern is maximum.

Thanks Roy, I'll try to be careful with that term from now on.
--
cheers, CAM http://www.qsl.net/w5dxp

5198. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 14:39:42 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C93592E.2D0A32BC@IEEE.org>
Source record: 146586

-Your Friend Bill- wrote:
>
> Crazy George wrote:
> >
>
> > On the other hand, I have a couple of observations: The Statue of Liberty
> > wears a copper coat. I understand from reading in corrosion publications
> > that it is not eroding, and the thickness does not decrease. Why not?
>
> I think the layer of oxidation inhibits (not prevents) further
> corrosion.

There's a copper roofed house on the beach in Santa Cruz, CA.
--
cheers, CAM http://www.qsl.net/w5dxp

5199. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 16:54:36 UTC
From: the-boatman <the-boatman@lineone.net>
Message-ID: <3c9378b4_2@mk-nntp-1.news.uk.worldonline.com>
Source record: 146587

Hi Deni,
Copper is ok
But it does have its faults.
An alternative:
Go to a yacht riggers. Get 3mm stainless riging wire.
Most military antennas are made from this stuff now.
It is not over expensive. (more expensive than single strand copper)
You can get stainless steel crimp connectors for it.
Use stainless thimbles etc.
It will last forever. you can tension it very tight if you need to support
feed wire at the center of a dipole.
Regards Peter, G0LRP

"Deni" <deni@gm3skn.fsnet.co.uk> wrote in message
news:a6tb6s$o5p$1@news5.svr.pol.co.uk...
> What is the current informed opinion on wire antenna materials? Wire and
> insulators?
> Solid copper versus stranded?
> 16 SWG copper. Covered or bare? If bare wire is used especially stranded
> does the inevitable corrosion on the copper strands cause any appreciable
> degradiation in perfomance?
> PVC or similar covering insulaton invariably fails somewhere and then of
> course water enters and unseen corrosion takes place!
> I wont even consider using any form of copperclad steel wires, bad
> experience with these!
> I have constructed many wire antennas in the past with whatever I had
> available but right now I want to fit and forget the 'Ultimate low loss
> Doublet' using the best materials I can get, it also has to be rugged to
> survive weather and wind. It's to be around 132' top with open wire line
> feed, probably home brew line as I hate that 450 ohm copper clad steel
> windowline stuff!
> Any comments or suggestions considered with much interest.
>
> 73, Deni, Gm3skn
> Shetland Islands UK
>
>

5200. Re: Switchable amplifiers WITHOUT stray capacitance/inductance

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 17:07:25 UTC
From: blackm00@cam.org
Message-ID: <6447bcd3.0203160907.4fe06733@posting.google.com>
Source record: 146588
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

jason_hsu@my-deja.com (Jason Hsu) wrote in message
news:<f7d9a152.0203152058.d5a6e84@posting.google.com>...
> I would like to build a modified version of the SWR noise bridge shown
> on page 27-25 of _The ARRL Antenna Book_. The schematic is available
> at http://www.qsl.net/wq1rp/noisebrg.htm, as the New England QRP group
> sells a kit.
>
> One of the modifications I would like to make is an extra RF
> amplifier. More forward power means more reflected power given the
> same SWR. I want the noise from the noise bridge to be stronger
> relative to RF picked up by the antenna, because noise spikes or
> strong signals can foil my attempts to minimize the SWR on 80m and
> 40m.
>
> At the same time, I would like this extra power to be OPTIONAL so that
> I don't have to waste the battery. This requires use of a switch.
>
> However, I understand that the variable resistor and capacitor in the
> original design of this circuit are sources of stray capacitance and
> inductance. Would using a switch have a similar effect? If so, what
> would it take to minimize this?
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

You really need to understand how the noise bridge works, before you
start modifying it.

You have a bridge, consisting of T1, C1/C2, and R1. Your receiver is
the level indicator. You have an unknown impedance, which would often
be the antenna. And you need a signal source.

You can read up on bridges, in books like the ARRL Handbook. The
basics is the same as a resistive bridge, though in the case of the noise
bridge you are dealing with more complex components.

But the basic idea is that by adjusting one leg of the bridge, you balance
it with the leg with the unknown impedance. When the level indicator
is at it's mimimum, you have balance. Since you can calibrate the
components in the bridge, then you can read from them the value of the
unknown impedance.

I passed over the signal source, deliberately. You want a signal
at the frequency where you are operating. If you go looking, you will

find this sort of bridge with the signal source being a low power transmitter, or even the station transmitter. The problem with this is that you need to retune it as you move in frequency; this may mean a bandswitching unit if the signal source is built into the bridge, and unless you put a lot of effort into it, you'll have to keep retuning things in order to keep the signal in the passband of the receiver.

So at one point, someone came up with the idea of a white noise source as the signal source. It puts out more or less constant level signal throughout a large slice of spectrum, so you don't need to retune the signal source.

As for the level indicator, I'm sure if you looked, you'd find similar bridges that used things other than the station receiver. But the usual ham does have a receiver, so it saves costs. Otherwise, you'd need to build up some sort of sensitive level indicator.

Take a look at the 2001 ARRL Handbook, there's a different noise bridge in there. The circuit is probably in other recent editions. You will find the same basic circuit, but with a different implementation. The bridge portion is the same. But it uses an IC to amplify the noise generator, which is a zener diode like the one in the Antenna book. The significant difference is that the noise source is not modulated. (In one of these threads of yours, someone suggested modulating the noise source to help in finding the null. That's what the 555 in the Antenna book schematic is doing.)

And a noise bridge has nothing to do with adjusting SWR. It's a piece of test equipment for measuring the impedance of the antenna (or some other device). The variable R and C are your readouts. The only thing you can adjust to improve things is by fiddling with the actual antenna.

Michael VE2BVW

5201. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 17:34:39 UTC
From: Dave Holford <holford@sympatico.ca>
Message-ID: <3C93822F.345A88FF@sympatico.ca>
Source record: 146589

Phosphor Bronze is commonly used for non-insulated naval antennas due to its corrosion resistance. The only reason for insulating it is to protect against precipitation static, which is not really needed if only used for transmitting.

More details can be found in "Shipboard Antennas" by Presont E. Law Jr.. published by Artech House Inc. (sorry I don't have the ISBN). And, I am sure there are other publications on the subject of antenna materials in corrosive atmospheres.

Regards
Dave Holford
VE3HLU

Crazy George wrote:
>
> I can be a little more specific about Reg's comments. I don't know what the
> UK equivalent is, but either "Formvar(TM)" insulation, or nylon overcoated
> enamel insulation are extremely resistant to abrasion, and therefore will
> last a long time before the weather gets to the copper.
>
> On the other hand, I have a couple of observations: The Statue of Liberty
> wears a copper coat. I understand from reading in corrosion publications
> that it is not eroding, and the thickness does not decrease. Why not?
>
> Then, in 1990, I personally examined AWG 10 bare hard drawn copper wire
> which was installed in 1969 within sight of the Atlantic Ocean on the island
> of Puerto Rico as a backscreen for a DF set. Approximately 100 feet long
> pieces. Brown in color, and as close as we could measure with a standard
> micrometer, the same diameter as it started out. No general green
> corrosion, some spots. The ground mat was AWG 10 Copperweld (TM).
> Installed at the same time. Rust showing on cut ends, but as far as could
> be measured in the lab on pieces we extracted, still the same coating
> thickness as when manufactured. When the site was destroyed by hurricane
> Georges in 1999(?) (didn't look up my records), what was left of the wires
> looked the same as they had in 1990. Failure was poorly welded bolts
> holding the upper boards to the support poles, which were supposed to be
> single piece bolts anyway. Installer cheated and got away with it for 30
> years.
>
> I have seen stranded copper wire turn to green dust as Roy reports, but I
> always wonder if it started out as an alloy for flexibility?
>
> --
> Crazy George

> Remove NO and SPAM from return address
>
> Deni <deni@gm3skn.fsnet.co.uk> wrote in message
> news:a6tb6s$o5p$1@news5.svr.pol.co.uk...
> > What is the current informed opinion on wire antenna materials? Wire and
> > insulators?
> > Solid copper versus stranded?
> > 16 SWG copper. Covered or bare? If bare wire is used especially stranded
> > does the inevitable corrosion on the copper strands cause any appreciable
> > degradiation in perfomance?
> > PVC or similar covering insulaton invariably fails somewhere and then of
> > course water enters and unseen corrosion takes place!
> > I wont even consider using any form of copperclad steel wires, bad
> > experience with these!
> > I have constructed many wire antennas in the past with whatever I had
> > available but right now I want to fit and forget the 'Ultimate low loss
> > Doublet' using the best materials I can get, it also has to be rugged to
> > survive weather and wind. It's to be around 132' top with open wire line
> > feed, probably home brew line as I hate that 450 ohm copper clad steel
> > windowline stuff!
> > Any comments or suggestions considered with much interest.
> >
> > 73, Deni, Gm3skn
> > Shetland Islands UK
> >
> >

5202. Icom AH-4 autotuner and non-Icom transceivers?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 18:10:39 UTC
From: ATD <capt-tripps@comcast.net>
Message-ID: <3C938A9E.EC83283D@comcast.net>
Source record: 146590
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Is there an interface available that lets one use the AH-4 tuner with other transceivers?

TIA

Andy N3LCW

5203. Re: Switchable amplifiers WITHOUT stray capacitance/inductance

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 18:26:43 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203161026.2f648b2c@posting.google.com>
Source record: 146591
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

NOTE: My version of the noise bridge will NOT have the variable resistor and capacitor that the original has. I will operate it by hooking it up, adjusting the antenna for minimum SWR for resonance, and then making any additional adjustments (if necessary) with my tuner.

In other words, the purpose of my noise bridge is to tune the antenna WITHOUT using the transmitter. My noise bridge will be more like the MFJ-212 Matchmaker (http://www.mfjenterprises.com/products.php?prodid=MFJ-212), which does not have the resistance and reactance dials.

Jason Hsu, AG4DG
jason_hsu_802701@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

5204. Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 19:33:48 UTC
From: Ken Linder <radstream@lvcm.com>
Message-ID: <u977h8atpo145a@corp.supernews.com>
Source record: 146592

Well, of all days, it is actually snowing and raining today in the foothills of Las Vegas. 'Great,' I think to my self. No yard work, can't wash the car, wife is playing bingo and daughter is at a friend's house. Perfect day for ham radio. The night before, I had plugged my antenna coax into a grounding block because of the possibility of thunderstorms. When I unplugged it from the block, electricity arced over to it. I quickly released the plug & dropped it on the table! I could hear the thing sizzling with electricity. I carefully picked it up by the coax so as not to be jolted and brought it closer to the grounding block. At about one inch away from the block, electricity was visibly arcing over from the center connector to ground. After about 15 minutes it stopped, then started again. I decided this be a better computer day than ham day! I am glad I didn't have it plugged in to my radio!

Has anyone else experienced this? Any idea what this might be from? It is an older HF6V with a very new CPK (Capacitive Counterpoise Kit). I operated this antenna for years with radials and never had this happen, although I do know that in that configuration the entire system operates at DC ground. With the CPK, neither the antenna or CPK operate at ground, their voltage floats... I guess that is partially how it tunes the antenna without radials.

Comments? Thoughts?? Have I found a new power source I could sell??? :-)

73s
Ken Linder
KC7RAD
www.radstream.com

5205. Stupid question on ferrite antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 19:48:04 UTC
From: stephendeese@hotmail.com
Message-ID: <25cad608.0203161148.1cd64b06@posting.google.com>
Source record: 146593

I have been wanting to build a 60Khz ferrite antenna (WWVB) but have very little experience on the RF side of electronics.

I am assuming that ferrite antennas are simply a LC circuit, with very high Q and tuned for 60khz (in this case). I took apart a Radio Shack atmoic clock and examined the antenna. My question is this.... How can I build a better antenna?

I suppose that there could be many combinations of L and C that would give you the same Q at 60khz. Therefore, does the antenna's ouput become stronger with the use of larger values (i.e. large ferrite rod, L and C)?

I have physical room in my application for the antenna to be 2 - 3 x larger than the Radio Shack (approx. 2 in long) antenna.

Any suggestions? And good books that cover this kind of thing (I am currently reading RF Circuit Design by Chirst Bowick.... which looks good)?

Again, thanks for ANY help on this. I realize that this is a very ingnorant question.

Thanks and May God richly bless you in every way (in Chirst)
Stephen

5206. Re: Verticals over sloping terrain?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 19:50:41 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <4b279ust8lu1bcb4ru20au4scgtgrbsh5h@4ax.com>
Source record: 146594

On 16 Mar 2002 09:31:38 GMT, k3bu@aol.com (Yuri Blanarovich) wrote:

>I have been with verticals at the ocean front and seen the benefits.
>
>I have this question about the verticals installed on the sloping terrain, like
>hillside. I wonder what the sloping hill would do to the vertical antenna
>performance.
>What does it do to far field (Brewster) and radiation pattern at low angles?
>Any practical experiences, measurements or clues from the terrain modeling out
>there?
>
>
>Yuri, K3BU

Hi Yuri,

The Brewster angle is unaffected by such considerations. This is a characteristic of the far ground seen from the radiator at shallow, depressed angles (from the current maxima). Having a hilltop vantage only forces that angle's strike point out to a more distant geography; it is the soil (or sea water) characteristic at THAT point that will determine what the Brewster angle is and if you will encounter absorption or reflection.

Let's put it another way. If you were to presume a uniform soil characteristic; then that characteristic's Z in relation to the Z of free space dictates at what angle (the Brewster angle) where the critical changeover from absorption to reflection takes place. If you raise the origin of the ray (the straight line from the current maxima to the strike point at ground), you extend where the strike point occurs. If the ground characteristic imposes a Brewster angle of 5ï¿½ (we should all be so lucky); then a 5ï¿½ depression will strike ground further away if the origin of the ray is raised.

Of course, this can be used to advantage if you have the flexibility in adjusting the current maxima's height (through either the selection of quarterwave or halfwave or 5/8 radiator OR simply raising the radiator). The peak of hill would be suitable, if its slope falls away faster than that same 5ï¿½ depression. One side benefit is that local ground at a peak or ridge pulls lossy ground away from the near fields; hence less loss. This, too, affects the low angle of the lobe, and all angles for that matter.

I've assembled a shorthand of various conditions to illustrate:

strike point terrain DC Zc Brewster angle

heavily wooded land 2 266 40ï¿½
poor soil 4 190 25ï¿½
good soil 30 65 9ï¿½
undrained soil 80 40 6ï¿½
lake/sea 80 10-20 1.5ï¿½-5ï¿½

The principal gain of sea-side conditions is in the enormous impedance mismatch between it and free space (a SWR of nearly 40:1) that all but guarantees total reflection (until that critical angle is achieved, of course - which abnegates the mismatch). The discussion above is derived from material in Bailey's "TV and Other Receiving Antennas" and various other sources for some numbers.

73's
Richard Clark, KB7QHC

5207. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 20:06:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C93A5AC.84FF893A@eznec.com>
Source record: 146595

I hadn't realized that elevating the radials could make such a substantial difference in the gain and pattern. But it sure looks like that's what's really happening. Thanks very much for sending the file and giving me the opportunity to learn something new.

Roy Lewallen, W7EL

5208. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 20:20:01 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <o2979usqs0rns89ccdv15go359pq9ofujd@4ax.com>
Source record: 146596

On Sat, 16 Mar 2002 04:28:50 GMT, Bob Miller <bamiller@texas.net>
wrote:

>
>It makes me wonder, then, what the communications guys use for dipoles on the
>big ocean liners, military ships, etectera that are constantly exposed to marine
>atmospherics. Might be something you could research on Google. (I'm currently
>reading "The French Atlantic Affair," about a ham who sneaks his transceiver
>aboad an ocean liner, and strings up a 20 meter dipole. Fascinating stuff.)
>
>Bob
>k5qwg

Hi Bob,

Having been a teacher to Navy Electronics techs in ET "A" school (A3N
branch, Communications) I would offer there are few dipoles aboard
ships (aside from ship-to-ship VHF/UHF). All radiating surfaces were
painted (this conforms to the service maxim that if it moves, salute
it; if it does not move, pick it up; if it weighs too much, paint it).

However, this is not true historically. On my wall is the photograph
of a line of pre WWII battleships entering Puget Sound. The photo was
taken from the signal bridge or fire control director looking back
over the aft gun turrets. In this photo are seen the far points of
two large for/aft dipoles each developed from 6 wires in a cage
configuration. There is little advantage to horizontal antennas in a
mobile configuration during war - in fact it would be quite a
detriment (the VHF/UHF dipoles were mounted vertically).

73's
Richard Clark, KB7QHC, ET1

5209. FS: Celwave VHF BA1010-1 Omni Fiberglass Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 20:22:42 UTC
From: wickedlittlecritter@msn.com
Message-ID: <1404fdf3.0203161222.50849288@posting.google.com>
Source record: 146597
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf,alt.ham-radio.marketplace

This antenna was used for several years under moderate load (100-200
watts). This unit has been in storage since it was taken out of
service and replaced with a directional unit in late 1998. Sold as is,
not tested since it was removed from service in perfect working order.
$50 OBO.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1713202648

5210. Re: Switchable amplifiers WITHOUT stray capacitance/inductance

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 20:50:29 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <tpa79ucgd1g9bu0p62ajc3pf37rvj2rllg@4ax.com>
Source record: 146598
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On 16 Mar 2002 10:26:43 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>NOTE: My version of the noise bridge will NOT have the variable
>resistor and capacitor that the original has. I will operate it by
>hooking it up, adjusting the antenna for minimum SWR for resonance,
>and then making any additional adjustments (if necessary) with my
>tuner.
>
>In other words, the purpose of my noise bridge is to tune the antenna
>WITHOUT using the transmitter. My noise bridge will be more like the
>MFJ-212 Matchmaker (http://www.mfjenterprises.com/products.php?prodid=MFJ-212),
>which does not have the resistance and reactance dials.
>
>Jason Hsu, AG4DG

Hi Jason,

You WILL NOT have R1-C1? It will not be a bridge then. These are (in
order) the reference and compensation for stray capacitance seen at
the "unknown" port; without them, you will never see a balance. Such
sweeping design changes will devastate the circuit, much less
eliminate any chance of accuracy (even for amateur work).

R1-C1 are not user controls in the first place, so you have missed the
intent of the previously suggested design. In other words, the two
designs you've offered are much more alike than dissimilar.

As a matter of practical design consideration, can you present us with
a schematic of the stripped down design of either bridge circuit? It
should reveal ONLY the principal components (black boxes for source
and detector are suitable here for simplicity's sake). Your
discussion through several threads suggests you are not familiar with
bridge topography and this ï¿½tude would be beneficial (and necessary).

73's
Richard Clark, KB7QHC

5211. Re: Stupid question on ferrite antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 21:26:08 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a70dbc$h17cd$1@ID-124126.news.dfncis.de>
Source record: 146599

The ferrite rod antenna is the most inefficient of all small antennas.

The larger its volume the less inefficient it becomes.

Don't worry about Q. What you are really interest in is extracting the maximum amout of RF power from the 'ether' and injecting it into the receiver's first transistor with minimum amount of loss in the antenna itself.

The basic ferrite antenna is just a coil wound on the rod with a tuning capacitor in parallel with it. It is best not directly connected to anything else.

There is another coil with relatively very few turns wound on top of or alongside the main coil. This is a coupling coil which couples the main coil to the first transistor. The two coils behave as an impedance-matching step-down transformer.

For a single frequency receiver such as 60 KHz just wind a lot of turns, a few hundred?, on the insulated rod and then find a siutable fixed value of tuning capacitor. Use a junked rod from a medium or longwave transistor radio. You could possibly retain the same winding with a much larger fixed tuning capacitance.

For starters, on the coupling coil try 1/20th of the turns on the main coil and connect it to the base of the first transistor.

To minimise loss in the wire of the main coil us Litz wire. Litz consists of many specially woven very fine wires, separately insulated, all connected in parallel. But Litz is not essential.

If you can't find much to read about ferrite antennas in the books then that's because they are so simple there's hardly anything to write about.

A note on receiving efficiency and antenna size - For an antenna to be very efficient, say greater than 70 or 80 percent, its largest dimension must very roughly be at least 1/3 of the wavelength of the frquency it is intended to receive.

The wavelength of 60 KHz is 5 kilometres or 3 miles.

A 6-inch ferrite rod is 1/32,000 ths of a wavelength so don't expect very much from it unless the transmitter is very high power. A 3-feet square multi-turn loop (no ferrite) is a much better proposition for long distance long-wave reception.

With a 200-feet inverted-L wire antenna and a good ground you will be getting somewhere.

Make the receiver first.

Have fun !

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

stevo <stephendeese@hotmail.com> wrote in message
news:25cad608.0203161148.1cd64b06@posting.google.com...
> I have been wanting to build a 60Khz ferrite antenna (WWVB) but have
> very little experience on the RF side of electronics.
>
> I am assuming that ferrite antennas are simply a LC circuit, with very
> high Q and tuned for 60khz (in this case). I took apart a Radio Shack
> atmoic clock and examined the antenna. My question is this.... How
> can I build a better antenna?
>
> I suppose that there could be many combinations of L and C that would
> give you the same Q at 60khz. Therefore, does the antenna's ouput
> become stronger with the use of larger values (i.e. large ferrite rod,
> L and C)?
>
> I have physical room in my application for the antenna to be 2 - 3 x
> larger than the Radio Shack (approx. 2 in long) antenna.
>
> Any suggestions? And good books that cover this kind of thing (I am
> currently reading RF Circuit Design by Chirst Bowick.... which looks
> good)?
>
> Again, thanks for ANY help on this. I realize that this is a very
> ingnorant question.
>
> Thanks and May God richly bless you in every way (in Chirst)
> Stephen

5212. Re: 2 Element HB9CV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 21:56:22 UTC
From: Monitor <armani.uk++@ntlworld.com>
Message-ID: <8cPk8.12192$w65.2192746@news6-win.server.ntlworld.com>
Source record: 146600
Cross-posted to: rec.radio.amateur.antenna,alt.radio.scanner.uk,alt.ham-radio.vhf-uhf

"Steve" <steve@nospamstevego.demon,co.uk> wrote in message
news:1016132556.20025.0.nnrp-10.c2de4585@news.demon.co.uk...
> Can anyone recommend where I can either buy, in the UK, (or get plans to
> make) a 2 element HB9CV antenna for 430MHz or 70cms?
>
> Thanks
>
>
>

Put 'hb9cv uk' into Google.
It gives many useful links.
Dave

5213. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 22:20:10 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C93C51A.95A9C0FC@IEEE.org>
Source record: 146601

Roy Lewallen wrote:
> I hadn't realized that elevating the radials could make such a
> substantial difference in the gain and pattern. But it sure looks like
> that's what's really happening. Thanks very much for sending the file
> and giving me the opportunity to learn something new.

I had always heard that elevating the radials to 1/2WL would drastically
improve the low angle radiation. According to that model, tain't so.
With the radials at 20ft, the maximum gain is 0.13dB at 18 degrees.
With the radials at 60ft, the low angle gain is -0.52dB at 13 degrees.
At 60 ft, the maximum gain is 1.83 at 47 degrees. The low angle radiation
with the radials at 1/2WL is 0.65dB less than with the radials at 1/6WL.
That's why I chose 20ft for the height of my radials.
--
cheers, CAM http://www.qsl.net/w5dxp

5214. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 22:26:36 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C93C69C.5D0F847A@IEEE.org>
Source record: 146602

Ken Linder wrote:
> Has anyone else experienced this? Any idea what this might be from?

Of course. It's simple static electricity. When I lived in the Phoenix
area, windstorms caused my G5RV coax connector to arc once every few
seconds until I woke up and thought it might set my carpet on fire. I
hear snow can cause the same thing but I don't have much experience
with snow.
--
cheers, CAM http://www.qsl.net/w5dxp

5215. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 23:01:07 UTC
From: Ken Linder <radstream@lvcm.com>
Message-ID: <u97jmecg4bf9e3@corp.supernews.com>
Source record: 146603

That's what I thought but darn... I have never seen static electricity jump
that far!

Thanks & 73s
Ken

"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C93C69C.5D0F847A@IEEE.org...
> Ken Linder wrote:
> > Has anyone else experienced this? Any idea what this might be from?
>
> Of course. It's simple static electricity. When I lived in the Phoenix
> area, windstorms caused my G5RV coax connector to arc once every few
> seconds until I woke up and thought it might set my carpet on fire. I
> hear snow can cause the same thing but I don't have much experience
> with snow.
> --
> cheers, CAM http://www.qsl.net/w5dxp

5216. TGM Hybrid Quad Poor F/B Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 23:01:14 UTC
From: rons533@dejazzd.com
Message-ID: <3C93CE73.5994@dejazzd.com>
Source record: 146604

I just installed the TGM MQ-2 6 Band Hybrid Quad mini beam antenna with the Centaur 1:1 balun. The antenna seems to be working fine as far as signal strength is concerned over my vertical but I don't notice much difference in F/B Ratio and not much difference when I put the side to a station. SWR is right on for all bands as per instructions. I suspect it may be the balun. Should the problem be worse without the balun? If you are using no balun or another brand of 1:1 balun I would be interested in your observations and hearing what you see in F/B and side lobe? Don't get me wrong, I like the antenna very much but I want to improve upon what I have.

Ron
k3szy

5217. Re: Icom AH-4 autotuner and non-Icom transceivers?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 23:17:33 UTC
From: Leland Cox <lcox107nospam@comcast.net>
Message-ID: <3C93D31D.1030009@comcast.net>
Source record: 146605
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Andy,
The AH-3 and AH-4 antenna tuners can be used with any radio. The AH-4 will tune ant time it detects a high SWR. Look at the mods for the Icom 706 and somewhere it will explain the plug on the back of the rig and the way to make a tuner simulator plug.

An interface would be a simple power switch to the tuner.

Be sure any rig you connect has less than 10 Watts output when the tuner is tuning!

Sorry I do not have time to get you the info, but I am going out of town tomorrow, be back next weekend!

73 Les, AA4F

ATD wrote:

> Is there an interface available that lets one use the AH-4 tuner with
> other transceivers?
>
> TIA
>
> Andy N3LCW
>

5218. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 23:19:45 UTC
From: Leland Cox <lcox107nospam@comcast.net>
Message-ID: <3C93D3A5.8000906@comcast.net>
Source record: 146606

I think I would ground something!!!!!!!!

Les, AA4F

Ken Linder wrote:

> That's what I thought but darn... I have never seen static electricity jump
> that far!
>
> Thanks & 73s
> Ken
>
> "CAM" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3C93C69C.5D0F847A@IEEE.org...
>
>>Ken Linder wrote:
>>
>>>Has anyone else experienced this? Any idea what this might be from?
>>>
>>Of course. It's simple static electricity. When I lived in the Phoenix
>>area, windstorms caused my G5RV coax connector to arc once every few
>>seconds until I woke up and thought it might set my carpet on fire. I
>>hear snow can cause the same thing but I don't have much experience
>>with snow.
>>--
>>cheers, CAM http://www.qsl.net/w5dxp
>>
>
>

5219. Re: Icom AH-4 autotuner and non-Icom transceivers?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 23:41:18 UTC
From: ATD <capt-tripps@comcast.net>
Message-ID: <3C93D7A4.591A5863@comcast.net>
Source record: 146607
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Thanks Leland, I'll search for the mod.

I'd appreciate any hints where I can find this mod.

TIA

Andy N3LCW

Leland Cox wrote:
>
> Andy,
> The AH-3 and AH-4 antenna tuners can be used with any radio. The AH-4
> will tune ant time it detects a high SWR. Look at the mods for the Icom
> 706 and somewhere it will explain the plug on the back of the rig and
> the way to make a tuner simulator plug.
>
> An interface would be a simple power switch to the tuner.
>
> Be sure any rig you connect has less than 10 Watts output when the tuner
> is tuning!
>
> Sorry I do not have time to get you the info, but I am going out of town
> tomorrow, be back next weekend!
>
> 73 Les, AA4F
>
>

5220. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-16 23:50:57 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <a70lp2$htcgi$1@ID-52642.news.dfncis.de>
Source record: 146608

You bet snow can do it. I've held my coax 1.5 inches from a ground rod and watched the center conductor arc to a ground rod about every 15 secs or so during a heavy wet snow. 73

--
hasan schiers, N0AN

schiers@netins.net
or use amsat.org or arrl.net remailer
"CAM" <Cecil.A.Moore@IEEE.org> wrote in message
news:3C93C69C.5D0F847A@IEEE.org...
> Ken Linder wrote:
> > Has anyone else experienced this? Any idea what this might be from?
>
> Of course. It's simple static electricity. When I lived in the Phoenix
> area, windstorms caused my G5RV coax connector to arc once every few
> seconds until I woke up and thought it might set my carpet on fire. I
> hear snow can cause the same thing but I don't have much experience
> with snow.
> --
> cheers, CAM http://www.qsl.net/w5dxp

5221. If the MFJ-212 Matchmaker is not a noise bridge, then what is it?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 00:23:48 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203161623.60757301@posting.google.com>
Source record: 146609
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

http://www.mfjenterprises.com/products.php?prodid=MFJ-212

Jason Hsu, AG4DG
jason_hsu_802701@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

5222. Re: If the MFJ-212 Matchmaker is not a noise bridge, then what is it?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 00:28:08 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <jno79u46to0fhhke01448k08skmsuq50ua@4ax.com>
Source record: 146610
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On 16 Mar 2002 16:23:48 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>http://www.mfjenterprises.com/products.php?prodid=MFJ-212
>
>Jason Hsu, AG4DG

Why do you presume it is not?

73's
Richard Clark, KB7QHC

5223. Re: TGM Hybrid Quad Poor F/B Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 02:33:17 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C93FF5C.BD4A5A38@gte.net>
Source record: 146611

rons533@dejazzd.com wrote:

> I just installed the TGM MQ-2 6 Band Hybrid Quad mini beam antenna with
> the Centaur 1:1 balun. The antenna seems to be working fine as far as
> signal strength is concerned over my vertical but I don't notice much
> difference in F/B Ratio and not much difference when I put the side to a
> station. SWR is right on for all bands as per instructions. I suspect it
> may be the balun. Should the problem be worse without the balun? If you
> are using no balun or another brand of 1:1 balun I would be interested
> in your observations and hearing what you see in F/B and side lobe?
> Don't get me wrong, I like the antenna very much but I want to improve
> upon what I have.
>
> Ron
> k3szy

Hi Ron,
Unless the balun is not functioning as a balun and allowing p/u from the coax shield, it cannot affect the antenna's pattern- just the match.

Dale W4OP

5224. Re: Verticals over sloping terrain?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 02:37:44 UTC
From: k3bu@aol.com
Message-ID: <20020316213744.24440.00000086@mb-ch.aol.com>
Source record: 146612

>
>What you need is Brian Beezley's TA (Terrain Analysis) program. It takes
>as its input a free-space elevation pattern from EZNEC or from one of
>Brian's programs, lets you make the ground any shape you want, and tells
>you what the resulting pattern looks like. I've used it for several
>years to evaluate Field Day sites, and feel it's reasonably accurate.
>It's amazing how much field strength you can gain by picking the right
>location and placing your antenna at the best spot for the location. I
>think you can contact Brian at k6sti@n2.net.
>
>Roy Lewallen, W7EL

Thanks Roy,
I have his AO, I was going to find out about TA, if it would apply to verticals over real and sloping ground.
I am in the process of populating abt 140 acres with antennas, we have a ridge sloping south, so I am curious how would fixed vertical arrays perform on the slopes. Attenuation in the back is welcome. Just curious how close, if possible at all, it is to get to the sea side effects.
I will have an option to utilize the terrain to enhance antenna performance, so it would be interesting to play with some vertical curtains, etc.
If TA can answer some of these questions, I will go for it.

73 Yuri

5225. Re: Verticals over sloping terrain?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 02:40:02 UTC
From: k3bu@aol.com
Message-ID: <20020316214002.24440.00000089@mb-ch.aol.com>
Source record: 146613

>
>I once had a 40m vertical with plenty of radials on a hillside
>overlooking the sea. It was about 80' in elevation. It performed
>superbly for long haul DX in the direction of the slope but was very
>deaf on the backside. I imagine the hill completely blocked it.
>-Bill
>
>
>

That's great, we need ridge like that in the middle of the ocean. But now that I am looking at inland QTH I wonder how much benefit will it have to be on sloping hill. I guess I will try TA and plant some stuff, so I don't have to claim the tower or shear my fingers with crankup :-)

Yuri

5226. Re: TGM Hybrid Quad Poor F/B Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 03:50:40 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020316225040.24736.00002768@mb-mv.aol.com>
Source record: 146614

I don't find the front to back very dramatic, especially on 20 meters. Seems better on the higher bands, but that is to be expected with the shortened design. The front to side should be plenty noticable though. How high are you mounted? Maybe you are to close to the ground?
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

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5227. Re: Stupid question on ferrite antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 03:55:05 UTC
From: tdonaly@cs.com
Message-ID: <20020316225505.19781.00001860@mb-cc.news.cs.com>
Source record: 146615

Stephen wrote,
>
>I have been wanting to build a 60Khz ferrite antenna (WWVB) but have
>very little experience on the RF side of electronics.
>
>I am assuming that ferrite antennas are simply a LC circuit, with very
>high Q and tuned for 60khz (in this case). I took apart a Radio Shack
>atmoic clock and examined the antenna. My question is this.... How
>can I build a better antenna?
>
>I suppose that there could be many combinations of L and C that would
>give you the same Q at 60khz. Therefore, does the antenna's ouput
>become stronger with the use of larger values (i.e. large ferrite rod,
>L and C)?
>
>I have physical room in my application for the antenna to be 2 - 3 x
>larger than the Radio Shack (approx. 2 in long) antenna.
>
>Any suggestions? And good books that cover this kind of thing (I am
>currently reading RF Circuit Design by Chirst Bowick.... which looks
>good)?
>
>Again, thanks for ANY help on this. I realize that this is a very
>ingnorant question.
>
>Thanks and May God richly bless you in every way (in Chirst)
>Stephen
>

Hi Stephen,
there is a book by the late Doug Demaw entitled
Ferromagnetic - Core Design and Application Handbook that you
may still be able to get from the ARRL. My copy was published by
the MFJ Publishing Co., Inc. of Starkville MS 39759. You might want
to contact them. You might also want to get the AMIDON, INC. book
from Amidon or Bytemark if it's still available. These books will help
you with the specifics. Try the Radio Shack antenna. If it works you
won't need anything else.

Tom Donaly KA6RUH

(P.S. Don't trust anyone who tells you you can cut a ferrite antenna
to size with a hack saw.)

5228. Heathkits

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 04:27:16 UTC
From: Gary <gary@heathkits.com>
Message-ID: <EWUk8.20908$P4.1850484@newsread2.prod.itd.earthlink.net>
Source record: 146616

```
Want to know more about Heathkits? Visit http://www.heathkits.com
lots of pictures and specs of your favorite Heathkit
```

--
Gary KIMJ 45 years of Heathkit fun http://www.heathkits.com

5229. Re: Verticals over sloping terrain?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 04:38:47 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C941DD7.AF0C69C4@coqui.net>
Source record: 146617

Yuri Blanarovich wrote:

>
> That's great, we need ridge like that in the middle of the ocean. But now that
> I am looking at inland QTH I wonder how much benefit will it have to be on
> sloping hill. I guess I will try TA and plant some stuff, so I don't have to
> claim the tower or shear my fingers with crankup :-)
>
> Yuri

My QTH was in the middle of the ocean. We've made contacts with you
(VP2EXX, etc). Truly, the norm was 20db+ pileups with JAs in the
mornings...even running QRP. Often, working by call areas wasn't
sufficient...I often went A, B, C (a la Father Moran) with the JAs.
Switching to a dipole resulted into 'barely audible'.
All that being said, the vertical was no good in any other direction.
It was one of those lucky combinations that worked.
-Bill

5230. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 05:04:41 UTC
From: Ken Linder <radstream@lvcm.com>
Message-ID: <u988vo1s77lnf6@corp.supernews.com>
Source record: 146618

When I am not using it, I move the antenna coax to a grounding block, but acording to the instructions for the CPK, no part of the antenna is supposed to be run to DC ground. Of course, a standard radial set-up with a HF6V would have the whole thing grounded to DC. Makes me a little worried operating with it now... :-/

73s
Ken

"Leland Cox" <lcox107nospam@comcast.net> wrote in message news:3C93D3A5.8000906@comcast.net...
> I think I would ground something!!!!!!!!
>
> Les, AA4F
>
> Ken Linder wrote:
>
> > That's what I thought but darn... I have never seen static electricity jump
> > that far!
> >
> > Thanks & 73s

5231. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 07:24:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C9444C0.8C5FC50B@eznec.com>
Source record: 146519

When I lived in Denver, my coax connector would often arc when a thunderstorm was approaching. 30-foot high antennas would audibly fizzle and crackle. I recall once having the center conductor of the feedline to my 8 foot mobile whip arc through the car's floor insulation to the floorboard. It also could be heard sizzling and crackling. Static would arc across a tuner's wide-spaced variable capacitor on Field Day. It's common in some parts of the country. Here in Oregon's Willamette valley, we might have a couple of lightning bolts within sight or hearing distance in a year, and never that kind of static discharge.

Roy Lewallen, W7EL

Ken Linder wrote:
>
> That's what I thought but darn... I have never seen static electricity jump
> that far!
>
> Thanks & 73s
> Ken
>
> "CAM" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3C93C69C.5D0F847A@IEEE.org...
> > Ken Linder wrote:
> > > Has anyone else experienced this? Any idea what this might be from?
> >
> > Of course. It's simple static electricity. When I lived in the Phoenix
> > area, windstorms caused my G5RV coax connector to arc once every few
> > seconds until I woke up and thought it might set my carpet on fire. I
> > hear snow can cause the same thing but I don't have much experience
> > with snow.
> > --
> > cheers, CAM http://www.qsl.net/w5dxp

5232. Re: Verticals over sloping terrain?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 07:27:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C944561.6EC92E90@eznec.com>
Source record: 146520

It would be best to ask Brian about limitations of TA and tips on using
it for modeling verticals.

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
>
> Thanks Roy,
> I have his AO, I was going to find out about TA, if it would apply to verticals
> over real and sloping ground.
> I am in the process of populating abt 140 acres with antennas, we have a ridge
> sloping south, so I am curious how would fixed vertical arrays perform on the
> slopes. Attenuation in the back is welcome. Just curious how close, if possible
> at all, it is to get to the sea side effects.
> I will have an option to utilize the terrain to enhance antenna performance, so
> it would be interesting to play with some vertical curtains, etc.
> If TA can answer some of these questions, I will go for it.
>
> 73 Yuri

5233. Pre-selector 30megs and above

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 12:28:34 UTC
From: europeans <europeans@poczta.onet.pl>
Message-ID: <a722an$3tg$1@news.tpi.pl>
Source record: 146521

Has anyone heard of a design or commercial avaliable pre-selector/filters for 30 to around 108MHz? I am interested in followig the MUF upwards and SPE, but many scanners etc seem to enjoy suffering from overload and worst still image problems.

TIA
Richard Hill ex G6GGE/SP

5234. Re: TGM Hybrid Quad Poor F/B Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 12:47:17 UTC
From: rons533@dejazzd.com
Message-ID: <3C949011.6D19@dejazzd.com>
Source record: 146522

How high are
> you mounted? Maybe you are to close to the ground?
> Radio K4IA
> Craig Buck
> Fredericksburg, Virginia USA
> ----------
> REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free,
> Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

I am only 30' off the ground. I was thinking that this may be the
problem but it is as high as I can go.
Even with this minor problem the antenna is still great.

5235. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 14:53:10 UTC
From: k1bqt@aol.com
Message-ID: <20020317095310.06043.00001658@mb-mc.aol.com>
Source record: 146523

>You bet snow can do it.<

Bigtime. When I was a 13-year-old novice living in Maine, the discharge from a coax connector during a Northeaster woke me up 3 rooms away. Scared the hell out of me when I looked into the darkened radio room and saw the fireworks display firing off on my desk!

Rick K1BQT

5236. Re: Switchable amplifiers WITHOUT stray capacitance/inductance

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 16:00:34 UTC
From: Rory Davis <n7cr@nospambellsouth.net>
Message-ID: <j43l8.88655$Nn6.4961191@e3500-atl2.usenetserver.com>
Source record: 146524
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0203161026.2f648b2c@posting.google.com...
> NOTE: My version of the noise bridge will NOT have the variable
> resistor and capacitor that the original has. I will operate it by
> hooking it up, adjusting the antenna for minimum SWR for resonance,
> and then making any additional adjustments (if necessary) with my
> tuner.
>
> In other words, the purpose of my noise bridge is to tune the antenna
> WITHOUT using the transmitter. My noise bridge will be more like the
> MFJ-212 Matchmaker
(http://www.mfjenterprises.com/products.php?prodid=MFJ-212),
> which does not have the resistance and reactance dials.

Sounds like you're trying to build a return-loss bridge. Works good with a spec-an with a TG. Zach Lau did a couple of articles for QEX a couple of years ago describing the use and construction.

73/N7CR

5237. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 16:09:01 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C94BF4C.BE6BE756@shaw.ca>
Source record: 146525

Rick Littlefield wrote:
>
> >You bet snow can do it.<
>
> Bigtime. When I was a 13-year-old novice living in Maine, the discharge from a
> coax connector during a Northeaster woke me up 3 rooms away. Scared the hell
> out of me when I looked into the darkened radio room and saw the fireworks
> display firing off on my desk!
>
> Rick K1BQT

It happens frequently here in Calgary during windy periods.
A neighbour was
in my shack one evening and I was swinging the bands
showing him what
kind of activity was going on when I started getting arcs
across the caps in
my tuner (no cabinet cover). You could actually see a glow
develop just before
the arc. It scared him so bad, and despite my explanations,
he took off and it
was quite a while before I could get him down in the shack
again.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5238. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 16:20:12 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <3ryUPHeekvh9ZzIDXr+MzUothh+8@4ax.com>
Source record: 146526

Richard Clark <kb7qhc@attbi.com> wrote:

>On Sat, 16 Mar 2002 04:28:50 GMT, Bob Miller <bamiller@texas.net>
>wrote:
>
>>
>>It makes me wonder, then, what the communications guys use for dipoles on the
>>big ocean liners, military ships, etectera that are constantly exposed to marine
>>atmospherics. Might be something you could research on Google. (I'm currently
>>reading "The French Atlantic Affair," about a ham who sneaks his transceiver
>>aboad an ocean liner, and strings up a 20 meter dipole. Fascinating stuff.)
>>
>>Bob
>>k5qwg
>
>Hi Bob,
>
>Having been a teacher to Navy Electronics techs in ET "A" school (A3N
>branch, Communications) I would offer there are few dipoles aboard
>ships (aside from ship-to-ship VHF/UHF). All radiating surfaces were
>painted (this conforms to the service maxim that if it moves, salute
>it; if it does not move, pick it up; if it weighs too much, paint it).
>
>However, this is not true historically. On my wall is the photograph
>of a line of pre WWII battleships entering Puget Sound. The photo was
>taken from the signal bridge or fire control director looking back
>over the aft gun turrets. In this photo are seen the far points of
>two large for/aft dipoles each developed from 6 wires in a cage
>configuration. There is little advantage to horizontal antennas in a
>mobile configuration during war - in fact it would be quite a
>detriment (the VHF/UHF dipoles were mounted vertically).

Hey, Richard...

Admittedly, I don't know beans about maritime radio, but I notice in my AES
catalog there are two general types of marine radios being sold -- 25 watt VHF
transceivers, and 150 watt SSB transceivers operating from about 2-23 mhz. I'm
assuming the latter type typically use dipoles, random wires or perhaps some
kind of vertical whip.

Bob
k5qwg
>
>73's
>Richard Clark, KB7QHC, ET1

5239. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 16:52:11 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203170852.133b2e69@posting.google.com>
Source record: 146527

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C93C51A.95A9C0FC@IEEE.org>...
> Roy Lewallen wrote:
> > I hadn't realized that elevating the radials could make such a
> > substantial difference in the gain and pattern. But it sure looks like
> > that's what's really happening. Thanks very much for sending the file
> > and giving me the opportunity to learn something new.
>
> I had always heard that elevating the radials to 1/2WL would drastically
> improve the low angle radiation. According to that model, tain't so.

Not on the ones I've modeled. A 1/2 wave up and the pattern "shows" to
go upwards quite a bit. This type pattern seems to last up until you
get well over a wavelength high.
> With the radials at 20ft, the maximum gain is 0.13dB at 18 degrees.
> With the radials at 60ft, the low angle gain is -0.52dB at 13 degrees.
> At 60 ft, the maximum gain is 1.83 at 47 degrees. The low angle radiation
> with the radials at 1/2WL is 0.65dB less than with the radials at 1/6WL.
> That's why I chose 20ft for the height of my radials.

This part about this that is kind of strange is experimenting with 10m
verticals. I've tried many heights on these, and I've never noticed
the drastic change in pattern that you see when modeling these
antennas. OK, #1, the person/persons I used to test to were mostly
local stations that were quite a ways away. Like 20-30 miles to the
north. Now, would you agree that a local signal to a station using
ground wave would be a very low angle. Correct?
I would think so. Probably less then 10 degrees. Now, if you look at
the patterns of the average verticals, you will notice a pretty clean
pattern at low heights, but not so at 1/2 wave and up past 1 wave a
bit.
I just now ran a 28 mhz ground plane though eznec. I tried 8 ft, 16
ft, 24 ft, 32 ft, and 40 ft high. I measured the gain at 10 degrees on
each one to get an idea of the gain in DBI at that low angle. The
version at only 8 ft had .48 DBI gain at 10 degrees. 16 ft- .37 dbi.
24 ft- -0.72 dbi. 32 ft- -0.33 dbi. 40 ft- .53 dbi. Now looking at
these models you would think that the antenna at 8 ft would be the 2nd
strongest, and the one at 40 ft to be the strongest, but by an
unnoticable amount. The ones at 16,24,32 ft up you would think would
be horrible according to modeling. But in the real world, I say it
ain't so!!!
I would almost bet to my receiving station each step up in antenna
height would give an increase in signal. And by all the tests I've
done on 10m verticals I've always noticed this to be true. I have
NEVER tried to improve my signal by lowering my antenna to have a
better "takeoff angle". In all case so far, if I wanted to improve my

signal, I would either raise the antenna higher, or use an antenna with more gain. These pattern changes on verticals that I notice when modeling don't seem near as drastic in the real world. And in all my local ground wave tests, I've NEVER seen an antenna improve by being lower. Not once. I'm not saying it couldn't happen, or doesn't , I'm just saying I don't seem to notice that. I've never seen a GP at 8 ft beat one at 32 ft to far off ground wave. Not once, despite what modeling says about the TOA. So I'm kind of leary about these supposed radical pattern changes. I still think it's more important in your case to lower ground losses. IE: more radials, or more height.
I don't think the changes in pattern are quite as radical in the real world. BTW, I used fairly good grd cdx in those models that about matches this area, so the results are better than with "avg" ground .
MK

5240. Iocm AH-4 and Manual Interface...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 17:06:50 UTC
From: ATD <capt-tripps@comcast.net>
Message-ID: <3C94CC7F.F34E7019@comcast.net>
Source record: 146528
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

I've found 2 manual interfaces circulating on the web that can be used to manually control the AH-4 auto tuner. There is a simple version that is nothing more than a switch, LED, and resistor, and another that is more elaborate using a micorprocessor controller.

The designer of the micro controlled unit criticizes the other manual interface saying the 'relays may switch under load and you can not tell if the tuner has tuned'.

I'd go with the micro controller tuner in a hearbeat but have yet been able to get the details of the circuit, specifically the micro code, from the designer.

Has anyone used the simple manual interface and if so have you encountered any 'glitches'?

TIA

Andy N3LCW

5241. 200 radio/electronic projects many with pcb foils

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 17:55:11 UTC
From: Isacc Newman <someone@micro$oft.com>
Message-ID: <3M4I8.32897$I93.6442206@newsb.telia.net>
Source record: 146530
Cross-posted to: rec.ham-radio,rec.radio.amateur.antenna,uk.radio.amateur,rec.radio.amateur.homebrew

Hi all,

HF, VHF, Antennas, Transmitters, Receivers, Wireless microphones, VHF FM Broadcasting. SSB, RTTY, CW, Kits, Synthesisers, EPROMS (in both digital and anali�gue circuits). Is there anything there that interests you?

Come to http://pmp3.net/harry for a lot of homebrew radio/electronics fun (if you want to be 100% serious or be miserable then perhaps it may not be the right place for you).

There are not very many links, though. Sorry! Just a few component suppliers and the odd "usefull" page.

BR from Harry - SM0VPO

5242. Re: Alliance U-100 controller schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 18:03:31 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <TT4l8.15768$7B2.468871@news1.east.cox.net>
Source record: 146531
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Did you replace it with a NON-POLARIZED motor run capacitor?
That is an AC cap, and 5-mfd will not make a difference. Lot at the
tolerance ratings.

Pete

"KC8SSG" <kc8ssg@qsl.net> wrote in message news:9c5l8.362$AK4.5382@news...
> I need a copy of my controller schematic. My controller worked fine and
now
> it doesn't work at all. It had a 155uF 50v cap in it so I figured it was
> that. I replaced it with a 150uF 50v and it doesn't work at all. I'm not
> sure if that's the right one or not and would like to get this one going.
> Thanks
> Rob KC8SSG
>
>
>

5243. Antenna tuner MFJ 969

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 18:18:15 UTC
From: pd0hni <pd0hni@xs4all.nl>
Message-ID: <a72mb4nij1@news1.xs4all.nl>
Source record: 146532

Looking for the schematic from the MFJ969 antenna tuner.
Who will send me a copy.

Greetings Jan / pd0hni the Netherlands

5244. Alliance U-100 controller schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 18:25:09 UTC
From: KC8SSG <kc8ssg@qsl.net>
Message-ID: <9c5l8.362$AK4.5382@news>
Source record: 146529
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I need a copy of my controller schematic. My controller worked fine and now it doesn't work at all. It had a 155uF 50v cap in it so I figured it was that. I replaced it with a 150uF 50v and it doesn't work at all. I'm not sure if that's the right one or not and would like to get this one going.
Thanks
Rob KC8SSG

5245. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 18:35:43 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C94E1FF.2AEBA31D@IEEE.org>
Source record: 146534

Mark Keith wrote:
> Now, would you agree that a local signal to a station using
> ground wave would be a very low angle. Correct?

Yep, but EZNEC doesn't display the ground wave. Does that mean
the ground wave peters out and doesn't reach the ionosphere?

> These pattern changes on verticals that I notice when
> modeling don't seem near as drastic in the real world. And in all my
> local ground wave tests, I've NEVER seen an antenna improve by being
> lower. Not once. I'm not saying it couldn't happen, or doesn't , I'm
> just saying I don't seem to notice that.

Of course, the 1 dB difference would not be noticeable. What is
extremely noticeable for me is the average 4 S-unit advantage
that my dipole has over my vertical in (S+N)/N ratio. The noise
level is 2 S-units lower on the dipole and the average signal
strength is 2 S-units higher on the dipole.

I use the 40m vertical as the support for one end of my dipole
with the end of the dipole about ten feet from the vertical.
I'm wondering if the vertical acts as a reflector for the
dipole during off-the-end vertically polarized radiation from
the dipole. Guess I need to model both antennas together.
--
cheers, CAM http://www.qsl.net/w5dxp

5246. Re: Alliance U-100 controller schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 19:07:01 UTC
From: KC8SSG <kc8ssg@qsl.net>
Message-ID: <pP5l8.363$AK4.5291@news>
Source record: 146533
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I replaced it with a non-polarized one but the one that was in there was polarized. and the guys that know what they are doing said that it should be non
" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message news:TT4l8.15768$7B2.468871@news1.east.cox.net...
> Did you replace it with a NON-POLARIZED motor run capacitor?
> That is an AC cap, and 5-mfd will not make a difference. Lot at the
> tolerance ratings.
>
> Pete
>
> "KC8SSG" <kc8ssg@qsl.net> wrote in message news:9c5l8.362$AK4.5382@news...
> > I need a copy of my controller schematic. My controller worked fine and
> now
> > it doesn't work at all. It had a 155uF 50v cap in it so I figured it was
> > that. I replaced it with a 150uF 50v and it doesn't work at all. I'm not
> > sure if that's the right one or not and would like to get this one
going.
> > Thanks
> > Rob KC8SSG
> >
> >
> >
>
>

5247. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 19:25:43 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c94eb0e_2@corp.newsgroups.com>
Source record: 146535

"Ken Linder" <radstream@lvcm.com> wrote in message
news:u97jmecg4bf9e3@corp.supernews.com...
> That's what I thought but darn... I have never seen static electricity
jump
> that far!

Believe you have it's call Lighting and jump very large area to ground or
other objects.

I've seen this on almost clear days with T- Storms off on the horizon many
miles away.. and have also seen in in wind driven snow storms as static
builds up on the antenna the longer the wire the great the discharge usually
is.. We used to use air gap static discharge to ground on some installations
while I was in the military for this very reason.
73 Dave

>
> Thanks & 73s
> Ken
>
> "CAM" <Cecil.A.Moore@IEEE.org> wrote in message
> news:3C93C69C.5D0F847A@IEEE.org...
> > Ken Linder wrote:
> > > Has anyone else experienced this? Any idea what this might be from?
> >
> > Of course. It's simple static electricity. When I lived in the Phoenix
> > area, windstorms caused my G5RV coax connector to arc once every few
> > seconds until I woke up and thought it might set my carpet on fire. I
> > hear snow can cause the same thing but I don't have much experience
> > with snow.
> > --
> > cheers, CAM http://www.qsl.net/w5dxp
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.338 / Virus Database: 189 - Release Date: 3/14/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5248. Re: Antenna tuner MFJ 969

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 19:28:58 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C94EE65.4276CA99@icok.net>
Source record: 146536

Jan,
If I'm not mistaken, MFJ offers manuals for
their products on their website. I don't know
what that URL is off hand, sorry,
'Doc

5249. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 19:32:11 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c94ec91_4@corp.newsgroups.com>
Source record: 146537

"Bob Miller" <bamiller@texas.net> wrote in message
news:3ryUPHeekvh9ZzIDXr+MzUothh+8@4ax.com...
> Richard Clark <kb7qhc@attbi.com> wrote:
>
> >On Sat, 16 Mar 2002 04:28:50 GMT, Bob Miller <bamiller@texas.net>
> >wrote:
> >
> >>
> >>It makes me wonder, then, what the communications guys use for dipoles
on the
> >>big ocean liners, military ships, etectera that are constantly exposed
to marine
> >>atmospherics. Might be something you could research on Google. (I'm
currently
> >>reading "The French Atlantic Affair," about a ham who sneaks his
transceiver
> >>aboad an ocean liner, and strings up a 20 meter dipole. Fascinating
stuff.)
> >>
> >>Bob
> >>k5qwg
> >
> >Hi Bob,
> >
> >Having been a teacher to Navy Electronics techs in ET "A" school (A3N
> >branch, Communications) I would offer there are few dipoles aboard
> >ships (aside from ship-to-ship VHF/UHF). All radiating surfaces were
> >painted (this conforms to the service maxim that if it moves, salute
> >it; if it does not move, pick it up; if it weighs too much, paint it).
> >
> >However, this is not true historically. On my wall is the photograph
> >of a line of pre WWII battleships entering Puget Sound. The photo was
> >taken from the signal bridge or fire control director looking back
> >over the aft gun turrets. In this photo are seen the far points of
> >two large for/aft dipoles each developed from 6 wires in a cage
> >configuration. There is little advantage to horizontal antennas in a
> >mobile configuration during war - in fact it would be quite a
> >detriment (the VHF/UHF dipoles were mounted vertically).
>
> Hey, Richard...
>
> Admittedly, I don't know beans about maritime radio, but I notice in my
AES
> catalog there are two general types of marine radios being sold -- 25 watt

VHF
> transceivers, and 150 watt SSB transceivers operating from about 2-23 mhz.
I'm
> assuming the latter type typically use dipoles, random wires or perhaps
some
> kind of vertical whip.

Usually a base tuned whip on the intalls I've seen.

>
> Bob
> k5qwg
> >
> >73's
> >Richard Clark, KB7QHC, ET1
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.338 / Virus Database: 189 - Release Date: 3/14/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5250. Re: Antenna tuner MFJ 969

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 21:03:07 UTC
From: pd0hni <pd0hni@xs4all.nl>
Message-ID: <a7300d$i6c$1@news1.xs4all.nl>
Source record: 146538

Thanks Doc
But MFJ offers manuals but no schematics.
Just received a schematic from somebody here.
' 73 Jan / pd0hni

"'Doc" <w5lz@icok.net> schreef in bericht news:3C94EE65.4276CA99@icok.net...
> Jan,
> If I'm not mistaken, MFJ offers manuals for
> their products on their website. I don't know
> what that URL is off hand, sorry,
> 'Doc

5251. Re: Antenna tuner MFJ 969

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 21:33:33 UTC
From: Serial # 19781010 <jwilson4@carolina.rr.com>
Message-ID: <5f2a9u44v1epj7l7mtf5dtcmpib1o36njp@4ax.com>
Source record: 146543

would you mind sharing that schematic?

On Sun, 17 Mar 2002 22:03:07 +0100, "pd0hni" <pd0hni@xs4all.nl> wrote:

>Thanks Doc
>But MFJ offers manuals but no schematics.
>Just received a schematic from somebody here.
>' 73 Jan / pd0hni
>
>
>"'Doc" <w5lz@icok.net> schreef in bericht news:3C94EE65.4276CA99@icok.net...
>> Jan,
>> If I'm not mistaken, MFJ offers manuals for
>> their products on their website. I don't know
>> what that URL is off hand, sorry,
>> 'Doc
>

5252. Re: Alliance U-100 controller schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 21:34:22 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <yZ7l8.17441$7B2.511792@news1.east.cox.net>
Source record: 146539
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Yes, it should be non-polarized. I had one of those rotators, and I can't find the manual
for you. Sorry. But you can order one from this gentleman:
http://www.sarrio.com/sarrio/rsman1.html
if no one can help you. BTW, I think that unit came in a few different revisions over the years--
mine dated from my highschool days in the '60s! Good luck.

Peter

"KC8SSG" <kc8ssg@qsl.net> wrote in message news:pP5l8.363$AK4.5291@news...
> I replaced it with a non-polarized one but the one that was in there was
> polarized. and the guys that know what they are doing said that it should be
> non
> "

5253. April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 21:34:23 UTC
From: "Terrence R. Redding" <terry@oltraining.com>
Message-ID: <B8BA760E.164D%terry@oltraining.com>
Source record: 146540

Does this antenna look right to those on this list? I thought there was a discussion here a few years ago that dismissed the idea of a single mast diamond loop fed at the top of the mast by 50 ohms coax.

Now I see an article in QST that says the antenna works - and works on 20, 15, and 10.

Does this fall in the same category as radiating with a light bulb? Yes, you can use it as an antenna - but whether it appears to work or not, it isn't truly a good design.

Terry - W6LMJ

5254. Re: Antenna tuner MFJ 969

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 22:14:38 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C9514FB.2AE920D5@shaw.ca>
Source record: 146541

pd0hni wrote:
>
> Thanks Doc
> But MFJ offers manuals but no schematics.
> Just received a schematic from somebody here.
> ' 73 Jan / pd0hni
>
> "'Doc" <w5lz@icok.net> schreef in bericht news:3C94EE65.4276CA99@icok.net...
> > Jan,
> > If I'm not mistaken, MFJ offers manuals for
> > their products on their website. I don't know
> > what that URL is off hand, sorry,
> > 'Doc

Jan,
Could you please email me a copy? Thanks in
advance es 73
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5255. Re: Alliance U-100 controller schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 22:31:23 UTC
From: Lou <tech@dp.net>
Message-ID: <a737aq$17j0$1@news.dp.net>
Source record: 146542
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Still need the schematic? I think I have it..... Can look if you still need
it. Reply directly. Thanks.

--
Lou
Owner of: C.L. FURLONG ENTERPRISES

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"KC8SSG" <kc8ssg@qsl.net> wrote in message news:pP5l8.363$AK4.5291@news...
> I replaced it with a non-polarized one but the one that was in there was
> polarized. and the guys that know what they are doing said that it should
be
> non
> " Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
> news:TT4l8.15768$7B2.468871@news1.east.cox.net...
> > Did you replace it with a NON-POLARIZED motor run capacitor?
> > That is an AC cap, and 5-mfd will not make a difference. Lot at the
> > tolerance ratings.
> >
> > Pete
> >
> > "KC8SSG" <kc8ssg@qsl.net> wrote in message
news:9c5l8.362$AK4.5382@news...
> > > I need a copy of my controller schematic. My controller worked fine
and
> > now
> > > it doesn't work at all. It had a 155uF 50v cap in it so I figured it

```
was
> > > that. I replaced it with a 150uF 50v and it doesn't work at all. I'm
not
> > > sure if that's the right one or not and would like to get this one
> going.
> > > Thanks
> > > Rob KC8SSG
> > >
> > >
> > >
> >
> >
>
>
```

5256. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 22:53:07 UTC
From: ATD <capt-tripps@comcast.net>
Message-ID: <3C951E53.A966D68E@comcast.net>
Source record: 146544

Can I fit it in my attic? 8-|

ATD

"Terrence R. Redding" wrote:
>
> Does this antenna look right to those on this list? I thought there was a
> discussion here a few years ago that dismissed the idea of a single mast
> diamond loop fed at the top of the mast by 50 ohms coax.
>
> Now I see an article in QST that says the antenna works - and works on 20,
> 15, and 10.
>
> Does this fall in the same category as radiating with a light bulb? Yes,
> you can use it as an antenna - but whether it appears to work or not, it
> isn't truly a good design.
>
> Terry - W6LMJ

5257. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 23:07:37 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <ha7a9ucqjjpt88gmgu6b2838fea94r3oue@4ax.com>
Source record: 146545

On 17 Mar 2002 08:52:11 -0800, nm5k@wt.net (Mark Keith) wrote:

> I've NEVER seen an antenna improve by being
>lower. Not once. I'm not saying it couldn't happen, or doesn't , I'm
>just saying I don't seem to notice that.

Hi Mark,

Has time erase old wounds? Consult:
http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
and recall, if you care, a time when fractals and the k2 ruled the world and this famous ground warmer exhibited an optimized low angle radiation through what I consider the employment of earth ground as a passive, reflecting element.

This invention, of course, was discovered through itinerant model mining (unabashedly described as science), redefined with artificial constraints and posed as the poor man's solution to DX - such hubris....

73's
Richard Clark, KB7QHC

5258. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 23:12:47 UTC
From: avatar <avatar@frii.com>
Message-ID: <3c9522ec$0$86431$7586b60c@news.frii.com>
Source record: 146546

I haven't seen it, but it probably is an April Fools article.

Terrence R. Redding <terry@oltraining.com> wrote in message
news:B8BA760E.164D%terry@oltraining.com...
> Does this antenna look right to those on this list? I thought there was a
> discussion here a few years ago that dismissed the idea of a single mast
> diamond loop fed at the top of the mast by 50 ohms coax.
>
> Now I see an article in QST that says the antenna works - and works on 20,
> 15, and 10.
>
> Does this fall in the same category as radiating with a light bulb? Yes,
> you can use it as an antenna - but whether it appears to work or not, it
> isn't truly a good design.
>
> Terry - W6LMJ
>

5259. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 23:13:10 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <mj8a9usm93eb5sg6irbr3j2t8g9aie7hg2@4ax.com>
Source record: 146547

On Sun, 17 Mar 2002 16:20:12 GMT, Bob Miller <bamiller@texas.net>
wrote:

>
>Hey, Richard...
>
>Admittedly, I don't know beans about maritime radio, but I notice in my AES
>catalog there are two general types of marine radios being sold -- 25 watt VHF
>transceivers, and 150 watt SSB transceivers operating from about 2-23 mhz. I'm
>assuming the latter type typically use dipoles, random wires or perhaps some
>kind of vertical whip.
>
>Bob
>k5qwg

Hi Bob,

Well, the marine bands (not be confused with Sousa) are used on land
and at sea. In one of our shipyards here in the snowy northwest I
find a horizontal rotatable HF dipole barely above their offices on
Lake Union.

73's
Richard Clark, KB7QHC

5260. rohn 20

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 23:37:19 UTC
From: "Gary M. Belcaster" <gbelcas@pressenter.com>
Message-ID: <gbelcas-70650D.17371817032002@corp.supernews.com>
Source record: 146548

Anyone know for certain that a yaesu 800sdx rotator will fit easily into
rohn 20 tower ?? Tnx in advance.

Gary
ka9rao

5261. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-17 23:52:33 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C952C41.8060202@sympatico.ca>
Source record: 146549

The best shape is a circle for a loop antenna from what I understand.
You can also use it in a square configuration (Quad antenna
style)feeding it from the middle of one side with minor increases to
the total length of wire used to construct the loop. As for feeding it
from the top..... I think the diamond shaped Quad is fed from the bottom
using coax. The over all length would be about 17' diagonally.

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

Terrence R. Redding wrote:

> Does this antenna look right to those on this list? I thought there was a
> discussion here a few years ago that dismissed the idea of a single mast
> diamond loop fed at the top of the mast by 50 ohms coax.
>
> Now I see an article in QST that says the antenna works - and works on 20,
> 15, and 10.
>
> Does this fall in the same category as radiating with a light bulb? Yes,
> you can use it as an antenna - but whether it appears to work or not, it
> isn't truly a good design.
>
> Terry - W6LMJ
>
>

5262. Re: If the MFJ-212 Matchmaker is not a noise bridge, then what is it?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 00:24:22 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <9kca9us2tmsktmaqdpsjvnmmpv09ef5p4m@4ax.com>
Source record: 146550
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 17 Mar 2002 00:28:08 GMT, Richard Clark <kb7qhc@attbi.com>
wrote:

>On 16 Mar 2002 16:23:48 -0800, jason_hsu@my-deja.com (Jason Hsu)
>wrote:
>
>>http://www.mfjenterprises.com/products.php?prodid=MFJ-212
>>
>>Jason Hsu, AG4DG
>
>Why do you presume it is not?
>
>73's
>Richard Clark, KB7QHC

Hi Jason,

First the concept of the bridge. It exhibits a null to the detector when all four arms are balanced with respect to each other. There are many respects and many topologies to observe these relationships; however, when you boil down the designs, they are all closely related if not identical - hence my suggestion for you to reduce those circuits as an exercise. You will find much enlightenment in such an exercise still, even after my lucid explanation. :-)

Being able to "see" an opportunity for a bridge solution for a measurement problem is ALWAYS preferable. A balanced bridge presents absolutely no load to the item being measured and by this becomes invisible to the process. Bridges bring isolation, sensitivity, resolution and accuracy. To illustrate, you may not be able to afford a DC or low AF (audio) AC meter with 4 place accuracy (not to be confused with 4 digit display); but you may, with work, build an inexpensive bridge accurate at AF to 6 places and very respectable in HF. Note, as you depart from low frequencies, instrumentation accuracy plummets, and bridge techniques become even more necessary.

Second, the balance of the bridge. This may obtained by holding the "unknown" constant while you derive its value by the inference of control settings (what you have in mind in some sense, and perfectly justified). OR, the balance may be obtained against a constant reference by adjusting the "unknown."

This second method is cheaper to manufacture, calibrate, and simple to use. The first requires cumbersome shaft coupling for critical, large component placement; and (for precision) special shielding to balance

stray coupling.

Third, the source of white noise. By strict definition, white noise is constant in amplitude at every frequency. This again is a commercial consideration in that the designer need not build an extra stable source capable of wide frequency span. This last requirement of stability, as you may now guess, is strictly required if you are to seek and hold a sharp, deep null (it is an absolute pain to chase a drifting source).

Fourth, the operation of a noise bridge. As I said, R1-C1 are the reference and you should note that the ARRL design (and perhaps the MFJ) adds a 100 Ohm resistor to the "unknown" port. This means that without ANY other connection made, the bridge is already in balance. If you observe otherwise, it means that C1 is not adjusted correctly. This presents a simple, one-time solution for that problem by simply tweaking C1. Now, once observing this verity (the already mentioned null) and adding your reactive load to the 100 Ohm resistor at the "unknown" port, you run the risk of unbalancing the bridge if that reactance upsets the effective 100 Ohm requirement. You then rebalance the bridge in one of two ways. You shift your receiver's frequency until the noise abates, or you shift the component that presents the reactance until the noise abates at the original frequency. The first method determines the resonate frequency of the "unknown." The second method forces the "unknown" to resonate at the original frequency. This, of course, presumes a parallel resonance that presents infinite impedance whereupon the 100 Ohm resistor seems to be the only component residing at the "unknown" port (and balance is assured).

Note the emphasis on parallel resonance (it simplifies this instruction). This works with traps, but is not indicative of antennas (except for halfwave). This may sound like a paradox for the intended application, so there are other considerations to be observed in either the application of the bridge, or in its design. The observance and cogitation of those differences are left as an exercise.

The upshot of this all, is that you need to think abstractly in terms of the bridge topology, its design requirements, its actual design, and its application. Reduce all design issues to the bare minimum and replace the "unknown" with a simple L-C-R configuration to determine just how well the bridge may perform. Playing with a SPICE emulator like Electronic Workbench would do wonders to illustrate these concepts.

73's
Richard Clark, KB7QHC

5263. Re: Multiple antennas on one scanner?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 01:03:55 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <e5fa9u09lcnqlidqptc0kd861nu42fgrvc@4ax.com>
Source record: 146551

On 14 Mar 2002 16:08:56 GMT, vhfradiobuff@aol.comspamsux (VHFRadioBuff) wrote:
>I was wondering, if I use splitters to hook up multiple receiving antennas for
>a scanner, will I get good reception on the frequencies the antennas are
>designed for? I am particularly interested in having my Radio Shack mobile
>scanner antenna hooked up for general receive in the VHF band, as this seems to
>be the best portion of the spectrum for this antenna. I want to hook up an
>additional antenna for 800mhz by the use of a homemade spliter.

A splitter isn't the best choice. Better would be a diplexer. This has filtering
which will keep the antennas from interacting in ways that would modify their
patterns.

Gary

5264. Re: Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 01:10:38 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <mjfa9us9aaimve814483e45b58oulkiku7@4ax.com>
Source record: 146552

On Fri, 15 Mar 2002 17:22:27 -0600, "Crazy George" <munschNO@attglobal.net.SPAM> wrote:
>Reg:
>You don't think big enough. A number of years ago one of the nearby TV
>broadcast stations discovered they had a mis-manufactured feed line, and
>replaced it with new. Sold the old line for the price of scrap copper.
>Still relatively expensive, but it is 1200 feet of 6" outer diameter air
>insulated (erratically spaced teflon posts to avoid resonance) with a copper
>pipe center conductor of about 1.5". I could only afford 4 joints of it.
>Not very flexible, though, I have to admit.

Yeah, but you can guy it and it makes a reaonable mast too.

Gary

5265. FA: McKay Dymek AM7 TUNER - AM / Long Wave Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 01:39:20 UTC
From: Daniel Simpson <dzan@qwest.net>
Message-ID: <170320021939203730%dzan@qwest.net>
Source record: 146553

FA: McKay Dymek AM7 TUNER - AM / Long Wave Tuner.

A AM7 tuner is basically a AM5 with the addition of the Long Wave Band. Used in Europe. That you can receive along the east and west coast of the US. (See Information Below)

Long Wave Information:
"155 to 281 kHz: This is another AM broadcasting band in Europe and parts of Asia. In Europe, there are numerous high powered (1,000,000 watts or more) stations here. These stations are capable of covering an entire European nation like France or Germany with reliable signals around the clock. Although ionospheric propagation is not good at these frequencies, the high powers used means that many of these broadcasters can be heard along the Atlantic seaboard during the fall and winter. Best reception is usually from local sunset to about 0600 UTC. A few long Wave stations in Asiatic Russia can be heard on the Pacific Coast beginning an hour or so before local sunrise."

A Detroit Michigan user said:
"I have an AM-7 and a DA-7. They make a nice pair together. Unfortunately, there's not too much long Wave possible except on a few winter nights when I can pick up some of the powerhouses from Europe on the AM-7. I have heard Morocco, France, and BBC on longwave here in Detroit. In fact, this winter, I got them pretty regularly"

SPECIFICATIONS:
* Two Band High Fidelity Solid State Tuner
* Frequency Range: 540-1605 kHz. Standard AM broadcast band,150-300 kHz Long Wave
* Sensitivity: 6.0 ,uV for 10 dB signal to noise ratio on Long Wave Band. 3.0 uV for 10 dB signal to noise ratio on Standard AM broadcast band.
* AGC Characteristic: Less than 6 dB output variation for an input level change of 10,uV to 10 mV.
* Bandwidth: -3 dB RF Narrow - 6 kHz; Wide - 15 kHz
* I.F. Rejection: 45 dB
* Audio Frequency Response: -3 dB @ 15 Hz, 7500 Hz
* Audio Whistle Filter: 9 kHz
* Distortion: 1 kHz @ 30% modulation: 0.5% 1 kHz @ 50% modulation - 1.0%, 1 kHz @ 80% modulation - 1.5% (1 mv @ 1 MHz input, wide & distant mode).
* Audio Output: Standard: 1V RMS- 5K output.
* Shipping weight: 12 lbs. (5.5 Kg.)
* Dimensions: 17-1/2" x 10" x 3-1/2" (43cm x 25cm x 9cm)

Features

The McKay Dymek AM 7 TUNER is an all solid state high fidelity AM/Long Wave tuner combining extremely low distortion with excellent sensitivity, selectivity, and a wide audio range. The AM 7 is compatible with professional studio equipment as well as high fidelity "home" sound systems. The low profile black and teak cabinetry makes the AM 7 an attractive addition to any system or decor.

Broadcasters all over the country report excellent results using Dymek Equipment as low cost monitors. As one station executive wrote, after using the Dymek as the standard, "our signal was as close to 'FM on the AM band' as we could get".

reception from local or distant stations is assured by a choice of narrow or wide bandwidth selections at the front panel. To prevent an overload of the "frontend" that may be caused by strong local stations, an attenuator in the antenna circuit has been included. An illuminated, easy-to-read tuning meter aids in ease of tuning and is standard equipment on all Dymek tuners.

Remarkable selectivity is achieved with two eleven element ceramic filters. A whistle filter eliminates most bothersome noise common to AM listening. Distortion is low and sensitivity helps pull in those distant stations; lets you take advantage of AM's natural long range capabilities - hear stations which were previously unlistenable. Wide and narrow bandwidth selectors assure optimum local and distant reception. Illuminated tuning meter.

The Dymek outreach for perfection in AM reception has produced the Am 7. Unlike conventional AM tuners, the AM 7 allows full and accurate reproduction of transmitted program material. For the first time, AM reception is not limited by the receiving equipment The complete transmitted fidelity may now be fully enjoyed and appreciated.

McKay Dymek is the leading producer of AM high fidelity receiving equipment. Authoritative hi fi magazines agree that the quality of AM reception provided by Dymek equipment is truly excellent. This fact is further established by the acceptance of our products by scores of AM broadcasting stations throughout the United States. Many stations use more than one Dymek tuner to monitor and insure their transmitted quality.

For many years very high quality AM transmitters have been operating, but due to the mediocre performance of available AM receiving equipment, most high fidelity experts believed AM reception to be of inherently poor quality.

It is truly a difficult challenge to design and manufacture a tuner capable of high quality AM reception. McKay Dymek engineers accepted this challenge and, after expending great effort, have succeeded in the design of the AM 7.

The McKay Dymek AM 7 tuner is a precision, solid state AM instrument of the highest quality.

Innovations have been engineered to provide:

Very low distortion even at high modulation levels using a unique hot carrier biased diode detector.

Extremely wide frequency response through the use of expensive ceramic filters.

High sensitivity for reception of weak, distant stations.

Once you have listened to AM radio on the AM 7, surely you will agree with our many satisfied customers: the AM 7 is a truly superior addition to any high fidelity system.

RIF SECTION Dual antenna connectors are provided on the rear panel. An RCA type connector is provided for coaxial cable antenna systems. There is also a set of terminals for direct connection to a longwire antenna and external grounding.

A Dymek AM 7 tuner represents the very best in AM/Long Wave listening. Try it!

Note:This unit needs an external antenna to work I used a terk AM antenna with this unit and it worked well. I am also putting this antenna up for sale. Check for it on ebay. and will need a Long Wave Antenna to receive Long Wave. Like a Mckay Dymek DA7 Antenna or a QUANTUM QX PRO LOOP.

This unit has some minor scratches on the top also a scratch on dial under czech USSR (could be fixed with black paint or marker from the inside) and missing ground plug (see pictures). Otherwise it is in Great Shape!

I accept Paypal, Billpoint & Money Orders. $12.00 for shipping-Continental US only. Insurance optional at buyers expense. Winner to pay within 7 Days of auction close. Email me with questions.

Thank You and Good Luck!!

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1340216198

5266. FA: Terk Advantage AM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 02:01:52 UTC
From: Daniel Simpson <dzan@qwest.net>
Message-ID: <1703200220015264 51%dzan@qwest.net>
Source record: 146555
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment

FA: Terk Advantage AM Antenna

Finally an AM antenna that is truly beautiful!

When appearance is an issue you finally have a great choice! It has most of the power of a Select-A-Tenna plus it is a handsome addition to any decor. It comes with wires like the Select-A-Tenna Hardwire model for direct connection to your stereo or can be used like the regular model Select-A-Tenna. It certainly blows away any of the smaller antennas supplied with a stereo. Size: 9.5ï¿½ high.

The Terk AM Advantage AM antenna dramatically improves the AM reception from any receiver, tuner or portable radio. Its unique passive wireless technology eliminates the need for connectors, batteries and power cords ï¿½ simply place the AM Advantage near the receiver or radio.

The AM Advantage combines wireless convenience with advanced tuning technologies such as Terk's exclusive Pin-Dot Pre-Tuningï¿½ that zeroes in on even hard-to-get stations by tuning the antenna to the station's frequency.

Features:

* Pin-Dot Pre-Tuning dial adjusts antenna to a specific frequency for best reception of individual stations
* Compact design allows easy placement
* Non-skid base keeps antenna in place during adjustment
* Reception pattern: Omindirectional
* Dimensions: 9.5"H x 9.5" W x 2.5"D
* Wire For Direct connection

AM Advantage Q&A
Does this antenna need power for it to work? Also, how can I connect it to my radio?
The AM Advantage is designed for "wireless operation"--that is, it does not need AC or battery power and will actually provide signal to your radio or receiver without having to be connected with wires. However, if your radio or receiver has connections for an external AM antenna, we supply a wire with the AM Advantage to connect the antenna to the input, should you choose to do so. The solid black wire connects to the terminal on the radio or receiver labled "AM in," while the wire with the white stripe on it connects to the terminal labeled "ground."

Can I extend the wire on my AM Advantage to place it on a windowsill or somewhere away from my receiver?

You can extend the wire with by splicing it with insulated doorbell wire, which is available at any do-it-yourself electronics or hardware store. However, we do not suggest doing this, because the length of the wire is calibrated to correspond with the tuning dial on the AM Advantage. When you extend the wire on the AM Advantage, you also change the resistance of the antenna, which will cause the station indications on the dial to be inorrect.

Why does my antenna work better when I touch it?
When you touch the antenna with your feet on the ground, your body is actually acting as a giant antenna and affecting your AM Advantage's reception. You have to let go of the antenna and move away from it to determine its reception performance.

Can I make the wires on my antenna longer?
No. When you make an AM antenna lead longer, you make it more susceptible to interference. The longer the lead, the more interference you are likely to hear. Also, lengthening the cable will change the impedance of the antenna and degrade reception performance.

Why does the antenna work better when my radio and antenna are next to a window?
Many building materials can affect AM and FM signal reception. Metal, brick and stone between the radio station and the antenna will decrease the strength of the signal. to the antenna. However, glass does not block radio signals, and locating your antenna next to a window allows the antenna to receive a cleaner, stronger signal.

This unit is in good to great shape. It shows some scuffs in the rubber base. and that is all.

I accept Paypal, Billpoint & Money Orders. $9.00 for shipping-Continental US only. Insurance optional at buyers expense. Winner to pay within 7 Days of auctions close. Email me with questions.

Thank You and Good Luck!!

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1340212771

5267. FA: Terk Advantage AM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 02:04:51 UTC
From: Daniel Simpson <dzan@qwest.net>
Message-ID: <170320022004517239%dzan@qwest.net>
Source record: 146556
Cross-posted to:
alt.ham-radio.marketplace,alt.home-theater.marketplace,rec.radio.amateur.antenna,rec.video.marketplace,umn.general.forsale

FA: Terk Advantage AM Antenna

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The AM Advantage combines wireless convenience with advanced tuning technologies such as Terk's exclusive Pin-Dot Pre-Tuningï¿½ that zeroes in on even hard-to-get stations by tuning the antenna to the station's frequency.

Features:

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Does this antenna need power for it to work? Also, how can I connect it to my radio?
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This unit is in good to great shape. It shows some scuffs in the rubber base. and that is all.

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Thank You and Good Luck!!

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1340212771

5268. computer needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 02:22:57 UTC
From: "jim\\\\va7gpd"
Message-ID: <3C954F76.6AC112C9@telus.net>
Source record: 146557

i am a blind ham and and i am looking for a cheap pentium laptop
that i can use with a scanner and soft ware to be able to read with
my funds are very limited so if you might have one around that you do
not need and can let go cheap please let me know
73 jim va7gpd

5269. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 02:37:04 UTC
From: "James L. Hudson" <jlhudson@ev1.net>
Message-ID: <3C9552D0.7966DD18@ev1.net>
Source record: 146558

You need to look at the Radio Shack home page and search on that part number.

i.e.:

http://www.radioshack.com/ProdSupport/DocumentDetail/DocumentDetailIndex.asp?URL=http://support.radioshack.com/support_electronics/38410.htm

Jester wrote:

> I hope someone can offer some help with this one. A friend and myself
> bought a couple of used VHF radios and have thus far, been unable to find
> any service manuals about them. The local radio shops are stumped as well,
> acting as if this is some sort of alien technology.
>
> Any insite into programing these little rascles is welcome.. Here's some
> info...
>
> Radio Shack BTX-124
> model 19-1205
> FCC ID: AAO19-1205
>
> sluggo286@yahoo.com

5270. Re: rohn 20

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 03:03:52 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C955919.54557292@tampabay.rr.com>
Source record: 146560

hey gary
there is no size differnce between rohn 20 and 25 other than Zmember spacing
so if you know it will fit in 25 it will fit in 20

"Gary M. Belcaster" wrote:

> Anyone know for certain that a yaesu 800sdx rotator will fit easily into
> rohn 20 tower ?? Tnx in advance.
>
> Gary
> ka9rao

5271. Re: FA: Terk Advantage AM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 03:05:05 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C955961.94C7160@coqui.net>
Source record: 146559
Cross-posted to:
alt.ham-radio.marketplace,alt.home-theater.marketplace,rec.radio.amateur.antenna,rec.video.marketplace,umn.general.forsale

Daniel Simpson wrote:

2 megs of pix for a little antenna and 1.4 Megs on the tuner on ebay.
Give us dial-up folks a break.
-Bill

5272. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 03:15:11 UTC
From: John P Vassel <john@vassel.net>
Message-ID: <3c955bbe$0$1427$2c3e98f8@news.voyager.net>
Source record: 146562
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

"Jester" <sluggo286@yahoo.com> wrote in
news:2Rbl8.551$%n4.123289@news.uswest.net:

> BTX-124
>

BTX-124 VHF FM Business Band Transceiver
(190-1205) Features Faxback Doc. # 38411

Your RadioShack BTX-124 VHF FM Business Band Transceiver with CTCSS is a
portable, two-way business radio service transceiver that you can carry
almost anywhere. The transceiver is compact and light, making it an
ideal choice for your business needs.

Your transceiver has the following features:

Programmable Channels A and B - let you operate the transceiver on two
different frequencies.

Preset Frequencies - let you quickly begin operation on either
154.600 MHz (Channel A, green dot) or
154.570 MHz (Channel B, blue dot).

PLL-Controlled Circuitry - provides accurate and stable channel
selection.

Adjustable Squelch - helps eliminate noise between
transmissions.

CTCSS (Continuous Tone - helps reduce interference from other
Control Squelch System) systems in the area operating on the
same frequency.

Built-In Modulation Limiter - automatically adjusts for a wide variety
of
Circuit voice levels to ensure an understandable
transmission.

High/Low Power - lets you save power by selecting a
suitable
transmitting power for long or short
distances.

Battery Low and Transmit - shows the battery pack's condition and
Indicator lights when you transmit or receive.

Removable and Rechargeable - lets you use one battery pack while you
Battery Pack charge another (additional packs
available).

Supplied Battery Charger - conveniently recharges your transceiver's
battery pack.

Earphone Jack and External - let you use an earphone or external
Microphone Jack microphone to help ensure understandable
communications in noisy areas.

Belt Pouch - protects your transceiver and lets you
easily carry it on your belt.

We recommend you record your transceiver's serial number. The number is
on
the back of the transceiver.

Try searching on the model number at radioshack.com under advanced search.
There is much more info there also.

--
John Vassel
KC8SKE
RTFD Volunteer Firefighter

5273. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 03:16:22 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C955C07.3C28FFF8@tampabay.rr.com>
Source record: 146561
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

jester
i dont know why know one you asked knows about that radio its on radio shacks website i took this number 19-1205 that you posted and did a search and it came back with all sorts of info on it what you have is a VHF business band radio i am sure if you look around there you could find the manual you could download but dont be surprised if you cant modify it radio shack doesnt buy radios from any company that can be modified to work outside the band they are set to
good luck
oh there website is
http://www.radioshack.com
then in the search window type in that number then click the HERE link and off you go

Jester wrote:

> I hope someone can offer some help with this one. A friend and myself
> bought a couple of used VHF radios and have thus far, been unable to find
> any service manuals about them. The local radio shops are stumped as well,
> acting as if this is some sort of alien technology.
>
> Any insite into programing these little rascles is welcome.. Here's some
> info...
>
> Radio Shack BTX-124
> model 19-1205
> FCC ID: AAO19-1205
>
> sluggo286@yahoo.com

5274. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 03:21:46 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a73mga$e4e$2@quark.scn.rain.com>
Source record: 146563

VE9SRB <srbest@att.net> wrote:

> "Francesco Messineo" <frank@ares.ccii.unipi.it> wrote in message
> news:a6q5km$2lh$2@serra.unipi.it...

>> What's going wrong in this testing project (probably) is that some of
> these
>> persons already built EH prototypes and found nothing good with them.

> What's wrong with this? A negative test result is just as valid as a
> positive test result if the tests are done correctly.

This assumes that the test prototypes are actually constructed correctly.
There is no guarantee that this is true.

> The point here is that there is really nothing [new] to the EH antenna. The
> tests do not validate the claims of the EH "inventor" because the claims are
> not valid. Seems like a successful test to me.

I don't think there is anything new about the EH antenna either. But
the only way to tell for sure is by testing a sample provided by the
inventor. Testing antennas built by others proves nothing except that
those antennas did not perform well.

I wish that could be done, so the EH can be relegated to the "mythical
antenna performance" category to which I believe it belongs.

--
Bill Nelson (billn@peak.org)

5275. Re: TGM Hybrid Quad Poor F/B Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 03:32:15 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020317223215.11855.00002810@mb-dh.aol.com>
Source record: 146564

I am about 45 feet up and 15 feet above a tin roof. Front to back is not great, especially on 20, but there is plenty of front to side. It is hard to hear a change of one or two S units as QSB can be 20 db. Watch the meter carefully. Try listening some more and make a few more comparisons. I think you will find the antenna is performing better than you are giving it credit.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

5276. Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 03:57:22 UTC
From: Jester <sluggo286@yahoo.com>
Message-ID: <2Rbl8.551$%n4.123289@news.uswest.net>
Source record: 146554
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

I hope someone can offer some help with this one. A friend and myself bought a couple of used VHF radios and have thus far, been unable to find any service manuals about them. The local radio shops are stumped as well, acting as if this is some sort of alien technology.

Any insite into programing these little rascles is welcome.. Here's some info...

Radio Shack BTX-124
model 19-1205
FCC ID: AAO19-1205

sluggo286@yahoo.com

5277. Re: Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 04:20:08 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c9570fc_2@news1.prserv.net>
Source record: 146565

Hey, Gary, long time no hear. How're ya doin'?

--
Crazy George
Remove NO and SPAM from return address
Gary Coffman <ke4zv@bellsouth.net> wrote in message
news:mjfa9us9aaimve814483e45b58oulkiku7@4ax.com...
> On Fri, 15 Mar 2002 17:22:27 -0600, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:
> >Reg:
> >You don't think big enough. A number of years ago one of the nearby TV
> >broadcast stations discovered they had a mis-manufactured feed line, and
> >replaced it with new. Sold the old line for the price of scrap copper.
> >Still relatively expensive, but it is 1200 feet of 6" outer diameter air
> >insulated (erratically spaced teflon posts to avoid resonance) with a
copper
> >pipe center conductor of about 1.5". I could only afford 4 joints of it.
> >Not very flexible, though, I have to admit.
>
> Yeah, but you can guy it and it makes a reaonable mast too.
>
> Gary
>

5278. Re: Celwave VHF BA1010-1 Omni Fiberglass Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 04:30:01 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c9570fd_2@news1.prserv.net>
Source record: 146566
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf,alt.ham-radio.marketplace

You might want to modify the fraudulent description of the frequency range you have given it. My Celwave (and Tessco and Hutton) catalog says it is 18 MHz wide, manufactured somewhere between 118 and 174 MHz, like either of the standard models, 146-164 or 154-174 MHz. Where on earth did you get the idea it would work from 25 to 299.9? From the catalog index? Sorry, it doesn't work that way.

--
Crazy George
Remove NO and SPAM from return address
Radiodork <wickedlittlecritter@msn.com> wrote in message
news:1404fdf3.0203161222.50849288@posting.google.com...
> This antenna was used for several years under moderate load (100-200
> watts). This unit has been in storage since it was taken out of
> service and replaced with a directional unit in late 1998. Sold as is,
> not tested since it was removed from service in perfect working order.
> $50 OBO.
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=1713202648

5279. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 04:33:06 UTC
From: TexasSteven <rothrock@nospamforme.stic.net>
Message-ID: <3c956d19$0$3041$39cecf19@news.twtelecom.net>
Source record: 146567
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

Jester wrote:

I hope someone can offer some help with this one. A friend and myself bought a couple of used VHF radios and have thus far, been unable to find any service manuals about them. The local radio shops are stumped as well, acting as if this is some sort of alien technology. Any insite into programing these little rascles is welcome.. Here's some info...

Radio Shack BTX-124
model 19-1205
FCC ID: AAO19-1205

FYI,

Here's an idea what frequencies they operate between

Lower Frequency in MHz Upper Frequency in MHz

152 mhz --------- 158 mhz

TexasSteven

5280. Re: Help With Coax Selection Requested

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 04:40:37 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <8sra9uceupqnuep4psll8j4hhhk3vu35p7@4ax.com>
Source record: 146568

On Sun, 17 Mar 2002 22:20:08 -0600, "Crazy George" <munschNO@attglobal.net.SPAM> wrote:
>Hey, Gary, long time no hear. How're ya doin'?

Busy. I don't have time to read the groups regularly anymore.

Gary

5281. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 05:00:26 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203172100.75c6fd83@posting.google.com>
Source record: 146469

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C94E1FF.2AEBA31D@IEEE.org>...
> Mark Keith wrote:
> > Now, would you agree that a local signal to a station using
> > ground wave would be a very low angle. Correct?
>
> Yep, but EZNEC doesn't display the ground wave. Does that mean
> the ground wave peters out and doesn't reach the ionosphere?

Doesn't matter. All I'm showing is that the very low angle radiation doesn't seem to just fizzle out as you would expect if you went by modeling alone. I would think most ground wave type stuff on 10m is below 10 degrees or so. If the antennas at 1/2-3/4-1.0 ,etc wave up were as bad as the modeling seems to show, then they should be fairly lame to low angle ground wave stuff. That doesn't seem to be the case in the real world.
>
> > These pattern changes on verticals that I notice when
> > modeling don't seem near as drastic in the real world. And in all my
> > local ground wave tests, I've NEVER seen an antenna improve by being
> > lower. Not once. I'm not saying it couldn't happen, or doesn't , I'm
> > just saying I don't seem to notice that.
>
> Of course, the 1 dB difference would not be noticeable. What is
> extremely noticeable for me is the average 4 S-unit advantage
> that my dipole has over my vertical in (S+N)/N ratio. The noise
> level is 2 S-units lower on the dipole and the average signal
> strength is 2 S-units higher on the dipole.

My noise was a bit higher on the vertical, but not too much. It didn't matter as the stronger signals overrode the extra noise. The s/n ratio to dx was much better on the vertical here. If the noise is 2 s units higher and the signals are 3-4 s units higher...That was the case for me except I don't think the noise was even 2 s units higher in my case. Maybe 1. Sometimes they were about the same if it was real quiet.
>
> I use the 40m vertical as the support for one end of my dipole
> with the end of the dipole about ten feet from the vertical.
> I'm wondering if the vertical acts as a reflector for the
> dipole during off-the-end vertically polarized radiation from
> the dipole. Guess I need to model both antennas together.

I doubt it really being they are at right angles. There may be some interaction, but not enough to matter I bet. MK

5282. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 05:18:05 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203172118.26a0c9e2@posting.google.com>
Source record: 146470

Richard Clark <kb7qhc@attbi.com> wrote in message
news:<ha7a9ucqjjpt88gmgu6b2838fea94r3oue@4ax.com>...
> On 17 Mar 2002 08:52:11 -0800, nm5k@wt.net (Mark Keith) wrote:
>
> > I've NEVER seen an antenna improve by being
> >lower. Not once. I'm not saying it couldn't happen, or doesn't , I'm
> >just saying I don't seem to notice that.
>
> Hi Mark,
>
> Has time erase old wounds? Consult:
> http://www.qsl.net/kb7qhc/antenna/fractal/n1ir/k2/index.htm
> and recall, if you care, a time when fractals and the k2 ruled the
> world and this famous ground warmer exhibited an optimized low angle
> radiation through what I consider the employment of earth ground as a
> passive, reflecting element.

I was referring mainly to elevated verticals. But I don't doubt you
can use the earth as a reflector, but I bet there is loss involved.
It's not a route I would want to take. MK

5283. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 05:40:04 UTC
From: juafi@yahoo.com
Message-ID: <3c957da7.2847074@news1.coam.net>
Source record: 146471
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

Go to the radio shack web site and type in the model number in the
search bar and it will give you info on that radio.
I did it and found all sorts of documentation. This is what you'll
find there.

BTX-124 VHF FM Business Band Transceiver
(190-1205)

Care and Maintenance
Features
Operation
Preparation
Specifications

PDF Files

Owner's Manual

Exploded Views/Parts List

Detailed Parts List

On Sun, 17 Mar 2002 19:57:22 -0800, "Jester" <sluggo286@yahoo.com>
wrote:

>I hope someone can offer some help with this one. A friend and myself
>bought a couple of used VHF radios and have thus far, been unable to find
>any service manuals about them. The local radio shops are stumped as well,
>acting as if this is some sort of alien technology.
>
>Any insite into programing these little rascles is welcome.. Here's some
>info...
>
>Radio Shack BTX-124
>model 19-1205
>FCC ID: AAO19-1205
>
>sluggo286@yahoo.com
>
>

5284. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 06:20:30 UTC
From: Misha <mm@nbnet.nb.ca>
Message-ID: <OGfl8.407$DZ4.51483@news-nb00s0.nbnet.nb.ca>
Source record: 146472
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

try
http://support.tandy.com/support_electronics/38410.htm

ve9mtb

"Jester" <sluggo286@yahoo.com> wrote in message
news:2Rbl8.551$%n4.123289@news.uswest.net...
> I hope someone can offer some help with this one. A friend and myself
> bought a couple of used VHF radios and have thus far, been unable to find
> any service manuals about them. The local radio shops are stumped as
well,
> acting as if this is some sort of alien technology.
>
> Any insite into programing these little rascles is welcome.. Here's some
> info...
>
> Radio Shack BTX-124
> model 19-1205
> FCC ID: AAO19-1205
>
> sluggo286@yahoo.com
>
>

5285. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 10:28:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C95C14D.5E4429AE@eznec.com>
Source record: 146473

Bill Nelson wrote:

> . . .
> I wish that could be done, so the EH can be relegated to the "mythical
> antenna performance" category to which I believe it belongs.

I take the opposite point of view. The EH antenna makes claims that contradict known antenna theory. Therefore, it belongs in the "mythical antenna performance category" at the very outset, and remains there until good data can be provided that justifies its being removed from that category. To permit the opposite is like saying that we should believe Lepreuchans or perpetual motion machines exist until proof is provided that they don't.

Roy Lewallen, W7EL

5286. Gross understatement!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 10:51:16 UTC
From: Erik Stafette <someone@microsoft.com>
Message-ID: <a74gpgdff1@newstoo.ericsson.se>
Source record: 146474
Cross-posted to: rec.ham-radio,rec.radio.amateur.antenna,uk.radio.amateur,rec.radio.amateur.homebrew

Bit of an understatement! Just how many projects have you got on there?

>HF, VHF, Antennas, Transmitters, Receivers, Wireless microphones, VHF FM
>Broadcasting. SSB, RTTY, CW, Kits, Synthesisers, EPROMS (in both digital
and
>anali�gue circuits). Is there anything there that interests you?
>
>Come to http://pmp3.net/harry for a lot of homebrew radio/electronics fun
>(if you want to be 100% serious or be miserable then perhaps it may not be
>the right place for you).
>
>There are not very many links, though. Sorry! Just a few component
suppliers
>and the odd "usefull" page.
>
>BR from Harry - SM0VPO

5287. Re: Re: spelling

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 10:53:38 UTC
From: Erik Stafette <someone@microsoft.com>
Message-ID: <a74gttdos1@newstoo.ericsson.se>
Source record: 146475
Cross-posted to: rec.ham-radio,rec.radio.amateur.antenna,uk.radio.amateur,rec.radio.amateur.homebrew

```
Do you use an English dictionary or an American dictionary? Perhaps you need
a bit of help with the spelling, or is that part of the fun?
```

Isacc Newman wrote in message <3M4l8.32897$l93.6442206@newsb.telia.net>...
>Hi all,
>
>HF, VHF, Antennas, Transmitters, Receivers, Wireless microphones, VHF FM
>Broadcasting. SSB, RTTY, CW, Kits, Synthesisers, EPROMS (in both digital
and
>anali�gue circuits). Is there anything there that interests you?
>
>Come to http://pmp3.net/harry for a lot of homebrew radio/electronics fun
>(if you want to be 100% serious or be miserable then perhaps it may not be
>the right place for you).
>
>There are not very many links, though. Sorry! Just a few component
suppliers
>and the odd "usefull" page.
>
>BR from Harry - SM0VPO
>
>

5288. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 10:59:17 UTC
From: johan <j.blaak@home.nl>
Message-ID: <INjl8.33275$I6.1488568@zwoll1.home.nl>
Source record: 146476
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

there is a site called www.mods.dk with a manual for this radio
"TexasSteven" <rothrock@nospamforme.stic.net> schreef in bericht
news:3c956d19$0$3041$39cecf19@news.twtelecom.net...
>
> Jester wrote:
>
> I hope someone can offer some help with this one. A friend and myself
> bought a couple of used VHF radios and have thus far, been unable to find
> any service manuals about them. The local radio shops are stumped as
well,
> acting as if this is some sort of alien technology. Any insite into
> programing these little rascles is welcome.. Here's some info...
>
>
> Radio Shack BTX-124
> model 19-1205
> FCC ID: AAO19-1205
>
> --
--
> -------------
>
> FYI,
>
> Here's an idea what frequencies they operate between
>
> Lower Frequency in MHz Upper Frequency in MHz
>
> 152 mhz --------- 158 mhz
>
>
> TexasSteven
>
>
>
>
>

5289. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 12:07:49 UTC
From: Tom Currie <n4aof@iglou.com>
Message-ID: <3C95D894.E967D709@iglou.com>
Source record: 146477
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

> > BTX-124
> >
> BTX-124 VHF FM Business Band Transceiver
> Your RadioShack BTX-124 VHF FM Business Band Transceiver with CTCSS is a
> portable, two-way business radio service transceiver that you can carry
> almost anywhere. The transceiver is compact and light, making it an ideal
> choice for your business needs.
>
> Your transceiver has the following features:
>
> Programmable Channels A and B - let you operate the transceiver on two
> different frequencies.
>
> Preset Frequencies - let you quickly begin operation on either
> 154.600 MHz (Channel A, green dot) or
> 154.570 MHz (Channel B, blue dot).

And Radio Shack can reprogram it for any other two business frequencies within its reach. If I recall correctly, they don't believe it reaches the 2m ham band. Whether it really could reach the 2m ham band isn't important unless you can find someone to reprogram it to a ham frequency.

The two frequencies that originally come programmed in this model radio are FORMER itinerant business band frequencies that used to be licensed under Part 90 of the FCC Regulations. Those two frequencies were withdrawn from Part 90 in November 2000 and are now allocated to the Multi-Use Radio Service (MURS) which is a licensed-by-rule service under Part 95 with strict limits on ERP and bandwidth.

5290. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 12:58:23 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C95E32E.BF1A6EC1@bellatlantic.net>
Source record: 146478

I've had a 40m dipole up for 30 years now with Copper Clad.. The Coax has
been replaced, but the dipole lives on! Especially for an 80 meter.. I'd
strongly suggest the Clad.

'73 KI4Z

Deni wrote:

> What is the current informed opinion on wire antenna materials? Wire and
> insulators?
> Solid copper versus stranded?
> 16 SWG copper. Covered or bare? If bare wire is used especially stranded
> does the inevitable corrosion on the copper strands cause any appreciable
> degradiation in perfomance?
> PVC or similar covering insulaton invariably fails somewhere and then of
> course water enters and unseen corrosion takes place!
> I wont even consider using any form of copperclad steel wires, bad
> experience with these!
> I have constructed many wire antennas in the past with whatever I had
> available but right now I want to fit and forget the 'Ultimate low loss
> Doublet' using the best materials I can get, it also has to be rugged to
> survive weather and wind. It's to be around 132' top with open wire line
> feed, probably home brew line as I hate that 450 ohm copper clad steel
> windowline stuff!
> Any comments or suggestions considered with much interest.
>
> 73, Deni, Gm3skn
> Shetland Islands UK

5291. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 13:19:15 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203180519.58067fa@posting.google.com>
Source record: 146479

Why does it matter where a one wavelength loop is fed (other than for
selecting polarization)?

On a one wavelength loop, in free space, any point would be as good as
any other. If it is close to ground, then different feed point would
have slightly different impedances. The shape of the loop may have a
smaller effect. Otherwise I don't see why it would matter much.

Jim
N8EE

VA3ATD <a.duffy@sympatico.ca> wrote in message news:<3C952C41.8060202@sympatico.ca>...
> The best shape is a circle for a loop antenna from what I understand.
> You can also use it in a square configuration (Quad antenna
> style)feeding it from the middle of one side with minor increases to
> the total length of wire used to construct the loop. As for feeding it
> from the top..... I think the diamond shaped Quad is fed from the bottom
> using coax. The over all length would be about 17' diagonally.
>
> --
> 73, Tony
> VA3ATD
> London, Ontario
> "Imagination and Ingenuity are the only limits" AD
>
> Terrence R. Redding wrote:
>
> > Does this antenna look right to those on this list? I thought there was a
> > discussion here a few years ago that dismissed the idea of a single mast
> > diamond loop fed at the top of the mast by 50 ohms coax.
> >
> > Now I see an article in QST that says the antenna works - and works on 20,
> > 15, and 10.
> >
> > Does this fall in the same category as radiating with a light bulb? Yes,
> > you can use it as an antenna - but whether it appears to work or not, it
> > isn't truly a good design.
> >
> > Terry - W6LMJ
> >
> >

5292. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 13:37:24 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <o4ml8.16105$tP2.1419698@bgtnsc05-news.ops.worldnet.att.net>
Source record: 146480

"Bill Nelson" <billn@spock.peak.org> wrote in message
news:a73mga$e4e$2@quark.scn.rain.com...
>
> I don't think there is anything new about the EH antenna either. But
> the only way to tell for sure is by testing a sample provided by the
> inventor. Testing antennas built by others proves nothing except that
> those antennas did not perform well.
>

Hi Bill:

I must agree with Roy.

The issue is not for others to prove that the EH antenna does not work as claimed. This is an exercise in which the "inventors" can always claim that the antenna was not constructed properly. (I place "inventors" in quotes because the antenna is a simple small conical monopole antenna over a small ground plane. Its performance characteristics have been well known for many years.)

Given that the "inventors" claims defy widely accepted and proven antenna theory (and in most their claims defy simple logic), the "inventors" must prove their claims. The burden of proof rests on their shoulders.

Steve VE9SRB

5293. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 14:34:45 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a74u1p$ieohv$1@ID-124126.news.dfncis.de>
Source record: 146481

What I look for in a program which generates radiation patterns are those patterns proper to the antenna itself and its immediate environment. i.e., before propagation loss in its many directions and elevations sets in.

I would prefer to make my own predictions of what happens to the somewhat more distant radiated fields by taking into account propagation loss along the ground and through the ionosphere.

The two aspects are independent. They are as different as the generator is from the transmission line. There's no need to confuse them. Now folks, KISS and make up !

Regards, Reg G4FGQ

5294. KW-107 Super Match - Panel Instrument needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 15:16:50 UTC
From: Per Enocson <per.enocson@telia.com>
Message-ID: <Cxnl8.33090$l93.6487777@newsb.telia.net>
Source record: 146482

Looking for a replacement SWR/ power panel meter for the KW-107. My old instrument is mechanically finished after many years of service. Orignal or similar 100 mikroamp 80x80 mm panel measure. Anyone who can help me ?

73ï¿½s / Per SM0WRA

5295. Cellular Yagi Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 16:14:46 UTC
From: Billphill@earthlink.net
Message-ID: <3c96120c.95937248@news.earthlink.net>
Source record: 146483

I need to build a yagi for my cell phones. I have a remote cabin in the woods and get minimal service. Does anyone know of a site with some instructions for a yagi?

Bill

5296. Re: Wire Antenna Materials your VIEWS?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 16:47:55 UTC
From: Sylvan Butler <Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna9c6kf.b80.Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 146508

On 15 Mar 2002 21:37:43 -0800, Dan Dowell <dandowell@sprintmail.com> wrote:
> In regards to exposed copper wire. What if you sealed the wire with a
> couple of coats of polyurathane. Even in salty air I think that the
> poly would protect it.

Think what poly does when you put it on a surface that flexes.

sdb
--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

5297. Re: Cellular Yagi Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 18:14:05 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C962E6D.77346626@tampabay.rr.com>
Source record: 146484

hey bill
this site below has antennas for all sorta of microwave bands and stuff
i am sure they would have one for the freqs your cellphone works on good
luck
www.directivesystems.com

Badwater Bill wrote:

>
> I need to build a yagi for my cell phones. I have a remote cabin in
> the woods and get minimal service. Does anyone know of a site with
> some instructions for a yagi?
>
> Bill

5298. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 18:40:50 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C9634B2.20B7DBD0@crosslink.net>
Source record: 146486

CAM wrote:
>
> Ken Linder wrote:
> > Has anyone else experienced this? Any idea what this might be from?
>
> Of course. It's simple static electricity. ....

I'd agree, except the Butternut is (supposed to be?) DC grounded; ie, mine has a coil between the base of the antenna itself and ground that 'theoretically' bleeds off the static charge. Did the coil go away with the new radial system?

73, KA3DWW

5299. Antenna feed line arc over

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 18:42:13 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a75c9m$30m5$1@news1.tribune.com>
Source record: 146485

I have had similar experiences. Now my HF antennas include a 1 meg resistor dc path to ground from each element while in use. When not in use they are hard grounded, by a relay or a manual switch.

KA9CAR

Ken Linder <radstream@lvcm.com> wrote in message news:u977h8atpo145a@corp.supernews.com...
> Well, of all days, it is actually snowing and raining today in the foothills
> of Las Vegas. 'Great,' I think to my self. No yard work, can't wash the
> car, wife is playing bingo and daughter is at a friend's house. Perfect day
> for ham radio. The night before, I had plugged my antenna coax into a
> grounding block because of the possibility of thunderstorms. When I
> unplugged it from the block, electricity arced over to it. I quickly
> released the plug & dropped it on the table! I could hear the thing
> sizzling with electricity. I carefully picked it up by the coax so as not
> to be jolted and brought it closer to the grounding block. At about one
> inch away from the block, electricity was visibly arcing over from the
> center connector to ground. After about 15 minutes it stopped, then started
> again. I decided this be a better computer day than ham day! I am glad I
> didn't have it plugged in to my radio!
>
> Has anyone else experienced this? Any idea what this might be from? It is
> an older HF6V with a very new CPK (Capacitive Counterpoise Kit). I operated
> this antenna for years with radials and never had this happen, although I do
> know that in that configuration the entire system operates at DC ground.
> With the CPK, neither the antenna or CPK operate at ground, their voltage
> floats... I guess that is partially how it tunes the antenna without
> radials.
>
> Comments? Thoughts?? Have I found a new power source I could sell??? :-)
>
> 73s
> Ken Linder
> KC7RAD
> www.radstream.com
>
>

5300. Re: rohn 20

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 18:50:21 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a75cou$30vc$1@news1.tribune.com>
Source record: 146487

I do not know how the size of the 450 compares to the 800sdx. But ...

I had to remove one diagonal to get a Yaesu 450 in to my Rohn 25. I had to redrill the plate to make it match. In fariness, this was a very old plate and might have had some non standard spacing. ALSO the bolts that came with the rotator were TOO SHORT. They warn you against bolts that are too long damaging the rotator, but then shipped bolts with it that engaged only 2 turns when put through the plate. I went to the hardware store and found a combination of standard bolt length and washers that gave me a good engagement of the threads with out bottoming out.

KA9CAR

Gary M. Belcaster <gbelcas@pressenter.com> wrote in message news:gbelcas-70650D.17371817032002@corp.supernews.com...
> Anyone know for certain that a yaesu 800sdx rotator will fit easily into
> rohn 20 tower ?? Tnx in advance.
>
> Gary
> ka9rao

5301. Auto Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 18:56:35 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C963863.ED916F57@crosslink.net>
Source record: 146488

I met a fellow at HRO Saturday who couldn't get either of two different automatic tuners (one an ICOM) to tune a random wire, either at home or in the shop's store. Either tuner would work FB with under five watts, but neither would tune at 100 watts out on his new ICOM 706. Any ideas?

KA3DWW

5302. Alinco EDX-2 with any radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 20:14:02 UTC
From: Owen Duffy <owen@oda.com.au>
Message-ID: <3C964A8A.764DE714@oda.com.au>
Source record: 146489
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

The Alinco EDX-2 is an automatic end-fed-wire tuner that integrates with a couple of Alinco HF radios, including the DX70-TH.

I am aware that some folk have used this tuner independently of the Alinco transceivers.

Has anyone information on the protocol for controlling this antenna tuner so that I can make a controller that will allow it to be used safely and reliably with other radios?

Thanks... Owen

5303. Re: TGM Hybrid Quad Poor F/B Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 21:13:35 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <a75l25$3ur@nntpa.cb.lucent.com>
Source record: 146490

I installed a similar antenna for a neigbor who is also a ham. The best test we could find was between our two stations seperated by about 300 yards. I made measurements using my s-meter and a calibrated attenuator. We found the antenna met specs or greater when at a height of 20 fett above his roof of 20 feet so 40 feet total. The qsb on 20 15 and 10 is usually too great to permit an accurate measurement and s-meters are notorious for their inaccuracy so hence the attenuator.

Tony

WA6LZH

5304. Re: Auto Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 21:16:08 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C9658FD.D2C48CFB@icok.net>
Source record: 146491

Vito,
In the order of 'likelyhood;

1. a. Radio and tuner connected incorrectly.
b. Tuner, antenna, and ground connected incorrectly.

2. The 'random wire' was too random, tuner was unable to
find an acceptible match.

3. Something wrong with the radio.

4. Something wrong with both tuners.

Got to be one of those, or a combination of them. The
only other possibility is 'operator error'.
Hope you get it worked out...
'Doc

5305. Re: spelling

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 21:50:44 UTC
From: la8ak.xnd@online.no
Message-ID: <3c963665.3424514@news.online.no>
Source record: 146492
Cross-posted to: rec.ham-radio,rec.radio.amateur.antenna,uk.radio.amateur,rec.radio.amateur.homebrew

On Mon, 18 Mar 2002 11:53:38 +0100, "Erik Stafette"
<someone@microsoft.com> wrote:

>Do you use an English dictionary or an American dictionary? Perhaps you need
>a bit of help with the spelling, or is that part of the fun?
>

perhaps 'someone' just need assistance in his limited English world ?
--
remove ,xnd to reply

5306. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 23:20:13 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a75snd$5ci$11@quark.scn.rain.com>
Source record: 146493

VE9SRB <srbest@att.net> wrote:

>> I don't think there is anything new about the EH antenna either. But
>> the only way to tell for sure is by testing a sample provided by the
>> inventor. Testing antennas built by others proves nothing except that
>> those antennas did not perform well.

> Hi Bill:

> I must agree with Roy.

> The issue is not for others to prove that the EH antenna does not work as
> claimed. This is an exercise in which the "inventors" can always claim that
> the antenna was not constructed properly. (I place "inventors" in quotes
> because the antenna is a simple small conical monopole antenna over a small
> ground plane. Its performance characteristics have been well known for many
> years.)

Which is why I stated - "testing a sample provided by the inventor". That
way, the person has no way of weaseling out when the test fails, due to
claims of "improper construction".

> Given that the "inventors" claims defy widely accepted and proven antenna
> theory (and in most their claims defy simple logic), the "inventors" must
> prove their claims. The burden of proof rests on their shoulders.

Agreed. I have never stated otherwise - and didn't mean to imply otherwise.

--
Bill Nelson (billn@peak.org)

5307. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-18 23:25:20 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C967760.80406@sympatico.ca>
Source record: 146494

I never said it mattered. I was merely pointing out that the driven elements of a quad style antenna and a diamond configuration quad antenna had the feed points at the bottom. Why have the extra coax? Matching purposes?

Terry seemed to be questioning the validity of feeding it from the top. ("Does this antenna look right to those on this list? I thought there was a discussion here a few years ago that dismissed the idea of a single mast diamond loop fed at the top of the mast by 50 ohms coax.")

But if it were a 1/2 wave loop, isn't the maximum field strength opposite the feed point (unless the opposite corner is open at which time the reverse is true)? If this is the case, then feeding from the top might not be such a good idea. But also on 10m the loop would become a full wave antenna at which time the feed point wouldn't matter. I've never heard of a 2 wave length loop (does one exist and what would be the effect on the pattern and impedance).

All this in mind, I would have to say that if it's a half wave at 20m then it might be best to feed it from the bottom and on 10m it wouldn't matter.

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

JLB wrote:

> Why does it matter where a one wavelength loop is fed (other than for
> selecting polarization)?
>
> On a one wavelength loop, in free space, any point would be as good as
> any other. If it is close to ground, then different feed point would
> have slightly different impedances. The shape of the loop may have a
> smaller effect. Otherwise I don't see why it would matter much.
>
> Jim
> N8EE
>
> VA3ATD <a.duffy@sympatico.ca> wrote in message news:<3C952C41.8060202@sympatico.ca>...
>
>>The best shape is a circle for a loop antenna from what I understand.
>>You can also use it in a square configuration (Quad antenna
>>style)feeding it from the middle of one side with minor increases to

>>the total length of wire used to construct the loop. As for feeding it
>>from the top..... I think the diamond shaped Quad is fed from the bottom
>>using coax. The over all length would be about 17' diagonally.
>>
>>--
>>73, Tony
>>VA3ATD
>>London, Ontario
>>"Imagination and Ingenuity are the only limits" AD
>>
>>Terrence R. Redding wrote:
>>
>>
>>>Does this antenna look right to those on this list? I thought there was a
>>>discussion here a few years ago that dismissed the idea of a single mast
>>>diamond loop fed at the top of the mast by 50 ohms coax.
>>>
>>>Now I see an article in QST that says the antenna works - and works on 20,
>>>15, and 10.
>>>
>>>Does this fall in the same category as radiating with a light bulb? Yes,
>>>you can use it as an antenna - but whether it appears to work or not, it
>>>isn't truly a good design.
>>>
>>>Terry - W6LMJ
>>>
>>>
>>>

5308. Ham Stick on a Van

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 00:10:43 UTC
From: rons533@dejazzd.com
Message-ID: <3C9681C2.4221@dejazzd.com>
Source record: 146495

I want to install a Ham Stick for 17 meters on my Chrysler van but I don't want it to be hitting the trees as I drive by. Can I mount it on a trailer hitch extension off to one side? Does the antenna have to be above the roof? I have searched the Web but couldn't find any information. Any information or sites would be appreciated.

5309. Re: Ham Stick on a Van

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 00:55:18 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <W%vl8.17641$e33.5523@nwrddc01.gnilink.net>
Source record: 146496

It's pretty much like any OTHER mobile antenna install - sure, it WILL work that way, and you WILL
make contacts - but the BEST installation is as high and in the clear as you can physically manage!

Anything LESS is a compromise - with results that match...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
<rons533@dejazzd.com> wrote in message news:3C9681C2.4221@dejazzd.com...
> I want to install a Ham Stick for 17 meters on my Chrysler van but I
> don't want it to be hitting the trees as I drive by. Can I mount it on a
> trailer hitch extension off to one side? Does the antenna have to be
> above the roof? I have searched the Web but couldn't find any
> information. Any information or sites would be appreciated.

5310. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 01:19:09 UTC
From: Brenda Ann <servfsr@kornet.net>
Message-ID: <a763ko$sc8$1@hiline.shinbiro.com>
Source record: 146505
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

http://www.radioshack.com/ProdSupport/DocumentDetail/DocumentDetailIndex.asp
?URL=http://support.radioshack.com/support_electronics/38410.htm

"Jester" <sluggo286@yahoo.com> wrote in message
news:2Rbl8.551$%n4.123289@news.uswest.net...
> I hope someone can offer some help with this one. A friend and myself
> bought a couple of used VHF radios and have thus far, been unable to find
> any service manuals about them. The local radio shops are stumped as
well,
> acting as if this is some sort of alien technology.
>
> Any insite into programing these little rascles is welcome.. Here's some
> info...
>
> Radio Shack BTX-124
> model 19-1205
> FCC ID: AAO19-1205
>
> sluggo286@yahoo.com
>
>

5311. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 01:19:09 UTC
From: Brenda Ann <servfsr@kornet.net>
Message-ID: <a76jbi$46n$1@hiline.shinbiro.com>
Source record: 146506
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

http://www.radioshack.com/ProdSupport/DocumentDetail/DocumentDetailIndex.asp
?URL=http://support.radioshack.com/support_electronics/38410.htm

"Jester" <sluggo286@yahoo.com> wrote in message
news:2Rbl8.551$%n4.123289@news.uswest.net...
> I hope someone can offer some help with this one. A friend and myself
> bought a couple of used VHF radios and have thus far, been unable to find
> any service manuals about them. The local radio shops are stumped as
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> acting as if this is some sort of alien technology.
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> Any insite into programing these little rascles is welcome.. Here's some
> info...
>
> Radio Shack BTX-124
> model 19-1205
> FCC ID: AAO19-1205
>
> sluggo286@yahoo.com
>
>

5312. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 01:45:17 UTC
From: richardharrison@webtv.net
Message-ID: <16227-3C96982D-77@storefull-2395.public.lawson.webtv.net>
Source record: 146498

Tony, VA3ATD wrote:
"Terry seemed to be questioning the validity of feeding it from the top."

The first figure, 10-1(A) in the large loop chapter in ON4UN`s book may show why the QST loop is fed at the top, and not the bottom.
Current is stronger adjacent to the feedpoint than it is on the far side of the loop. Significant energy is radiated on its way to the far side.

The closer an energized wire comes to the earth, and the stronger the excitation of the wire, the more the earth`s energy toll. The loss in extra feedline to reach the top probably is less than the extra energy loss in the more powerfully excited antenna elements near the earth, were the antenna bottom-fed. A taller support pole might change this trade-off.

ON4UN says:
"The radiation resistance of an equilateral quad loop in free space is approximately 120 ohms."
Impedance is affected by proximity and quality of earth near the loop.
ON4UN has charts in "Low-Band DXing".

Best regards, Richard Harrison, KB5WZI

5313. Re: Ham Stick on a Van

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 02:42:00 UTC
From: NI4L <ni4l@charter.net>
Message-ID: <3C96A578.CD2AE020@charter.net>
Source record: 146499

I have a dodge van i put a ball mount on the side it puts the antenna high enough where it work like it
should anything else is a waste of time and engery.

Gary - KJ6Q wrote:

> It's pretty much like any OTHER mobile antenna install - sure, it WILL work that way, and you WILL
> make contacts - but the BEST installation is as high and in the clear as you can physically manage!
>
> Anything LESS is a compromise - with results that match...
>
> --
> Gary - KJ6Q
> **********
> Two things we'll never see:
> 1. Perpetual motion...
> 2. A liberal Democrat complaining
> about "Too much government"
> <rons533@dejazzd.com> wrote in message news:3C9681C2.4221@dejazzd.com...
> > I want to install a Ham Stick for 17 meters on my Chrysler van but I
> > don't want it to be hitting the trees as I drive by. Can I mount it on a
> > trailer hitch extension off to one side? Does the antenna have to be
> > above the roof? I have searched the Web but couldn't find any
> > information. Any information or sites would be appreciated.

--

NI4L CUSTOM RESONANT DIPOLE
LEGAL LIMIT ++ CUSTOM MADE CENTER FED DIPOLE
Made with the same components used by our military forces today
Custom made to YOUR FREQUENCY of operation
Let me take the hassle out of making a RESONANT DIPOLE for you.
Click here for more info... http://www.angelfire.com/nb/ni4l/

5314. Re: TGM Hybrid Quad Poor F/B Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 03:01:39 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C96AA49.647B2D1E@bellatlantic.net>
Source record: 146500

rons533@dejazzd.com wrote:

> How high are
> > you mounted? Maybe you are to close to the ground?
> > Radio K4IA
> > Craig Buck
> > Fredericksburg, Virginia USA
> > ----------
> > REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free,
> > Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers
>
> I am only 30' off the ground. I was thinking that this may be the
> problem but it is as high as I can go.
> Even with this minor problem the antenna is still great.

Ron,

I agree with Craig. I love the antenna. The F/B is not great,
as you noted, but F/S is. I get about 1 S unit difference F/B,
and about 3 S units difference F/S. If you believe my S meter
is calibrated, linear and accurate, maybe that means about 18
db F/S and about 6 db F/B. I have no clue - but I do know
it makes a difference. Mine is mounted only about 5' above
the peak of my roof - the peak is 23' above ground.

5315. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 03:42:57 UTC
From: Jester <sluggo286@yahoo.com>
Message-ID: <AJwl8.173$nQ.119708@news.uswest.net>
Source record: 146497
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

We've looked over the site, but they don't tell us anything about what we really want to know.
inside the radio, there are 10 DIP switches and what appears to be a reset button of some sort.
The service techs over here don't have a clue and aren't about to touch it.
The paper manual,
the PDF files, and tons of sites, so far, have not offered any explanation of these pins or
how to set them. All I really know about them is that they where all set to off and depending
on how you set them and work them, if you press the reset button, you get a different
series of beeps. What we really wanted was to see what the pin sets were for and if
the radio can be reset to a different freq with them, preferably to something we're licienced
for... <GRIN>, or are these just some pricy paperweights...

Thanks for all the input... sluggo286@yahoo.com

Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message news:3C955C07.3C28FFF8@tampabay.rr.com...
> jester
> i dont know why know one you asked knows about that radio its on radio shacks
> website i took this number 19-1205 that you posted and did a search and it came
> back with all sorts of info on it what you have is a VHF business band radio
> i am sure if you look around there you could find the manual you could download
> but dont be surprised if you cant modify it radio shack doesnt buy radios from
> any company that can be modified to work outside the band they are set to
> good luck
> oh there website is
> http://www.radioshack.com
> then in the search window type in that number then click the HERE link and off
> you go
>
> Jester wrote:
>
> > I hope someone can offer some help with this one. A friend and myself

> > bought a couple of used VHF radios and have thus far, been unable to
find
> > any service manuals about them. The local radio shops are stumped as
well,
> > acting as if this is some sort of alien technology.
> >
> > Any insite into programing these little rascles is welcome.. Here's some
> > info...
> >
> > Radio Shack BTX-124
> > model 19-1205
> > FCC ID: AAO19-1205
> >
> > sluggo286@yahoo.com
>

5316. Re: Ham Stick on a Van

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 03:49:49 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <xzyl8.18435$e33.340@nwrddc01.gnilink.net>
Source record: 146501

"Works like it should" is a HIGHLY relative term - and if YOU are suggesting that a ball mount
somewhere at mid-point on the SIDE of your van will deliver performance AS GOOD AS if the antenna
was mounted in the center of the ROOF - well, yer simply kidding yourself! SURE, you MAY make
contacts and receive signal reports that satisfy you - but UNLESS you have actually run tests with
that SAME antenna mounted on the top of your van, out high and in the clear, you have NO CLUE as
"how it SHOULD" - or COULD - function on that same vehicle!

And concerning statements as to "waste of time and energy" - to SOME of us, obtaining an additional
S unit from our antenna because WE have done actual tests and research as to the BEST placement for
our antennas is HARDLY a "waste of time and energy"!

What YOU are happy and satisfied with in a mobile installation and on-the-air reports probably
differs SIGNIFICANTLY from what some of the REST of us will "settle" for!

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

"NI4L" <ni4l@charter.net> wrote in message news:3C96A578.CD2AE020@charter.net...
> I have a dodge van i put a ball mount on the side it puts the antenna high enough where it work
like it
> should anything else is a waste of time and engery.
>
>
> Gary - KJ6Q wrote:
>
> > It's pretty much like any OTHER mobile antenna install - sure, it WILL work that way, and you
WILL
> > make contacts - but the BEST installation is as high and in the clear as you can physically
manage!

> >
> > Anything LESS is a compromise - with results that match...
> >
> > --
> > Gary - KJ6Q
> > **********
> > Two things we'll never see:
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> > <rons533@dejazzd.com> wrote in message news:3C9681C2.4221@dejazzd.com...
> > > I want to install a Ham Stick for 17 meters on my Chrysler van but I
> > > don't want it to be hitting the trees as I drive by. Can I mount it on a
> > > trailer hitch extension off to one side? Does the antenna have to be
> > > above the roof? I have searched the Web but couldn't find any
> > > information. Any information or sites would be appreciated.
>
> --
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> Click here for more info... http://www.angelfire.com/nb/ni4l/
>
>

5317. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 04:19:54 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <VbSWPPtsSQrAs+RUjJ6k29MsOXuu@4ax.com>
Source record: 146502

"Jester" <sluggo286@yahoo.com> wrote:

>We've looked over the site, but they don't tell us anything about what we
>really want to know.
>inside the radio, there are 10 DIP switches and what appears to be a reset
>button of some sort.
>The service techs over here don't have a clue and aren't about to touch it.
>The paper manual,
>the PDF files, and tons of sites, so far, have not offered any explanation
>of these pins or
>how to set them. All I really know about them is that they where all set to
>off and depending
>on how you set them and work them, if you press the reset button, you get a
>different
>series of beeps. What we really wanted was to see what the pin sets were
>for and if
>the radio can be reset to a different freq with them, preferably to
>something we're licienced
>for... <GRIN>, or are these just some pricy paperweights...

This seems fairly straight forward. According to my Radio Shack catalog their business band radios "can be set by a RadioShack Service Center to nearly any VHF business frequency from 150.775 to 157.740 Mhz." The catalog also says "FCC license required." No testing is needed for the license, so you're not allowed to service the radios.

In other words, it is illegal for you to reset these radios, yourself, but if you get a business radio license and have a RadioShack Service Center set the radios for you, you'll have working radios.

To apply for your business radio license, go to the www.fcc.gov site, click on "Forms" and then click on "600" and "Download Instructions."

Cheers

Bob
k5qwg

>
>Thanks for all the input... sluggo286@yahoo.com
>
>
>
>
>Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
>news:3C955C07.3C28FFF8@tampabay.rr.com...

>> jester
>> i dont know why know one you asked knows about that radio its on radio
>shacks
>> website i took this number 19-1205 that you posted and did a search and it
>came
>> back with all sorts of info on it what you have is a VHF business band
>radio
>> i am sure if you look around there you could find the manual you could
>download
>> but dont be surprised if you cant modify it radio shack doesnt buy radios
>from
>> any company that can be modified to work outside the band they are set to
>> good luck
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>> Jester wrote:
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>> > acting as if this is some sort of alien technology.
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>> > Any insite into programing these little rascles is welcome.. Here's some
>> > info...
>> >
>> > Radio Shack BTX-124
>> > model 19-1205
>> > FCC ID: AAO19-1205
>> >
>> > sluggo286@yahoo.com
>>
>

5318. Re: Cellular Yagi Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 04:20:13 UTC
From: DW <wilson.d@skyweb.ca>
Message-ID: <3c96bc4b_2@skyweb.ca>
Source record: 146503

"Badwater Bill" <Billphill@earthlink.net> wrote in message
news:3c96120c.95937248@news.earthlink.net...
>
> I need to build a yagi for my cell phones. I have a remote cabin in
> the woods and get minimal service. Does anyone know of a site with
> some instructions for a yagi?
>
> Bill

Good day,

Doing a google search
http://www.google.com/search?hl=en&ie=ISO-8859-1&oe=ISO-8859-1&q=homebrew+cellul
ar+yagi yielded very few "valid" links, but the top one may be something to look
at. A little OT but I did buy a great one for less than $100.00 and boy did it
work great on my old Motorola Bagphone!

http://www.qsl.net/n9zia/wireless/appendixE.html

Outgoing mail is certified Virus Free by AVG Anti-Virus system.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.336 / Virus Database: 188 - Release Date: 3/11/2002

5319. Re: Ham Stick on a Van

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 05:34:06 UTC
From: ATD <capt-tripps@comcast.net>
Message-ID: <3C96CDCF.7C165F30@comcast.net>
Source record: 146504

Gary - KJ6Q wrote:
>
> "Works like it should" is a HIGHLY relative term - and if YOU are suggesting that a ball mount
> somewhere at mid-point on the SIDE of your van will deliver performance AS GOOD AS if the antenna
> was mounted in the center of the ROOF - well, yer simply kidding yourself! SURE, you MAY make
> contacts and receive signal reports that satisfy you - but UNLESS you have actually run tests with
> that SAME antenna mounted on the top of your van, out high and in the clear, you have NO CLUE as
> "how it SHOULD" - or COULD - function on that same vehicle!
>
> And concerning statements as to "waste of time and energy" - to SOME of us, obtaining an additional
> S unit from our antenna because WE have done actual tests and research as to the BEST placement for
> our antennas is HARDLY a "waste of time and energy"!
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> What YOU are happy and satisfied with in a mobile installation and on-the-air reports probably
> differs SIGNIFICANTLY from what some of the REST of us will "settle" for!
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> --
> Gary - KJ6Q
> **********
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> 2. A liberal Democrat complaining
> about "Too much government"
>
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> > I have a dodge van i put a ball mount on the side it puts the antenna high enough where it work
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> manage!
> > >
> > > Anything LESS is a compromise - with results that match...
> > >
> > > --
> > > Gary - KJ6Q
You can always try a Hustler short mast with 17M resonator mounted in
the center of your van. When I had a minivan I used this combination
with resonators for 10-40M with very good results.

Be sure to use a spring at the base.

Andy N3LCW

5320. refill cartridges,not refill kits????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 06:33:16 UTC
From: kc5cqa@yahoo.com
Message-ID: <3c98db84.5626132@news.devtex.net>
Source record: 146507

I have tried the ''refilling the printer ink cartridges route,(messy)
what I would like now is to
see if I could find some company that refills the cartridges
themselves, and there by cutting down on the 'high cost' of the
originals. Anyone
out there have any 'input'. thanks, cl.

5321. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 07:40:31 UTC
From: Zoran Brlecic <WA7AA@attbi.com>
Message-ID: <3C96EB6D.D13DEB4@attbi.com>
Source record: 146509

VE9SRB wrote:

> Given that the "inventors" claims defy widely accepted and proven antenna
> theory (and in most their claims defy simple logic), the "inventors" must
> prove their claims. The burden of proof rests on their shoulders.

They can always claim that they "know in their heart". It works beautifully for all the religions.

73 ..... Zoran WA7AA

5322. EH Antenna: what a pity !

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 08:03:53 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a76re7$8t$1@newsserver.cilea.it>
Source record: 146510

Hi everybody,

what a pity ! I was surfing the EH antenna official web site today, and I noticed that the site had been updated on March 18th. I said to myself "wow!, maybe we can eventually find the results of the AM tests..". Guess what... NOTHING at all.
Just another updated release of the "theory" behind the antenna, with the same hilarious approach to electromagnetic fileds.. today's best is the sentence: "If the phase is corrected, the "capacitor" becomes a leaky capacitor". Guys, that's really GREAT !
When will they understand that they CANNOT change the physical properties of an antenna by changing the circuit to which it is connected ?? You wonder which kind of engineer Ted is ....
Best 73,

Michele IZ2EAS

5323. Re: refill cartridges,not refill kits????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 08:29:53 UTC
From: W6DKN <w6dkn@qsl.net>
Message-ID: <5GCl8.4598$BP1.618@nwrddc04.gnilink.net>
Source record: 146511

What type of antenna does this printer use ? :>)

"kc5cqa" <kc5cqa@yahoo.com> wrote in message
news:3c98db84.5626132@news.devtex.net...
> I have tried the ''refilling the printer ink cartridges route,(messy)
> what I would like now is to
> see if I could find some company that refills the cartridges
> themselves, and there by cutting down on the 'high cost' of the
> originals. Anyone
> out there have any 'input'. thanks, cl.

5324. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 10:53:27 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u9e657l287cq59@corp.supernews.com>
Source record: 146512
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

Those switches may be for the CTCSS tones.
Usually a binary coding as far as the switches go.
Most VHF High band units like that are on what was referred to as the high split, and are nearly impossible to convert to the 2 meter ham band, at least AFAIK.
But it's been years since I worked on commercial stuff...

--
Wayne. <|:^)>
KG6KFE@charter.nospam.net
http://www.wayneleake.net

"Jester" <sluggo286@yahoo.com> wrote in message
news:AJwl8.173$nQ.119708@news.uswest.net...
> We've looked over the site, but they don't tell us anything about what we
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> inside the radio, there are 10 DIP switches and what appears to be a reset
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> series of beeps. What we really wanted was to see what the pin sets were
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> > jester
> > i dont know why know one you asked knows about that radio its on radio

> shacks
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> radio
> > i am sure if you look around there you could find the manual you could
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> > but dont be surprised if you cant modify it radio shack doesnt buy
radios
> from
> > any company that can be modified to work outside the band they are set
to
> > good luck
> > oh there website is
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> > then in the search window type in that number then click the HERE link
and
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> > > model 19-1205
> > > FCC ID: AAO19-1205
> > >
> > > sluggo286@yahoo.com
> >
>
>

5325. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 11:00:34 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u9e6ipreplh378@corp.supernews.com>
Source record: 146513
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

Follow up to my last reply:
Found switch in parts as follows...
S201 11878030 SWITCH,ENCODING DIP D10GE S90067
Would look to me that this is the CTCSS encoding switch, but I do not know
exactly how to program your unit(s).
A service manual would tell, I assume, but getting one looks like it might
be a hassle.

--
Wayne. <|:^)>
KG6KFE@charter.nospam.net
http://www.wayneleake.net

"Jester" <sluggo286@yahoo.com> wrote in message
news:AJwl8.173$nQ.119708@news.uswest.net...
> We've looked over the site, but they don't tell us anything about what we
> really want to know.
> inside the radio, there are 10 DIP switches and what appears to be a reset
> button of some sort.
> The service techs over here don't have a clue and aren't about to touch
it.
> The paper manual,
> the PDF files, and tons of sites, so far, have not offered any explanation
> of these pins or
> how to set them. All I really know about them is that they where all set
to
> off and depending
> on how you set them and work them, if you press the reset button, you get
a
> different
> series of beeps. What we really wanted was to see what the pin sets were
> for and if
> the radio can be reset to a different freq with them, preferably to
> something we're licienced
> for... <GRIN>, or are these just some pricy paperweights...
>
> Thanks for all the input... sluggo286@yahoo.com
>
>
>
>
> Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
> news:3C955C07.3C28FFF8@tampabay.rr.com...
> > jester

> > i dont know why know one you asked knows about that radio its on radio
> shacks
> > website i took this number 19-1205 that you posted and did a search and
it
> came
> > back with all sorts of info on it what you have is a VHF business band
> radio
> > i am sure if you look around there you could find the manual you could
> download
> > but dont be surprised if you cant modify it radio shack doesnt buy
radios
> from
> > any company that can be modified to work outside the band they are set
to
> > good luck
> > oh there website is
> > http://www.radioshack.com
> > then in the search window type in that number then click the HERE link
and
> off
> > you go
> >
> > Jester wrote:
> >
> > > I hope someone can offer some help with this one. A friend and myself
> > > bought a couple of used VHF radios and have thus far, been unable to
> find
> > > any service manuals about them. The local radio shops are stumped as
> well,
> > > acting as if this is some sort of alien technology.
> > >
> > > Any insite into programing these little rascles is welcome.. Here's
some
> > > info...
> > >
> > > Radio Shack BTX-124
> > > model 19-1205
> > > FCC ID: AAO19-1205
> > >
> > > sluggo286@yahoo.com
> >
>
>

5326. Re: Butternut HF6V SHOCKING question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 11:41:02 UTC
From: Mogens <petsen@lazy.dk>
Message-ID: <3c9723cd$0$66972$edfadb0f@dspool01.news.tele.dk>
Source record: 146514

> Did the coil go away with the new radial system?
>
I think the problem is caused by a missing DC ground of the antenna. Of
cause the 80m coil will DC ground the antenna if it is present.

According to the instruction masts and supporting parts must be grounded.
The base of the HF6 must therefore have DC connection to ground.

73 de oz1akn, Mogens

5327. Re: refill cartridges,not refill kits????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 12:40:23 UTC
From: -Your Friend Bill- <none@coqui.net>
Message-ID: <3C9731B7.D7BEB485@coqui.net>
Source record: 146515

W6DKN wrote:
>
> What type of antenna does this printer use ? :>)
>
> "kc5cqa" <kc5cqa@yahoo.com> wrote in message
> news:3c98db84.5626132@news.devtex.net...
> > I have tried the ''refilling the printer ink cartridges route,(messy)
> > what I would like now is to
> > see if I could find some company that refills the cartridges
> > themselves, and there by cutting down on the 'high cost' of the
> > originals. Anyone
> > out there have any 'input'. thanks, cl.

For printing out all those sample antenna radiation plots :-)
CL, just go to ebay and search 'epson cartridges' or whatever. There
are more discount cartridge sellers than there are lawyers. If you
don't like buying via ebay, most of them will have a link to deal
direct.
-WX4A

5328. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 13:23:48 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203190523.7ac9c432@posting.google.com>
Source record: 146516

VA3ATD <a.duffy@sympatico.ca> wrote in message news:<3C967760.80406@sympatico.ca>...

[snipped]

> But if it were a 1/2 wave loop, isn't the maximum field strength
> opposite the feed point (unless the opposite corner is open at which
> time the reverse is true)? If this is the case, then feeding from the
> top might not be such a good idea. But also on 10m the loop would become
> a full wave antenna at which time the feed point wouldn't matter. I've
> never heard of a 2 wave length loop (does one exist and what would be
> the effect on the pattern and impedance).
>

I'm not sure how a 1/2 wave loop would work. I think it might have a very high impedance and be hard to feed. Some one who is more knowledgeable than I will have to answer that one.

I have heard of a 2 wavelength loop. I think Kraus mentions it in Antennas. I don't have my copy here at work so I can't look it up, but as I recall it has quite a few lobes in the pattern. It is not as good for a directional antenna as a full wave loop and would probably be best placed in a horizontal plane

In general for a loop antenna, I think you would want to stay away from odd multiples of a half wave. For a dipole you want to use the odd multiples.

A full wavelength loop, regardless of the length, can be fed anywhere depending on the polarization you want. At the bottom will give horizontal and on the side will give vertical. Certain shapes, however, may have slightly different characteristics. My dad had a 40 meter delta loop (pointy at top) that he fed a few feet up from the bottom on one side. As I recall the horizontal bottom wire was only about 8 ft off the ground, and this was supposed to do something good. I don't recall the details, but this was a real performer! Perhaps someone else will. The design was in Ham Radio or QST back in the late 70s, I think.

Jim
N8EE

5329. Re: Cellular Yagi Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 13:28:42 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203190528.23926c26@posting.google.com>
Source record: 146517

Usually they use log periodic Yagis for this, because of the bandwidth involved.

And don't forget to make it vertically polarized,or you will loose 30 to 40 dB before you even get started!

You could also consider a parabolic reflector, or possibly even a simple corner reflector, with a single dipole as the feed antenna.

What band? 800 MHz or 1.8 GHz?

Billphill@earthlink.net (Badwater Bill) wrote in message news:<3c96120c.95937248@news.earthlink.net>...
> I need to build a yagi for my cell phones. I have a remote cabin in
> the woods and get minimal service. Does anyone know of a site with
> some instructions for a yagi?
>
> Bill

5330. Re: Auto Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 14:12:06 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <a77gvo$115u@r02n01.cac.psu.edu>
Source record: 146518

Hi:
If they were the built in kind of tuners, they are meant to tune over a 3 to
! SWR range. It would be a wild bit of luck to have a random wire fall with
in that range. Other wise if it's a external tuner, it still needs a ground
to work with. It could be a car body or a wire laying on the ground. But
with a radio sitting on a bench it would again be just good luck if it
worked. Any way the to handle this is to make the "random" wire a bit longer
(best) or shorter until it works. Never make the "random" length close to a
half wave as the Z at the end of that almost any tuner will have trouble
with.

--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"Vito" <vito@crosslink.net> wrote in message
news:3C963863.ED916F57@crosslink.net...
> I met a fellow at HRO Saturday who couldn't get either of two different
> automatic tuners (one an ICOM) to tune a random wire, either at home or
> in the shop's store. Either tuner would work FB with under five watts,
> but neither would tune at 100 watts out on his new ICOM 706. Any ideas?
>
> KA3DWW

5331. Re: refill cartridges,not refill kits????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 14:51:52 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3c975247$0$35565$1dc6e903@news.corecomm.net>
Source record: 146369

An "EH", what else.

W6DKN wrote:
>
> What type of antenna does this printer use ? :>)
>
> "kc5cqa" <kc5cqa@yahoo.com> wrote in message
> news:3c98db84.5626132@news.devtex.net...
> > I have tried the ''refilling the printer ink cartridges route,(messy)
> > what I would like now is to
> > see if I could find some company that refills the cartridges
> > themselves, and there by cutting down on the 'high cost' of the
> > originals. Anyone
> > out there have any 'input'. thanks, cl.

5332. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 15:00:35 UTC
From: Val <nishikeit@zilch.com>
Message-ID: <3C975293.D306352F@zilch.com>
Source record: 146371

Michele IZ2EAS wrote:
>
> "Val" <nishikeit@zilch.com> ha scritto nel messaggio
> news:3C909A9B.4FBC9514@zilch.com...
> > Let's clarify:
> >
> > NO antenna can work without a ground. Period.
> > Not even in satellites (but, when one use the word "ground"
> > in this context people tends to get very confused..).
>
> There is NO theoretical reason why the "ground" should be needed. Period.
>
> Michele IZ2EAS

Imagine a system floating in free space. For simplicity, we use a folded
dipole or a dipole with a delta match. You know, the kind of antenna
where
You do not need an insulator to attach the antenna to the boom or Your
mast- it's simply to bolt the middle of the radiating element directly
to
the mast. But, in free space You of course do not use any mast, just
the radiating element. The antenna is conneced with a random feeder to
a transmitter, which is on.Please, will you tell me how to figure out
what
is the antenna and what is the feedline/rig/power supply. As I am an
alien from outer space, I am not able to see the physical shape (or feel
it), but to my help I have the possiblity to detect field-strength
with my senses.

Val,
alien

5333. cobbwebb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 15:01:33 UTC
From: JEEPMON <JEEPMON@HOTMAIL.COM>
Message-ID: <hpll8.70223$Yv2.27844@rwcrnsc54>
Source record: 146372

Hey since I am new to this newsgroup I dont know if this antenna has been talked about much but does it work?
http://www.g3tpw.ukgateway.net/
I hope so.
Has anybody put this desigh into one of the antenna programs to 'see' how well it works?
But most important has anyone ever used this antenna?
Please respond if so!
Also on the website the creator said it has been reviewed in several magazines.
They state that they used to advertise up until 1993 and the last magasine to review the antenna was in 1996.
Does anyone have these reviews?

5334. Re: refill cartridges,not refill kits????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 15:03:03 UTC
From: "A. Domonkos" <capt-tripps@comcast.net>
Message-ID: <3C97544C.E5FFEB50@comcast.net>
Source record: 146370

Check rec.photo.digital, it's a popular topic there.

I refill all my carts with refill kits. Once you get the hang of it
it's quite simple.

Andy N3LCW

5335. Bandwidth matching of equilateral patch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 15:49:20 UTC
From: rafael <rafahol@hotmail.com>
Message-ID: <a77mg2$5ut$1@news.tudelft.nl>
Source record: 146373

Hello People,

Does anyone know how to match a triangular patch antenna using the microstrip feeding method (because of the fact it has to be used for mobile phones, therefore the feeding network has to be planar)?
For my thesis I have to design a triangular patch antenna resonating at 2.14 GHz with a VSWR< 1.9 for the band
2.11-2.17 GHz. Calculating with standard formulas gives me the length of the side of the antenna but the bandwidth
is very small, usually 1%. My tutor suggested me to feed this antenna at one of the edges to obtain an improvement in bandwidth
and to use for example three sections of microstrip lines with different lengths and impedances feeding the antenna at the middle of one of the edges.
Is there a simple software package available which allows optimization of the different lengths and widths of the three section of microstrip lines?
Is there already a design available from literature for such a equilateral patch antenna??

Thanks already for answering my questions, Rafael

5336. Re: cobbwebb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 16:06:59 UTC
From: Walter <walter@accessus.net>
Message-ID: <DmJl8.62211$Ib6.5080241@bin7.nnrp.aus1.giganews.com>
Source record: 146374

I have no problem thinking the Cobweb ant. will work, but I do
have a problem with 1/2 wave loops being omni-directional.
Most normally they exhibit forward gain towards the feedpoint
which takes away from the other 3 sides.

You could build up a mono-bander pretty easy with pvc
pipe and give it a try, that gives you results that beats anyone's
opinion.

73, Walter, AG5P

"JEEPMON" <JEEPMON@HOTMAIL.COM> wrote in message
news:hpIl8.70223$Yv2.27844@rwcrnsc54...
> Hey since I am new to this newsgroup I dont know if this antenna has
been
> talked about much but does it work?
> http://www.g3tpw.ukgateway.net/
> I hope so.
> Has anybody put this desigh into one of the antenna programs to
'see' how
> well it works?
> But most important has anyone ever used this antenna?
> Please respond if so!
> Also on the website the creator said it has been reviewed in several
> magazines.
> They state that they used to advertise up until 1993 and the last
magasine
> to review the antenna was in 1996.
> Does anyone have these reviews?
>
>
>

5337. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 16:44:34 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a77pur$9e6$1@newsserver.cilea.it>
Source record: 146375

Sorry Val, but maybe your question is too difficult for my simple mind... I really don't understand what it all has to do with "ground"... In fact, you don't have to distinguish between antenna/feedline/rig... you'll just have parts of your system that radiate more (the "antenna") and parts that radiate less (the feedline)... in fact, all you need to calculate the radiation is the distribution of the electrical current on your conductors. What you call an "antenna" is just something that radiates quite efficiently... again, I cannot see what "ground" has to do with that... unless we are biased by different definitions of "ground".
73s,

Michele IZ2EAS

"Val" <nishikeit@zilch.com> ha scritto nel messaggio
news:3C975293.D306352F@zilch.com...
> Michele IZ2EAS wrote:
> >
> > "Val" <nishikeit@zilch.com> ha scritto nel messaggio
> > news:3C909A9B.4FBC9514@zilch.com...
> > > Let's clarify:
> > >
> > > NO antenna can work without a ground. Period.
> > > Not even in satellites (but, when one use the word "ground"
> > > in this context people tends to get very confused..).
> >
> > There is NO theoretical reason why the "ground" should be needed.
Period.
> >
> > Michele IZ2EAS
>
> Imagine a system floating in free space. For simplicity, we use a folded
> dipole or a dipole with a delta match. You know, the kind of antenna
> where
> You do not need an insulator to attach the antenna to the boom or Your
> mast- it's simply to bolt the middle of the radiating element directly
> to
> the mast. But, in free space You of course do not use any mast, just
> the radiating element. The antenna is conneced with a random feeder to
> a transmitter, which is on.Please, will you tell me how to figure out
> what
> is the antenna and what is the feedline/rig/power supply. As I am an
> alien from outer space, I am not able to see the physical shape (or feel
> it), but to my help I have the possiblity to detect field-strength
> with my senses.
>

> Val,
> alien

5338. Re: Ham Stick on a Van

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 17:47:47 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <qKKl8.114303$Yd.5864237@e3500-atl1.usenetserver.com>
Source record: 146376

<rons533@dejazzd.com> wrote in message news:3C9681C2.4221@dejazzd.com...
> I want to install a Ham Stick for 17 meters on my Chrysler van but I
> don't want it to be hitting the trees as I drive by. Can I mount it on a
> trailer hitch extension off to one side? Does the antenna have to be
> above the roof? I have searched the Web but couldn't find any
> information. Any information or sites would be appreciated.

I would, indeed, mount it on the left side of the van and high enough to get the coil and
whip above the roof. I *think* the 17 meter hamstick would allow you to do that without
hitting *too* much stuff. I am not a fan of hamsticks, but you may get satisfactory results
if you do the above things.

73

Jerry
K4KWH
www.qsl.net/k4kwh

5339. Re: Auto Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 18:12:35 UTC
From: G Blair <gblair@sympatico.ca>
Message-ID: <3C977F93.1624E3B@sympatico.ca>
Source record: 146377

Vito wrote:
>
> I met a fellow at HRO Saturday who couldn't get either of two different
> automatic tuners (one an ICOM) to tune a random wire, either at home or
> in the shop's store. Either tuner would work FB with under five watts,
> but neither would tune at 100 watts out on his new ICOM 706. Any ideas?
>
> KA3DWW

First things first:

What type of counterpoise (ground) did you have to work the random wire against?

If you don't have a counterpoise to work against, don't expect it to tune.

I see this all the time on sail boats that do not understand anything about antennas and wonder why they can't transmit when they do not have a ground system to work against.

==========

If you do have an adequate ground...

Try tuning at low power and then change to 100 watts and see if the tuner maintains lock.

SGC sells a kit for their SG line of tuners that locks the tuner settings while the tuner lock switch is engaged so that it does not attempt to re-tune on every transmission. If your candidate tuner attempts unsuccessfully to tune up on higher power once it has correctly tuned on low power, you may need "tuner lock" capability.

A lot of automatic tuners are "automatic sort-of" or "automatic sometimes". The better your ground, the better they work!

Cheers, Greg
VE0ACR
Maritime Mobile

5340. I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 19:06:21 UTC
From: Joe Jones <JoeJones42@hotmail.com>
Message-ID: <M_Ll8.26462$4l.2534778@bin4.nnrp.aus1.giganews.com>
Source record: 146378

I read about Yagis. I look at commercially sold Yagis. I don't get it.

Please help me understand for once and for all:

Do the reflectors and directors _need_ to be insulated from a conducting boom? I keep seeing both insulated and non-insulated units; I read the specs; I see no discernable patterns of difference, and it makes no sense to me.

If it truly doesn't matter, could someone kindly explain to me (first-grade level, please) the theory which proves that this is irrelevant? If it _does_ matter, (which resonates in my heart), how, aside from outright lies, can manufacturers post the numbers that they do?

Many, many, many TIAs. (Oh, my head hurts!)

5341. Re: refill cartridges,not refill kits????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 19:24:04 UTC
From: Joe Jones <JoeJones42@hotmail.com>
Message-ID: <ofMl8.63000$lb6.5235556@bin7.nnrp.aus1.giganews.com>
Source record: 146379

DataProducts Corporation (_long-time_ reputable computer company) sells recycled and refilled cartridges for the more popular models of inkjet printers. In my area, they use Staples (an office supply store) as an outlet. In the case of my particular HP printer, the DP refills are about 20% cheaper than the HP new. DP represents the refilled cartridges as being equivalent to new cartridges and as being warranty-compliant. My experience so far is excellent. I don't have good enough data to prove cartridge life, but it seems to be OK.

HTH.

"kc5cqa" <kc5cqa@yahoo.com> wrote in message
news:3c98db84.5626132@news.devtex.net...
> I have tried the ''refilling the printer ink cartridges route,(messy)
> what I would like now is to
> see if I could find some company that refills the cartridges
> themselves, and there by cutting down on the 'high cost' of the
> originals. Anyone
> out there have any 'input'. thanks, cl.
>

5342. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 19:37:14 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3C97936A.A01DD39F@dialpoint.net>
Source record: 146380

It does not mater if the elements are inuslated from the boom or not. HOwever, the calculations will be differant if they are connected or insulated. At 30 mhz and below there is probably not much differance but at higher frequencies the boom has an effect of shorting out some of the length of the element so the elements need to be of differant lengths on insulated vers noninsulated booms. One thing is that if the elements are not insulated from the boom they need to be firmly attached. If not they can cause noise on the received signal as they flex in the wind and possiabley cause harmonics to the transmitted signal as a diode junction might occure as the elements oxide.

As far as the specs due to gain and F/B ratios I think they are pulled out of the hat for most antennas. Some are in refferance to dipoles, some to the isotropic and some are calculated counting on the aditional gain due to ground reflections. The main thing that determins the gain is the length of the boom and next is how the elements are spaced and the length of the elements. Many times the longer boom length antenna will have more actual gain than one that has a shorter boom but more elements.

Joe Jones wrote:
>
> I read about Yagis. I look at commercially sold Yagis. I don't get it.
>
> Please help me understand for once and for all:
>
> Do the reflectors and directors _need_ to be insulated from a conducting
> boom? I keep seeing both insulated and non-insulated units; I read the
> specs; I see no discernable patterns of difference, and it makes no sense
> to me.
>
> If it truly doesn't matter, could someone kindly explain to me (
> first-grade level, please) the theory which proves that this is irrelevant?
> If it _does_ matter, (which resonates in my heart), how, aside from outright
> lies, can manufacturers post the numbers that they do?
>
> Many, many, many TIAs. (Oh, my head hurts!)

5343. Re: Auto Tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 19:37:35 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a78441$jbsr2$1@ID-124126.news.dfncis.de>
Source record: 146381

Icom automatic tuners (and perhaps others) automatically turn down the transmitter power output to a few watts until the tune up process is completed. Its a safety precaution.

If the TX power for some reason cannot be reduced to a low level the tuner inhibits itself from starting. It is protecting itself.

There is a DC lead from tuner back to transmitter which takes control of the ALC.

--
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****
'Doc <w5lz@icok.net> wrote in message news:3C9658FD.D2C48CFB@icok.net...
> Vito,
> In the order of 'likelyhood;
>
> 1. a. Radio and tuner connected incorrectly.
> b. Tuner, antenna, and ground connected incorrectly.
>
> 2. The 'random wire' was too random, tuner was unable to
> find an acceptible match.
>
> 3. Something wrong with the radio.
>
> 4. Something wrong with both tuners.
>
> Got to be one of those, or a combination of them. The
> only other possibility is 'operator error'.
> Hope you get it worked out...
> 'Doc

5344. Re: Cellular Yagi Anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 20:02:07 UTC
From: Joe Jones <JoeJones42@hotmail.com>
Message-ID: <3PMI8.302826$pN4.19912424@bin8.nnrp.aus1.giganews.com>
Source record: 146382

I've got a tri-mode cell phone and bought an 800-900MHz yagi made by
Wilson Electronics (model Y8009EL). (OK!. OK! Cut the crap. I was in a
hurry for a solution.) Antenna, coax, cell phone adapter, etc. about $100
at the local ham/CB/scanner/obscene-car-audio shack. Put it in my office
(we're in a _huge_ cell phone hole here) and aimed it at a tower. Works
very well. Only complaint (not the antenna's fault) is that my cell
provider prefers 1.8GHz, so sometimes there are issues with regard to missed
voice-jail messages since the 850MHz absolutely dominates the 1.8GHz when
the antenna is connected.
Have you looked at sites such as
http://www.netscum.com/~clapp/wireless.html ? They are dealing with
wireless LANs at 2.4GHz, which isn't that different from 1.8GHz cell in
terms of size and technique. Really cheap solutions there using an "N"
connector, all-thread, washers and a Pringles can. Claiming 12+ dB plus
good noise numbers. Going to try it myself!!! Compensation for freq
shouldn't be too tough. Check a site like
http://www.kvmo.net/~aschmitz/antennas/calcantenna.html if you need help
with the calcs.
HTH.

"Badwater Bill" <Billphill@earthlink.net> wrote in message
news:3c96120c.95937248@news.earthlink.net...
>
> I need to build a yagi for my cell phones. I have a remote cabin in
> the woods and get minimal service. Does anyone know of a site with
> some instructions for a yagi?
>
> Bill

5345. Re: Vertical without a ground

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 20:11:30 UTC
From: richardharrison@webtv.net
Message-ID: <15291-3C979B72-23@storefull-2396.public.lawson.webtv.net>
Source record: 146386

Val ha scrito:
"NO antenna can work without a ground. Period. Not even in satellites.

Val also wrote:
"---what is the antenna and what is the feedline / rig / power supply?"

An antenna must be part of a complete circuit for a radio input or output. In the case of a transmitter, energy exits one output terminal and enters the other.

In a loop antenna connected with a radio, a complete circuit is obvious.

In a dipole, you see an open-circuit because the coupling between dipole elements is not visible, but we see the effects of invisible fields. We see electrostatic fields attract small particles nearby. We see magnetic fields attract magnetic particles nearby. These fields exert unseen forces. In the dipole we have a complete r-f circuit because the antenna accepts current that we can read on an r-f ammeter. Dipoles have mutual coupling between their elements. No ground is needed for this coupling to complete a circuit. Displacement current and inductive flux link the parts of a dipole. No physical contact is needed for current between parts of a dipole for current flow. Current flows wirelessly. Some of the energy this current represents gets away as radiation.

The balanced antenna needs no ground.

The unbalanced antenna completes its radiator circuit through a "ground" which replaces 1/2 of a dipole, but functions differently from a dipole. A proper ground does not radiate because the energy flowing into it flows in diverse directions which balance to zero In their field effects.

The salient part of an unbalanced system which is supposed to radiate is the antenna.

The feedline is the energy conduit between the radio and the santenna, and this is usually not supposed to radiate.

The rig is the radio which needs the antenna, feedline, and power supply to operate properly. It is the transmitter and/or the receiver.

The power supply is a source of energy a rig can convert to r-f and other frequencies.

Best regards, Richard Harrison, KB5WZI

5346. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 20:19:02 UTC
From: stefano <sgalast@tin.it>
Message-ID: <W2NI8.5234$pT1.115668@news1.tin.it>
Source record: 146383

Hi to all the Ng EH antenna readers.

I was out for a vacation...out from any antennas...hi.:-))

I was REALLY surprised to read some comments.
about the test was supposed to be held....

1) WE were ready with any EH antenna waiting for the test.
2) Francesco and the others never asked us anything about
3) They never told us anything about it
4) i think the english of Francesco is very good. I think is clear THEY have some problems NOT us. ok?
but...
5) I was surprised to read NO words on this sense from my collegues.....answering YOUR sarcastic comments.
shame on them.
many hams here are negative minded oriented....nothing can change their menthality.

Answering to Richard I am asking to many italians hams to report here their SUCCESSFULLY experiments with eh antenna.
I am still saying we have HERE a lot of top success stories.
again I am speaking of real data measurements....

since I CAN'T speak on this topic because I am the part involved, I hope you can discuss with some experts ham soon about it.

I can still repeat:
1) the eh antenna works as claimed
2) the efficiency is more than 95% respect to a dipole
3) th eh antenna is working exactely as the dipole. BUT here the E and H fields are also in time phase AT the antenna.
4) I am collecting all the success stories....I have reached number 60. Every day I am getting one more on the average.
5) for the first time in the humanity history the USA "guru" are back....because the pushing guy is a italian one. (actually is the second....the first was Marconi)

when every one of you will have a working eh antenna on his shack, probabily will start to open the eyes.

Hoping you will start to discuss with some good italian experimenters (not warming chairs only) soon, I wish you all the best.
Stefano IK5IIR

"Francesco Messineo" <frank@ares.ccii.unipi.it> ha scritto nel messaggio news:a6npc0ill1@serra.unipi.it...

> Roy Lewallen <w7el@eznec.com> wrote:
> > Last time I tuned in, a group of credible Italian hams were getting set
> > to actually run some reasonably well controlled and documented tests on
> > a real EH antenna. What happened to that? If it hasn't taken place, does
> > anyone know when it will?
>
> I am supposed to be part of that group.
> Unfortunately we've not yet found an agreement between us about how we
should
> do the tests and what we actually can reasonably do.
> Another thing that is slowing the whole test setup is the fact that the
> ones of us that tried to build the EH found that it isn't working as
claimed
> (or we are just unable to build it), so the interest isn't so high after
> all.
> I'm sorry to say this, but I admit that probably I'm not the right person
> who can set up a well made test. However if anyone wants to help, please
> contact me.
>
> 73
>
> Francesco IZ5DWF

5347. battery4 Ft530,reasonable???

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 20:39:16 UTC
From: kc5cqa@yahoo.com
Message-ID: <3c9ea1ed.9951760@news.devtex.net>
Source record: 146384

I am looking for a replacement battery ,or OME for my old ft 530, I would like the 7.2volt fnb 25 or 12volt fnb 27 which ever would prsent the best deal. I hope someone out there knows of a 'good price', and a good place. thanks cl. 73

5348. 10 METER HT VERTICAL

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 20:40:16 UTC
From: marvin rosen <raghead@worldnet.att.net>
Message-ID: <QmNl8.633$aF.45784@bgtnsc05-news.ops.worldnet.att.net>
Source record: 146385

I have a 10 mtr multi-mode ht & would like to make an add on antenna for
it..are there any sites describing homemade verticals that connect directly
to the rig?

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.338 / Virus Database: 189 - Release Date: 3/14/02

5349. MFJ 1796 and more

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 21:22:13 UTC
From: Lou <tech@dp.net>
Message-ID: <a78c3g$l2s$1@news.dp.net>
Source record: 146387

1 - Instruction and Assembly manual for MFJ 1796 Vertical Antenna. A water mark is on the bottom, otherwise manual is in fair and readable condition. $1.25

1 - Batch of parts for MFJ 1796. Mounting brackets, some of the cable, etc. Whatever is there, all for $10.00

1 - Pair of "small" white porcelain insulators - $2.50/pair

2 - CB/10 meter verticals. NEW IN BOX, but SOLD - AS IS. They are the ones sold by R.S. Info in boxes opened of previously sold stock was that of Antron 99. $35 each

1 - MFJ 5/8 wave 2 meter "base" antenna base - for parts. $2

Much more. IF you don't need anything today, save this for another day. Things come and go here. Like a perpetual Hamfest/Fleamarket.
--
Lou
Owner of: C.L. FURLONG ENTERPRISES

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514 Railroad Street
P.O. Box 289
Stockdale, PA 15483

Phone 724-938-7808
E-Mail: Tech@DP.NET
Hours: M-F 9-5 - S/S by appt.
Closed on Holidays

5350. FS Icom BC-72 Desk Charger and W2A FacePlate

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 21:40:59 UTC
From: Charles Hugg <chashugg@earthlink.net>
Message-ID: <LfOl8.1934$MC5.168401@newsread2.prod.itd.earthlink.net>
Source record: 146388

[No readable article body recovered]

5351. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 21:41:41 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <iebf9u4vic2dj6l5n0cti1gcuioqf4d8gt@4ax.com>
Source record: 146389

On Tue, 19 Mar 2002 20:19:02 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi to all the Ng EH antenna readers.
>
>I was out for a vacation
>
>I was REALLY surprised
>
>1) WE were ready with any EH antenna waiting for the test.
>2) Francesco and the others never asked us anything about
>3) They never told us anything about it
>4) i think
>I think
>5) I was surprised
>my
>collegues.
>shame on them.
>I am asking
>I am still saying
>again I am speaking
>I CAN'T speak
>I am the part involved,
>I hope
>
>I can still repeat:
> I am collecting
>I have
>I am getting
>I wish
>Stefano IK5IIR

How wuz i to guess how much since doin' this wud make?

;-)

73's
Richard Clark, KB7QHC

5352. FS Icom BC-72 Charger and W2A FacePlate

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 21:42:27 UTC
From: Charles Hugg <chashugg@earthlink.net>
Message-ID: <7hOl8.1938$MC5.171459@newsread2.prod.itd.earthlink.net>
Source record: 146390

FS a nice Icom BC-72 Desk Charger with original manual. Works with W2A's and other Icom HT's of the era. Price is $30 shipped; also for sale is a brand new Face Plate for an Icom W2A HT. Price is $20 shipped. Thanks, Charlie Hugg, K5MBX

5353. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 22:26:47 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C97BB27.D5FA6C2A@IEEE.org>
Source record: 146391

Mark Keith wrote:
> My noise was a bit higher on the vertical, but not too much. It didn't
> matter as the stronger signals overrode the extra noise.

I wish I could have heard a strong signal on my vertical. There weren't
any that were as strong as my dipole. I sacrificed my garden for 8 buried
radials for that vertical. I just today took down the vertical and ripped
out the radials. Time for a new garden.
--
cheers, CAM http://www.qsl.net/w5dxp

5354. fdh

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 23:00:21 UTC
From: Rusty <rustyspam@dccnet.com>
Message-ID: <3C97C305.8060700@dccnet.com>
Source record: 146392

[No readable article body recovered]

5355. dfg

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-19 23:00:37 UTC
From: Russell Smith <rusty@dccnet.com>
Message-ID: <3C97C315.6040609@dccnet.com>
Source record: 146393

[No readable article body recovered]

5356. Mobile Ant on roof of Chevy K1500 P.U.?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 00:36:24 UTC
From: Matthew Hodges <mudges3@chartermi.net>
Message-ID: <u9flqa98791p65@corp.supernews.com>
Source record: 146394

Has anyone mounted a large VHF/UHF (over 40 inches tall) antenna on an extended cab, K1500 Chevy Pickup? If you have, please tell me what mount you used and were there any challenges to mounting it? I'm considering a permanent mount for a large Diamond antenna I have.
Diamond wasn't any help (online or tech support).
A couple of the ham radio equipment dealers didn't recommend it (wind load on a roof mount was of concern).

Any ideas?

Thanks,
Matt, N8UVF

5357. Re: Mobile Ant on roof of Chevy K1500 P.U.?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 01:03:46 UTC
From: SideBand <abNO8SPAMlr@csotbs.org>
Message-ID: <3C97DFF2.1080801@csotbs.org>
Source record: 146395

http://www.hamstick.com/hk.htm

Works for me for HAMStick/LakeView's 2M collinear. Of course, my pickup's
an '85, so I don't mind the hole in the roof liner for the coax...

If you don't want the hole in your roof liner (does your cab have one?),
there are other similar types out there that have the coax attached. You'll
have to remove your roof liner to install it, then replace the liner, run
the coax down an A-pillar or something, to the rig.

HTH

de AB8LR, Chris

Matthew Hodges wrote:

> Has anyone mounted a large VHF/UHF (over 40 inches tall) antenna on an
> extended cab, K1500 Chevy Pickup? If you have, please tell me what mount
> you used and were there any challenges to mounting it? I'm considering a
> permanent mount for a large Diamond antenna I have.
> Diamond wasn't any help (online or tech support).
> A couple of the ham radio equipment dealers didn't recommend it (wind load
> on a roof mount was of concern).
>
> Any ideas?
>
> Thanks,
> Matt, N8UVF
>
>
>

--
73 de AB8LR, Chris

http://csotbs.shopiwon.com/ for great deals on computer products.

5358. Re: Mobile Ant on roof of Chevy K1500 P.U.?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 01:12:51 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C97E213.84C9EC04@tampabay.rr.com>
Source record: 146396

if you are worried about wind load i would suggest the 3 or 4 magnet mag mount
once that thing is stuck to the roof you shouldnt have much worries about it
coming off

Matthew Hodges wrote:

> Has anyone mounted a large VHF/UHF (over 40 inches tall) antenna on an
> extended cab, K1500 Chevy Pickup? If you have, please tell me what mount
> you used and were there any challenges to mounting it? I'm considering a
> permanent mount for a large Diamond antenna I have.
> Diamond wasn't any help (online or tech support).
> A couple of the ham radio equipment dealers didn't recommend it (wind load
> on a roof mount was of concern).
>
> Any ideas?
>
> Thanks,
> Matt, N8UVF

5359. Opinions on the Cushcraft AR-10?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 01:55:19 UTC
From: kc2hmn@cs.comnospam
Message-ID: <20020319205519.04043.00001820@mb-bj.news.cs.com>
Source record: 146397

Does anybody have any experiences or impressions with the Cushcraft AR-10 Ringo Ranger that they'd like to share. Thanks in advance. :-)

73 de Bert
KC2HMN

5360. Re: Bandwidth matching of equilateral patch antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 02:48:14 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <QLSI8.15674$mZ3.1133076@news20.bellglobal.com>
Source record: 146398

"rafael"
> Hello People (are you sure ?),
> Does anyone know how to match a triangular
> patch antenna using the microstrip feeding
> method (because of the fact it has to be used
> for mobile phones, therefore the feeding network
> has to be planar)?
> For my thesis I have to design a triangular patch
> antenna resonating at 2.14 GHz with a
> VSWR< 1.9 for the band 2.11-2.17 GHz.
> Calculating with standard formulas gives me
> the length of the side of the antenna but the
> bandwidth is very small, usually 1%. My tutor
> suggested me to feed this antenna at one
> of the edges to obtain an improvement in
> bandwidth and to use for example three
> sections of microstrip lines with different
> lengths and impedances feeding the antenna
> at the middle of one of the edges.
> Is there a simple software package available
> which allows optimization of the different lengths
> and widths of the three section of microstrip lines?
> Is there already a design available from literature
> for such a equilateral patch antenna??
> Thanks already for answering my questions,
> Rafael

Hi Raf,

I have seen your very same question appearing and disappearing on the www.eng-tips.com forum twice now. Each time I have responded, and the thread has then disappeared. Very very strange. IIRC, on those (temporary) threads, you had mentioned that the patch in question was a Sphincter Gasket, no that's not the right term..., a Sierpinski Gasket.

Is your triangular patch a fractal antenna ? Does your ~1% bandwidth exist only in the computer model, or with a real antenna ? Does your model include any loss at all ? Or is it a superconducting idealized fiction ? What does the model do if you add a -0.1 dB pad in series with the feed ?

Curiously yours,

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

5361. Re: Opinions on the Cushcraft AR-10?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 03:15:48 UTC
From: wb4una@aol.com
Message-ID: <20020319221548.19800.00002022@mb-cc.aol.com>
Source record: 146399

i have one up at 110' It works great ..wide freq. range..works fm and ssb with no problems...I have one for 6 meters I am going to stick up at 100' this spring..any other questions i will try to answer for you....

ARS: WB4UNA
Randy Chavis
247 Goff Court
West Columbia
S.C. 29172

5362. Re: Opinions on the Cushcraft AR-10?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 04:22:20 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C980E79.68B4D129@tampabay.rr.com>
Source record: 146400

well bert
if it was me i would go with the antron A99 it is a cheaper and much better performing antenna and if you use it with a tuner you can use it on 10 12 15 17 meters with very good results below is a website with the antenna and its only about $40 for it
i have one and its only about 8 feet off the ground and i have worked about 40 countries with it on 10 meters alone
http://www.copper.com/product_menu.shtml

good luck

Bert Craig wrote:

> Does anybody have any experiences or impressions with the Cushcraft AR-10 Ringo
> Ranger that they'd like to share. Thanks in advance. :-)
>
> 73 de Bert
> KC2HMN

5363. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 07:00:35 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203192300.7dd74584@posting.google.com>
Source record: 146401

CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C97BB27.D5FA6C2A@IEEE.org>...
> Mark Keith wrote:
> > My noise was a bit higher on the vertical, but not too much. It didn't
> > matter as the stronger signals overrode the extra noise.
>
> I wish I could have heard a strong signal on my vertical. There weren't
> any that were as strong as my dipole. I sacrificed my garden for 8 buried
> radials for that vertical. I just today took down the vertical and ripped
> out the radials. Time for a new garden.

Huh? I'm a bit confused here. I thought the antenna was at 1/8 wave high??? Why would the radials be in the garden where the veggies should be? Heck, no wonder it didn't work... Oh well...Good gardening. I still have my 32 ft antenna, but it hasn't been up in quite a while. I took it down one summer when we were having extra heavy lightning nearly every day. I was paranoid about having a 70 foot lightning rod next to me. This winter would have been good, but I didn't use it. Now it's almost summer again...Mine also worked 17m as a 5/8 wave. Worked better than any of my other antennas on that band. I used an antenna mounted 24 volt relay to switch bands. When I went to 40m, I'd plug in the 24v transformer here in the shack. That would bypass the loading coil.MK

5364. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 07:43:01 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203192343.6b96e2b@posting.google.com>
Source record: 146402

"stefano" <sgalast@tin.it> wrote in message news:<W2Nl8.5234$pT1.115668@news1.tin.it>...
> Hi to all the Ng EH antenna readers.
>
> I was out for a vacation...out from any antennas...hi.:-))
>
> I was REALLY surprised to read some comments.
> about the test was supposed to be held....
>
> 1) WE were ready with any EH antenna waiting for the test.
> 2) Francesco and the others never asked us anything about
> 3) They never told us anything about it
> 4) i think the english of Francesco is very good. I think is clear THEY have
> some problems NOT us. ok?
> but...
> 5) I was surprised to read NO words on this sense from my
> collegues.....answering YOUR sarcastic comments.
> shame on them.
> many hams here are negative minded oriented....nothing can change their
> menthality.

How would you go about changing the menthal level of these "many"
hams?

>
> Answering to Richard I am asking to many italians hams to report here their
> SUCCESSFULLY experiments with eh antenna.
> I am still saying we have HERE a lot of top success stories.
> again I am speaking of real data measurements....

Where oh where have the measurements gone? Where oh where might they
be?
>
> since I CAN'T speak on this topic because I am the part involved, I hope
> you can discuss with some experts ham soon about it.

What, cat got your tongue? Non-disclosure agreements? Silly to worry
about being the antenna was already designed years ago.
>
> I can still repeat:
> 1) the eh antenna works as claimed

So does the rubber duck on my HT.

> 2) the efficiency is more than 95% respect to a dipole

On what? 10m? Big deal...Lets see it on the low bands.

> 3) th eh antenna is working exactely as the dipole. BUT here the E and H
> fields are also in time phase AT the antenna.

They must be good dancers.

> 4) I am collecting all the success stories....I have reached number 60.

What? None of them has internet access? Tell em to give the reports
here.
The cats must be getting fat with all those tongues missing.

> Every day I am getting one more on the average.

I hear these about dipoles at about the same rate.

> 5) for the first time in the humanity history the USA "guru" are
> back....because the pushing guy is a italian one. (actually is the
> second....the first was Marconi)

Do "guru's" look like those little fat men you see on floors that hold
incense?
Thats what I envision when I hear that name. Crap..If I look like a
guru, I'm not going outside anymore. I might roll down the street and
not be able to stop until I've been hit by a truck.
>
> when every one of you will have a working eh antenna on his shack,
> probabily will start to open the eyes.

Dude... We Texans run realï¿½ full size antennas that radiate. If I ran
an EH antenna on 75m, I'd have to open my eyes to read morse sent by
flashlight. I wouldn't be able to make a decent qso otherwise. And if
a tall building is in the way...:(
>
> Hoping you will start to discuss with some good italian experimenters (not
> warming chairs only) soon, I wish you all the best.
> Stefano IK5IIR

I could do it maybe if I changed my name to Markano, but you all will
have to pay for the plane fair and temp visa, etc. I like italian food
so I could probably hang there for a little while anyway. I could
teach you all how to cook enchiladas as special bonus. I have to have
those on a regular basis to function properly. I doubt italians make a
good enchilada. Kinda like trying to find one in NYC. Their idea of
hot sauce is ketchup. Too scary to even think about. Almost as scary
as an antenna that looks like a UFO and has delusions of grandeur. But
don't feel too bad. You sure ain't the first on the block with a
"wonderstick" that defies all normal logic. MK

5365. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 07:43:47 UTC
From: Michele IZ2EAS <iz2eas@libero.it>
Message-ID: <a79ekf$k98$1@newsserver.cilea.it>
Source record: 146403

Hi Stefano,

you still didn't answer the original question; here it is for your
convenience again; can you please provide us with an answer ?

>I am NOT saying that the EH antenna is NOT working; I am saying that my
>interest for this matter will "resuscitate" ONLY when I will see posted on
>Ted Hart's Web site the results of the properly-made tests above, showing -
>without any doubt - a behaviour that we cannot explain with the theories we
>have at hand now.
>A good contribution could come from Ted or Stefano, telling us WHEN those
>"amazing" test results will be publised.

"stefano" <sgalast@tin.it> ha scritto nel messaggio
news:W2Nl8.5234$pT1.115668@news1.tin.it...
> Hi to all the Ng EH antenna readers.
>
> I was out for a vacation...out from any antennas...hi.:-))
>
> I was REALLY surprised to read some comments.
> about the test was supposed to be held....
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> 1) WE were ready with any EH antenna waiting for the test.
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have
> some problems NOT us. ok?
> but...
> 5) I was surprised to read NO words on this sense from my
> collegues.....answering YOUR sarcastic comments.
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> many hams here are negative minded oriented....nothing can change their
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> you can discuss with some experts ham soon about it.
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> 1) the eh antenna works as claimed
> 2) the efficiency is more than 95% respect to a dipole
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> fields are also in time phase AT the antenna.
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> Every day I am getting one more on the average.
> 5) for the first time in the humanity history the USA "guru" are
> back....because the pushing guy is a italian one. (actually is the
> second....the first was Marconi)
>
> when every one of you will have a working eh antenna on his shack,
> probabily will start to open the eyes.
>
> Hoping you will start to discuss with some good italian experimenters (not
> warming chairs only) soon, I wish you all the best.
> Stefano IK5IIR
>

5366. Re: 10 METER HT VERTICAL

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 07:48:44 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203192348.15a793be@posting.google.com>
Source record: 146404

"marvin rosen" <raghead@worldnet.att.net> wrote in message
news:<QmNl8.633$aF.45784@bgtnsc05-news.ops.worldnet.att.net>...
> I have a 10 mtr multi-mode ht & would like to make an add on antenna for
> it..are there any sites describing homemade verticals that connect directly
> to the rig?

AEA used to make one of those. I think they used a fairly simple
loaded whip about like what you would see on a CB walkie talkie. You
would be better of putting up an outside ground plane or whatever and
feeding coax from the radio to the antenna. MK

5367. Screwdriver antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 08:29:57 UTC
From: jess711@netdoor.com
Message-ID: <3c9846c0.13511855@news.netdoor.com>
Source record: 146405

I am rather new to the screwdriver antenna. I have spent most of my ham life with vhf yagis and quads. I recently got a used screwdriver at a hamfest. The guy I got it from gave me two boxes and told me how to hook them up. He said that he knew that one of them wouldn't work, but couldn't remember which one. I got one of them sort of working. With a 5 ft whip on top I was able to get it on 10 meters ok. And to go from 10 meter to 15 metes it only takes about 1/2 inch more coil. And you can forget 20 metes completly. It is ok on 40 and 80 meters. But it is very touchy, especilly on 80. I

I would like the group's opinion on the matching of screwdriver antennas. How much coil? What material, torroid or air? How many turns and what size wire..

Jessie AD5JW

5368. EH antenna tests

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 08:53:35 UTC
From: Alessandro Santucci I0SKK <i0skk@qsl.net>
Message-ID: <27YI8.44733$%g7.1416261@twister2.libero.it>
Source record: 146406

Hi to everyone,
I made several different EH samples and I use it for my radio activity on 40 m. I found it as a good dipole.
I can say that is good to construct it and to tune it (not alway easy!) but I see my log.

I'm in radio fron 1970, I'm always a QRP op, and homebewer, and not involved in EH business, I'm just an Ham.

The firt QRP contact I made was FROM INSIDE MY HOME with HA5KDQ with a power of 2 W in CW in 7 MHz with a 40 cm long antenna!!!!! It was worderfull and crazy!!!!! This was at sept. 29 of 2001.

This is what I see with my experience.
I don't know why, but it's in my log....

73

de

Alex I0SKK/QRP

i0skk@qsl.net

5369. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 09:11:12 UTC
From: paolopemi@yahoo.com
Message-ID: <967b3c85.0203200111.6aba030f@posting.google.com>
Source record: 146407

> 1) the eh antenna works as claimed
> 2) the efficiency is more than 95% respect to a dipole
> 3) th eh antenna is working exactely as the dipole. BUT here the E and H
> fields are also in time phase AT the antenna.
> 4) I am collecting all the success stories....I have reached number 60.
> Every day I am getting one more on the average.
> 5) for the first time in the humanity history the USA "guru" are
> back....because the pushing guy is a italian one. (actually is the
> second....the first was Marconi)

I thought there was only our Prime Minister to make these claims and
ask for a special court (as people suspect to get a easier way to
skirt the law) , I see now that there are emulators, may be for this
special antenna we should move the discussion to alt.religion.antenna
:-))

Paolo

5370. Re: Opinions on the Cushcraft AR-10?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 09:45:08 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203200145.5f80e19f@posting.google.com>
Source record: 146408

kc2hmn@cs.comnospam (Bert Craig) wrote in message
news:<20020319205519.04043.00001820@mb-bj.news.cs.com>...
> Does anybody have any experiences or impressions with the Cushcraft AR-10 Ringo
> Ranger that they'd like to share. Thanks in advance. :-)
>
> 73 de Bert
> KC2HMN

They are ok. Typical half wave as far as performance. They can cover a
wide frequency range with the gamma loop tuning and the ability to
adjust the tubing length. It's easy to remeasure the radiator to a new
freq and then adjust the gamma loop for best match. They also can be
converted to other types of antennas. I've made 5/8 wave GP's from
them by adding a bit more tubing and using a loading coil instead of
the gamma loop. Actually, you could even use the gamma loop to tune a
5/8 I think. They can also be further improved with an extra
decoupling section below the antenna. I used a set of radials 1/4 wave
below the feedpoint. The radials are grounded to the mast. This
reduces the feedline radiation and it's unwanted upward skewing of the
pattern. But they work ok even without the radials. I've got a
homebrew version I use on 10m at 20 ft with no decoupling, and it's
ok. MK

5371. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 10:19:48 UTC
From: Francesco Messineo <frank@ares.ccii.unipi.it>
Message-ID: <a79no4bmm1@serra.unipi.it>
Source record: 146409

stefano <sgalast@tin.it> wrote:

> 1) WE were ready with any EH antenna waiting for the test.
> 2) Francesco and the others never asked us anything about
> 3) They never told us anything about it
> 4) i think the english of Francesco is very good. I think is clear THEY have
> some problems NOT us. ok?

I can confirm, this is true but my english isn't good anyway.

73
Francesco IZ5DWF

5372. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 12:29:25 UTC
From: stefano <sgalast@tin.it>
Message-ID: <Fg%l8.8574$S52.219600@news2.tin.it>
Source record: 146410

dear Paolo P
there are two possibilities:
1) is true
2) is not

50% and 50%.
are you so sure to be in the right part?
Please ask about the eh antenna to those many italian hams that are
successfully using it.
In USA they don't have the evidence yet, but in Italy there are many
evidences.
Why are you closing your eyes?
The antenna is speaking it's self, I repeat when well built and well tuned a
1% wav EH is equalling a full size dipole.
73's Stefano

"PaoloP" <paolopemi@yahoo.com> ha scritto nel messaggio
news:967b3c85.0203200111.6aba030f@posting.google.com...
> > 1) the eh antenna works as claimed
> > 2) the efficiency is more than 95% respect to a dipole
> > 3) th eh antenna is working exactely as the dipole. BUT here the E and H
> > fields are also in time phase AT the antenna.
> > 4) I am collecting all the success stories....I have reached number 60.
> > Every day I am getting one more on the average.
> > 5) for the first time in the humanity history the USA "guru" are
> > back....because the pushing guy is a italian one. (actually is the
> > second....the first was Marconi)
>
> I thought there was only our Prime Minister to make these claims and
> ask for a special court (as people suspect to get a easier way to
> skirt the law) , I see now that there are emulators, may be for this
> special antenna we should move the discussion to alt.religion.antenna
> :-))
>
> Paolo

5373. Where to buy a halo

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 13:43:21 UTC
From: JEEPMON <JEEPMON@HOTMAIL.COM>
Message-ID: <ZI0m8.83592$q2.9204@sccrnsc01>
Source record: 146411

I am looking for the AEA 6m halo antenna.
Does anyone know where I can purchase one?

5374. Re: Where to buy a halo

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 13:52:07 UTC
From: JEEPMON <JEEPMON@HOTMAIL.COM>
Message-ID: <bu0m8.77690$702.20138@sccrnsc02>
Source record: 146412

Also Hy-Gain and HI-PAR made halo antennas for 6m. Does anyone know where I
can buy these?
Thanx!

"JEEPMON" <JEEPMON@HOTMAIL.COM> wrote in message
news:Zl0m8.83592$q2.9204@sccrnsc01...
> I am looking for the AEA 6m halo antenna.
> Does anyone know where I can purchase one?
>
>

5375. Re: Opinions on the Cushcraft AR-10?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 14:23:17 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C989A39.A606FD9F@gte.net>
Source record: 146413

Mark Keith wrote:

> kc2hmn@cs.comnospam (Bert Craig) wrote in message
news:<20020319205519.04043.00001820@mb-bj.news.cs.com>...
> > Does anybody have any experiences or impressions with the Cushcraft AR-10 Ringo
> > Ranger that they'd like to share. Thanks in advance. :-)
> >
> > 73 de Bert
> > KC2HMN
>
> They are ok. Typical half wave as far as performance. They can cover a
> wide frequency range with the gamma loop tuning and the ability to
> adjust the tubing length. It's easy to remeasure the radiator to a new
> freq and then adjust the gamma loop for best match. They also can be
> converted to other types of antennas. I've made 5/8 wave GP's from
> them by adding a bit more tubing and using a loading coil instead of
> the gamma loop. Actually, you could even use the gamma loop to tune a
> 5/8 I think. They can also be further improved with an extra
> decoupling section below the antenna. I used a set of radials 1/4 wave
> below the feedpoint. The radials are grounded to the mast. This
> reduces the feedline radiation and it's unwanted upward skewing of the
> pattern. But they work ok even without the radials. I've got a
> homebrew version I use on 10m at 20 ft with no decoupling, and it's
> ok. MK

> ok. MK

I don't know if C-C calls the matching a gamma loop or ont but that is not what it is. It is a parallel L-C
circuit- one end connected (Hi impedance) conected to the bottom of the half wave (hi Z) and the other end
grounded. The inductor (loop) is then tapped up from ground until a 50 Ohm match is found. The coaxial stub is
the C in the L-C.
A gamma match uses a series C to cancel out the arm inductance of the match.

Dale W4OP

5376. Re: Where to buy a halo

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 14:25:32 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C989AC5.9C996421@gte.net>
Source record: 146414

JEEPMON wrote:

> Also Hy-Gain and HI-PAR made halo antennas for 6m. Does anyone know where I
> can buy these?
> Thanx!
>
> "JEEPMON" <JEEPMON@HOTMAIL.COM> wrote in message
> news:Zl0m8.83592$q2.9204@sccrnsc01...
> > I am looking for the AEA 6m halo antenna.
> > Does anyone know where I can purchase one?
> >
> >

You are better off with any of the more modern horizontal omnis- lighter and in some cases more BW. The AEA halo radiated as much from the coax as it did the loop.

Dale W4OP

5377. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 14:28:52 UTC
From: Joe Jones <JoeJones42@hotmail.com>
Message-ID: <E01m8.319651$pN4.20853020@bin8.nnrp.aus1.giganews.com>
Source record: 146415

Thanks. That makes sense.

One more question pertaining to really high frequency stuff (800+MHz). I see antennas which use 1" square aluminum tubing as the boom. Elements at these freqs are only a few inches long. Construction was done by piercing the tubing, inserting insulators in the holes and running the elements thru the insulators. A VOM confirms DC isolation from the boom. Now the question: is that inch or so of element which is inside of the grounded boom "contributing" to the process, or is it "hidden" from the propagation process? At lower freqs, I'd expect that this doesn't matter, but in this scenario, we're talking about 25% of the element length.

Again, TIA!

"Ralph Mowery" <rmowery@dialpoint.net> wrote in message news:3C97936A.A01DD39F@dialpoint.net...
> It does not mater if the elements are inuslated from the boom or not.
> HOwever, the calculations will be differant if they are connected or
> insulated. At 30 mhz and below there is probably not much differance
> but at higher frequencies the boom has an effect of shorting out some of
> the length of the element so the elements need to be of differant
> lengths on insulated vers noninsulated booms. One thing is that if the
> elements are not insulated from the boom they need to be firmly
> attached. If not they can cause noise on the received signal as they
> flex in the wind and possiabley cause harmonics to the transmitted
> signal as a diode junction might occure as the elements oxide.
>
> As far as the specs due to gain and F/B ratios I think they are pulled
> out of the hat for most antennas. Some are in refferance to dipoles,
> some to the isotropic and some are calculated counting on the aditional
> gain due to ground reflections. The main thing that determins the gain
> is the length of the boom and next is how the elements are spaced and
> the length of the elements. Many times the longer boom length antenna
> will have more actual gain than one that has a shorter boom but more
> elements.
>
>
> Joe Jones wrote:
> >
> > I read about Yagis. I look at commercially sold Yagis. I don't get
it.
> >
> > Please help me understand for once and for all:
> >
> > Do the reflectors and directors _need_ to be insulated from a

conducting
> > boom? I keep seeing both insulated and non-insulated units; I read the
> > specs; I see no discernable patterns of difference, and it makes no
sense
> > to me.
> >
> > If it truly doesn't matter, could someone kindly explain to me (
> > first-grade level, please) the theory which proves that this is
irrelevant?
> > If it _does_ matter, (which resonates in my heart), how, aside from
outright
> > lies, can manufacturers post the numbers that they do?
> >
> > Many, many, many TIAs. (Oh, my head hurts!)

5378. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 14:41:04 UTC
From: paolopemi@yahoo.com
Message-ID: <967b3c85.0203200641.261ee122@posting.google.com>
Source record: 146416

"stefano" <sgalast@tin.it> ha scritto nel messaggio
news:Fg%l8.8574$S52.219600@news2.tin.it...
> dear Paolo P
> there are two possibilities:
> 1) is true
> 2) is not
>
> 50% and 50%.
> are you so sure to be in the right part?
> Please ask about the eh antenna to those many italian hams that are
> successfully using it.
> In USA they don't have the evidence yet, but in Italy there are many
> evidences.
> Why are you closing your eyes?
> The antenna is speaking it's self, I repeat when well built and well tuned a
> 1% wav EH is equalling a full size dipole.
> 73's Stefano

Stefano,
just two notes,

a) I suppose it is not wise to presume 50 % probability when no proofs
are given, on this way I would be glad to persuade my bank that I am a
50 % billionaire and ask them for half a billion (my 50 % probability)
long term loan :-)))
b) I believe there is a quite large scepticism toward this antenna in
Italy, this doesn't mean that people believe the antenna doesn't work
but independent tests and proofs (not adverstising) are
required.

Paolo

5379. Re: Auto Tuners-Greg-OT

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 14:51:33 UTC
From: Starr <ljs2k@attbi.com>
Message-ID: <Vl1m8.33392$44.10123852@typhoon.ne.ipsvc.net>
Source record: 146419

Slightly off-topic, but since Greg seems knowlegeable about Marine rigs ...I want to ask if he (or anyone) can point me toward a supplier for the parts I need to equip my sailboat with Marine SSB. The auto tuner, flatbraided wire connectors and counterpoise parts are no easily found by me ...yet.
Icom 710, to be installed.

Thanks.
Larry

> What type of counterpoise (ground) did you have to work the random wire
> against?
>
> If you don't have a counterpoise to work against, don't expect it to
> tune.
>
> I see this all the time on sail boats that do not understand anything
> about antennas and wonder why they can't transmit when they do not have
> a ground system to work against.
>
> ====================================
>
> If you do have an adequate ground...
>
> Try tuning at low power and then change to 100 watts and see if the
> tuner maintains lock.
>
> SGC sells a kit for their SG line of tuners that locks the tuner
> settings while the tuner lock switch is engaged so that it does not
> attempt to re-tune on every transmission. If your candidate tuner
> attempts unsuccessfully to tune up on higher power once it has correctly
> tuned on low power, you may need "tuner lock" capability.
>
> A lot of automatic tuners are "automatic sort-of" or "automatic
> sometimes". The better your ground, the better they work!
>
> Cheers, Greg
> VE0ACR
> Maritime Mobile

5380. Re: Where to buy a halo

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 15:35:50 UTC
From: derswede@aol.comspam.com
Message-ID: <20020320103550.04960.00001884@mb-bd.aol.com>
Source record: 146417

>I am looking for the AEA 6m halo antenna.
>Does anyone know where I can purchase one?

If you can't find one, try the PAR Electronics omni. Works great. I use one for rover operation...light, disassembles quickly and seems to work much better than the whip I had been using (subjective here). For contact info, do a google search for par and antenna or omni.

Cheers;
A

5381. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 15:37:13 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C98ACA9.5339BD5C@IEEE.org>
Source record: 146418

Mark Keith wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C97BB27.D5FA6C2A@IEEE.org>...
> > Mark Keith wrote:
> > > My noise was a bit higher on the vertical, but not too much. It didn't
> > > matter as the stronger signals overrode the extra noise.
> >
> > I wish I could have heard a strong signal on my vertical. There weren't
> > any that were as strong as my dipole. I sacrificed my garden for 8 buried
> > radials for that vertical. I just today took down the vertical and ripped
> > out the radials. Time for a new garden.
>
> Huh? I'm a bit confused here. I thought the antenna was at 1/8 wave
> high??? Why would the radials be in the garden where the veggies
> should be?

The vertical was first a ground mounted version with 8 buried radials
a little over a year ago. When that didn't work, I elevated it 20ft with
8 elevated radials. I couldn't tell any difference in the performance,
actually lack of performance. I couldn't rototill my garden last year
because of the ground radials. I tried each version for about six months.
If I ever mention trying a vertical again, someone please have me committed.
--
cheers, CAM http://www.qsl.net/w5dxp

5382. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 17:41:40 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <ihih9uojim2d0b7ghiqf5vhv8u5f3drr47@4ax.com>
Source record: 146420

On Wed, 20 Mar 2002 12:29:25 GMT, "stefano" <sgalast@tin.it> wrote:

>Please ask about the eh antenna to those many italian hams that are
>successfully using it.

Hi Stafano,

Well, not a SINGLE testimonial.

That "speaks" volumes for itself.

Thank you for confirming the EH is dead as a door nail.

73's
Richard Clark, KB7QHC

5383. R: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 17:42:56 UTC
From: Alessandro Santucci I0SKK <i0skk@qsl.net>
Message-ID: <vV3m8.48536$1S3.1453663@twister1.libero.it>
Source record: 146421

OK hi tu everybody and sorry for may English, maybe I'm not so good but the important is what I can write here: I want to say to evryone my EH antenna experience.

In last september occasionally I saw the web site of Arno elettronica, Ted Hart site and all the EH antenna news. I tried to make one sample and aslo if it was quite different in measures from the Stefano IK5IIR model, it was amazing that was a good antenna: In fact I made a 40 CM long sample and make several QSO with 2 W of power, from INSIDE my home in 40 m evening. The antenna was on a woodeen support. I received 569 to 579 reports in a night! Wow!
So I decide to make the right sample, tyhe sample I found on Stefano web site. I told about this antenna to two friends of mine: IK0CPS Mauro, and IZ7DJR, Nino. We all are since 70's year in radio and wer excited by a 50 cm long antenna for 40 m!
We made a new sample, and Nino made three of them, and more made also a modified one, calling it "zippiro" (llok for at Nino web site on QSL.NET!).
We made a lot of comparison: we made comparison with a 20m long dipole on a 7 m mast. We mount the dipole and in a second time the EH, we mounted the two antennas toghether and found always the same result; the EH was of same perormance of the dipole on distance over the 1000 km.
We made also several test in several days on direct wave, as Mauro's location is abt 6-8 km far from Rome. We use two different receiver without AGC, and I measure abt 2-3 dB in favour of EH in different time of the day (mornign and evening).
I don't know wha but this "strange pipe EH" does function well. I think it's like a good dipole, but is just 50 cm long! Maybe it is capable to make my house radiating, maybe it is able to make all metallic object in my roof radiating, I don't know but it's able to do some good DX in QRP on 40 m.
We decided to make the test in 40 m as we think that in Europe is very hard to do QSO with 2 W only, as we had a lot of noise in that band, as in 20m 15m and 10m maybe it's possible to make contacts also with a dummy load(!!!....)
Anyway Nino IZ7DJR made a lot of DX and repeated them and passed in several pile ups with just 30 W of power alway in 40 m.

More, Pino IW0BZD is going to do a great number of experiment in VHF, from 50 MHz to up! He made different test with dipole, Jpole and I heard the EH is superior. I don't know why, but it's so!...

I'd like if several good hams can make test, optimizing this antenna, as a lot of programmers made on Linux system, some years ago, as I think it would be very good for us to have a good dipole for low bands to make inside a rucksuck and go on mountain!... hi.

It would be interesting to do test with different shapes, array, ad so on.
But it would be interesting to see the tests of many of us, not only 3 or 4
peoples in tha world, there are a lot of good engineer between us!

We wrote three articles on italian "Radio Kit Elettronica" magazine, after
we did the tests, and we are going to further investigate in this new tipe
of radiating element!

Hope to meet people that want to do QSO with EH, in different world parts.
I'll ba glad to write emails about serious tests, but sorry I'll not a
disposal for wars about EH antenna.
I'm not involved in Arno Elettronica or Ted Hart business, I'm omly
interested in radio, in tests, in order to learn, study and understand, and
at finish in QSO's in QRP, as I'm in radi since 1970 and always with home
made RTX!

All the best to everyone.
72/73 de

Alex I0SKK/QRP

Italian QRP Club Secretary # 305

email: i0skk@qsl.net
Roy Lewallen <w7el@eznec.com> wrote in message 3C903F5C.5FC698@eznec.com...
> Why am I not surprised?
>
> I was at the University of Colorado at the height of the "'60's" (which
> really got going about 1968). In the expansive spirit of the times and
> the general liberal attitude of the university and local community, the
> university sponsored a series of lectures to give "alternative" points
> of view a forum. I recall attending a lecture where a perpetual motion
> machine was presented. Magnets seem to be a perennial favorite of the
> perpetual motion crowd, since they can pull things without an obvious
> source of power, and this particular machine featured quite a number.
> They were along a long continuous belt, that turned a wheel as it moved.
> I recall that the lecturer was appropriately convincing with his
> almost-right science, but don't recall the details of operation. Anyway,
> came the demonstration, and gee, whiz, it slowed down and stopped after
> a pretty good initial run. Ah, but this is just a prototype, the
> inventor explained. All that's needed is enough funding to make a bigger
> one, with more powerful magnets. Because, you see, it almost works now,
> so all it needs is more powerful magnets, and then!
>
> Well, I guess he never got his magnets, because here we are still paying
> good money for power.
>
> So, best luck to Stefano in his search for more powerful magnets. Just a
> little more powerful, then we'll have it. Right?
>
> Thanks, Francesco, for attempting to inject some rationality into this
> morass of bafflegab and hype. But you see, it's a fool's errand. My
> money says that like the perpetual motion machine inventor, Stefano

> won't ever find quite the right magnets.
>
> Roy Lewallen, W7EL
>
> Francesco Messineo wrote:
> >
> > Roy Lewallen <w7el@eznec.com> wrote:
> > > Last time I tuned in, a group of credible Italian hams were getting
set
> > > to actually run some reasonably well controlled and documented tests
on
> > > a real EH antenna. What happened to that? If it hasn't taken place,
does
> > > anyone know when it will?
> >
> > I am supposed to be part of that group.
> > Unfortunately we've not yet found an agreement between us about how we
should
> > do the tests and what we actually can reasonably do.
> > Another thing that is slowing the whole test setup is the fact that the
> > ones of us that tried to build the EH found that it isn't working as
claimed
> > (or we are just unable to build it), so the interest isn't so high after
> > all.
> > I'm sorry to say this, but I admit that probably I'm not the right
person
> > who can set up a well made test. However if anyone wants to help, please
> > contact me.
> >
> > 73
> >
> > Francesco IZ5DWF

5384. Re: MFJ-259B Servicing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 17:59:08 UTC
From: sweeneyj@voicenet.com
Message-ID: <3c3debfe.10766277@netnews.voicenet.com>
Source record: 146422

Dick & Irv... You might take a look at
http://www.vhfman.freeuk.com/index.html

Jim

On Wed, 09 Jan 2002 04:36:22 GMT, Dick Carroll
<dickc58@worldnet.att.net> wrote:

>
>
>Dino AL7LZ wrote:
>
>> Irv---did you get copy of the article regarding servicing the 259 (freq and SWR
>> calibration) I sent you a week or so ago in response to your first request?
>> Friend of mine and I co-authored it; applies to the early model boxes.
>
> Hi dino, could I ask you to send me that information also? Tnx in advance.
>
>73, Dick W0EX
>

5385. Re: EH antenna tests

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 18:01:20 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <pqih9uofniok7bbq5ptoamjfqtbbm9o1ca@4ax.com>
Source record: 146423

On Wed, 20 Mar 2002 09:53:35 +0100, "Alessandro Santucci I0SKK"
<i0skk@qsl.net> wrote:

>Hi to everyone,
>I made several different EH samples and I use it for my radio activity on 40
>m. I found it as a good dipole.
>I can say that is good to construct it and to tune it (not alway easy!) but
>I see my log.
>
>I'm in radio fron 1970, I'm always a QRP op, and homebewer, and not involved
>in EH business, I'm just an Ham.
>
>The firt QRP contact I made was FROM INSIDE MY HOME with HA5KDQ with a power
>of 2 W in CW in 7 MHz with a 40 cm long antenna!!!!! It was worderfull and
>crazy!!!!! This was at sept. 29 of 2001.
>
>This is what I see with my experience.
>I don't know why, but it's in my log....
>
>73
>
>de
>
>Alex I0SKK/QRP
>

Hi Alex,

Sorry, but according to Stefano, it is highly unlikely that you did
any of this correctly. To determine the merit of what you did, can
you tell us:
1. How high above ground you have the EH mounted?
2. Do you use a 1:1 current balun as a choke?
3. Do you use a coil of transmission line as a choke?
4. How much current is present on the outside of your transmission
line?
5. What are the rough outline dimensions of the EH antenna (how big a
box would it fill)?
6. How many dB below a standard Dipole does the noise at the receiver
appear to be?
7. How many dB below a standard Dipole do your contacts hear your
transmission (DX only)?
8. Can you make your model available for independent testing?

Please note that questions 6 & 7 require a full size dipole mounted at least 1/4 wavelength above earth for proper comparison. Further, that dipole must be remote from the EH (more than 3 wavelengths away). If you cannot provide suitable answers, then I must presume Stefano was right and you could not build a good example for comparison.

We must be cautious about just what an EH antenna is. Given Stefano's reports of extreme difficulty to build this, it is apparent that anyone who reports otherwise has obviously NOT built the right antenna. Sorry, but you first have to prove you have an EH, not merely another radiating dummy load.

73's
Richard Clark, KB7QHC

5386. Re: EH antenna tests

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 18:28:02 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <2rjh9ucr96fiqgj4vd5jm9su32as0ij42g@4ax.com>
Source record: 146424

On Wed, 20 Mar 2002 18:01:20 GMT, Richard Clark <kb7qhc@attbi.com>
wrote:

>On Wed, 20 Mar 2002 09:53:35 +0100, "Alessandro Santucci I0SKK"
><i0skk@qsl.net> wrote:
>
>>Hi to everyone,
>>I made several different EH samples and I use it for my radio activity on 40
>>m. I found it as a good dipole.
>>I can say that is good to construct it and to tune it (not alway easy!) but
>>I see my log.
>>
>>I'm in radio fron 1970, I'm always a QRP op, and homebewer, and not involved
>>in EH business, I'm just an Ham.
>>
>>The firt QRP contact I made was FROM INSIDE MY HOME with HA5KDQ with a power
>>of 2 W in CW in 7 MHz with a 40 cm long antenna!!!!! It was worderfull and
>>crazy!!!!! This was at sept. 29 of 2001.
>>
>>This is what I see with my experience.
>>I don't know why, but it's in my log....
>>
>>73
>>
>>de
>>
>>Alex I0SKK/QRP
>>
>
>Hi Alex,
>
>Sorry, but according to Stefano, it is highly unlikely that you did
>any of this correctly. To determine the merit of what you did, can
>you tell us:
>1. How high above ground you have the EH mounted?
>2. Do you use a 1:1 current balun as a choke?
>3. Do you use a coil of transmission line as a choke?
>4. How much current is present on the outside of your transmission
>line?
>5. What are the rough outline dimensions of the EH antenna (how big a
>box would it fill)?
>6. How many dB below a standard Dipole does the noise at the receiver
>appear to be?
>7. How many dB below a standard Dipole do your contacts hear your

>transmission (DX only)?
>8. Can you make your model available for independent testing?
>
>Please note that questions 6 & 7 require a full size dipole mounted at
>least 1/4 wavelength above earth for proper comparison. Further, that
>dipole must be remote from the EH (more than 3 wavelengths away). If
>you cannot provide suitable answers, then I must presume Stefano was
>right and you could not build a good example for comparison.
>
>We must be cautious about just what an EH antenna is. Given Stefano's
>reports of extreme difficulty to build this, it is apparent that
>anyone who reports otherwise has obviously NOT built the right
>antenna. Sorry, but you first have to prove you have an EH, not
>merely another radiating dummy load.
>
>73's
>Richard Clark, KB7QHC

one other item to confirm in regard to question 5:
> I repeat when well built and well tuned a
>1% wav EH is equalling a full size dipole.
>73's Stefano
I overlooked your description of your antenna being 40 cm long; this
is about twice the size described by Stefano's 3 lines above and as
such obviously does not qualify as a true example, Sorry, but I for
one cannot accept (according to Stefano's descriptions and warnings
which you confirm) that you have built the correct model where the
errors in construction are significant and you did not tune it well.
This is consistent with Stefano's claims however.

Too bad :-(
1 testimonial up - 1 testimonial down. Hardly worth it, and a far cry
from:
>many italians hams to report here their
>SUCCESSFULLY experiments with eh antenna.
Many? Not even one in these 6 or more months? Too bad this EH is so
difficult to build, tune, and test. If I am to understand Stefano,
many have tried and only your erroneous report has appeared.

Thank you anyway.

73's
Richard Clark, KB7QHC

5387. Re: R: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 18:49:31 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <6dlh9ucghltek809euphae34302flndot9@4ax.com>
Source record: 146425

On Wed, 20 Mar 2002 18:42:56 +0100, "Alessandro Santucci I0SKK"
<i0skk@qsl.net> wrote:

> I tried to make one sample and aslo
>if it was quite different in measures from the Stefano IK5IIR model

Again we are faced with what is NOT an EH antenna when Stefano has
made it clear that
>I repeat when well built and well tuned a
>1% wav EH is equalling a full size dipole.

And you go on to build it even larger:
> I made a 40 CM long sample and make
>several QSO with 2 W of power, from INSIDE my home in 40 m evening
or:
> a 50 cm long antenna for 40 m!
>I think it's
>like a good dipole, but is just 50 cm long! Maybe it is capable to make my
>house radiating, maybe it is able to make all metallic object in my roof
>radiating, I don't know

OK, so the EH has grown another 25% and the experimentor/tester is at
a loss to describe how it works (very common problem apparently):
>maybe it's possible to make contacts also with a dummy
>load(!!!....)

Well, that IS a comparison that we have long suspected as being
accurate, thanks!

>72/73 de
>
>Alex I0SKK/QRP

Hi Alex,

Same report with spurious data, but with even more obvious problems.
It is more than apparent you did NOT conform to the EH dimensions as
described by Stefano, and you went even further to make changes of
your own. You show the proper skepticism, that is good; and you show
an inclination to improve the design (who would have thought that
possible - or necessary? Didn't work very well the first time, hmm?).

The single greatest improvement is that you at least test your design.
This is something that Stefano has not been successful at for many,
many months (wonder why?). However, you say nothing of using a choke
at the feedpoint, nor do you measure transmission line currents, nor
do you say how high the EH (sic) was elevated above ground.

Sorry, without such details, your report is just a vague collection of irrelevant data. Thanks for trying anyway.

The count remains at one up, one down.

73's
Richard Clark, KB7QHC

5388. Re: EH antenna tests

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 19:05:46 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C98DD6B.3D5DE159@icok.net>
Source record: 146426

Here we go again...
'Doc

5389. Re: rohn 20

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 19:08:44 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna9hnhr.gm9.QSB@animas.frontier.net>
Source record: 146427

On Mon, 18 Mar 2002 12:50:21 -0600, KA9CAR scribbled:
> I do not know how the size of the 450 compares to the 800sdx. But ...
>
> I had to remove one diagonal to get a Yaesu 450 in to my Rohn 25.

????!! I did not. I have the YAESU G-450-XL installed mid-way
in the top section of my Rohn 25 tower. I home-brewed the base
mounting plate -- which needs shims on at least one of the
horizontal's to make it level. I agree with the YAESU-bolts-
are-too-short observation. YAESU must've designed it to be
installed on a pie tin.

I did find that the 450 expected to twist a far larger diameter
mast than the top section of the Rohn 25 could swallow. This
results in an off-center rotation of the mast (if uncorrected)
when using a mast that the top sleeve _can_ accept, and can/did
cause binding. I solved *that problem* by using thickish metal
shim plates in the rotator-to-mast clamping assy.
It's been doing ok for several years now.

hth es 73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

5390. Re: MFJ-259B Servicing

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 19:08:59 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C98DDED.82AAE6DA@shaw.ca>
Source record: 146428

Jim wrote:
>
> Dick & Irv... You might take a look at
> http://www.vhfman.freeuk.com/index.html
>
> Jim
>
> On Wed, 09 Jan 2002 04:36:22 GMT, Dick Carroll
> <dickc58@worldnet.att.net> wrote:
>
> >
> >
> >Dino AL7LZ wrote:
> >
> >> Irv---did you get copy of the article regarding servicing the 259 (freq and SWR
> >> calibration) I sent you a week or so ago in response to your first request?
> >> Friend of mine and I co-authored it; applies to the early model boxes.
> >
> > Hi dino, could I ask you to send me that information also? Tnx in advance.
> >
> >73, Dick W0EX
> >

Thanks Jim! Unfortunately it is for the MFJ-259 -- which is
quite different from
the MFJ-259B inside. Your effort to assist is commended
though! Thanks for trying.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5391. Rookie needs help with impedance matching a ferrite antenna w/ reciever

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 19:38:15 UTC
From: stephendeese@hotmail.com
Message-ID: <25cad608.0203201138.36569108@posting.google.com>
Source record: 146429

My Goal is to design a better ferrite antenna for my WWVB 60khz
circuit. I have an antenna which I took out of a Radio Shach clock.
It is pretty good.

I intend to incrase the sensitivity by increasing the cross sectional
area of the ferrite rod and by increasing the Q (sensitivity = Efield
* He * Qload where He is a function of cross sectional area).

I realize that to get maximum performance, I need to create an
impedance matching circuit to go between the antenna and the reciever.

so...

1) How do I determine the impendance of the reciever IC that I am
using? The application guide for the IC says that the impedance is
approx. 2Mohms. Should I take it that the impedance of the reciever
IC is all resistive (with no reactance) ??

2) The antenna is basically a parallel resonant circuit with values
for L, C and R. R is not easy to calculate because it involves core
losses. Could it be measured directly using a multimeter?

Once I know the answer to these two questions, I should be able to
come up with an impedance matching circuit.

In the end I hope to increase the Area and Ql of the antenna.... then
add an impedance matching circuit .... resulting in a much better
signal.

Does this seem like the right approach?

Thanks for ANY help!

May Christ richly bless you in every way
Stephen

5392. Rugged Duck TN2400SXR

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 19:41:39 UTC
From: frankie <h9821889@eee.hku.hk>
Message-ID: <a7aogr$9lu$1@www.csis.hku.hk>
Source record: 146430

Would anyone know the gain of this antenna(developed by Cushcraft
Corporation)?

5393. R: EH antenna tests

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 20:56:04 UTC
From: Alessandro Santucci I0SKK <i0skk@qsl.net>
Message-ID: <qK6m8.47873$%g7.1497212@twister2.libero.it>
Source record: 146432

OK Rich,
I'll try to answer, but I don't have the aim to convince you, so if you want can make your sample, anyway, and I think you'll be more able to make agood sample.
However about the mine it is in my location and I have three samples, the first one, the right one (with the right measures, and that I used for tests, and the "zippiro" the model that my friend Nino IZ7DJR made) and anyone can come here in order to use and test, no problem at all.

When I made the first test the antenna was mounted on my wife's broom..... at 1 meter height!
Than the right sample (with measure according to Stefano model) was mounted at 7 meters or 8 meters over the roof.
The same height was the apex of dipole we used for comparison.

When I measured in direct wave I measured by 2 to Ther dB in favour of EH, and I think that according with an error of 2 dB, can say that the two antennas were equal in perfomance.

I used two different power level, 2 W out from TX, and 5 W out from TX.
I didn't measure current, I used the same power for the two antenas, dipole and EH.
I didn't measure the roof dimension. The DX station gave me the same result with EH and dipole.

OK I know the dipole is not in an optimum installation. But I've not to cerify any antenna, I have just the need to undertsna dif the EH can be used as antenna, and for my opinion is ok. I repeat I'm not involved in any business, I don't have any desider to convice anyone. My friends Mauro IK0CPS and Nino IZ7DJR, and Pino IW0BZD used other EH samples and we are happy of these. We enjoy radio, we are not business man in this fiedl so anyone can make test good test, real good test, but no one is forced to do so, and I think it's real good side of our hobby.
I think it's not usefull to spend time to write messaghe, it's better to transmit or to construct devices. If you are interested make you own antenna, is you are not inerested don't do so: that's all. This is my simple opinion, sorry!
Anyway I think that can be usefull for everyone to know that exists and antenna like the EH and the possibility to copy it and to do by himself a sample. But really no one must do so.
Thanks for attention.

This is the last answer I do, as I don't use to download the NG news, so if you need, can you send me emails and I'll be glad to answer directly. Sorry but I don't like to be in disagreement with anyone! I'm not perfect... hi!
Bye.

72

de
Alex I0SKK

Richard Clark <kb7qhc@attbi.com> wrote in message
pqih9uofniok7bbq5ptoamjfqtbbm9o1ca@4ax.com...
> On Wed, 20 Mar 2002 09:53:35 +0100, "Alessandro Santucci I0SKK"
> <i0skk@qsl.net> wrote:
>
> >Hi to everyone,
> >I made several different EH samples and I use it for my radio activity on
40
> >m. I found it as a good dipole.
> >I can say that is good to construct it and to tune it (not alway easy!)
but
> >I see my log.
> >
> >I'm in radio fron 1970, I'm always a QRP op, and homebewer, and not
involved
> >in EH business, I'm just an Ham.
> >
> >The firt QRP contact I made was FROM INSIDE MY HOME with HA5KDQ with a
power
> >of 2 W in CW in 7 MHz with a 40 cm long antenna!!!!! It was worderfull
and
> >crazy!!!!! This was at sept. 29 of 2001.
> >
> >This is what I see with my experience.
> >I don't know why, but it's in my log....
> >
> >73
> >
> >de
> >
> >Alex I0SKK/QRP
> >
>
> Hi Alex,
>
> Sorry, but according to Stefano, it is highly unlikely that you did
> any of this correctly. To determine the merit of what you did, can
> you tell us:
> 1. How high above ground you have the EH mounted?
> 2. Do you use a 1:1 current balun as a choke?
> 3. Do you use a coil of transmission line as a choke?
> 4. How much current is present on the outside of your transmission
> line?
> 5. What are the rough outline dimensions of the EH antenna (how big a
> box would it fill)?
> 6. How many dB below a standard Dipole does the noise at the receiver
> appear to be?

> 7. How many dB below a standard Dipole do your contacts hear your
> transmission (DX only)?
> 8. Can you make your model available for independent testing?
>
> Please note that questions 6 & 7 require a full size dipole mounted at
> least 1/4 wavelength above earth for proper comparison. Further, that
> dipole must be remote from the EH (more than 3 wavelengths away). If
> you cannot provide suitable answers, then I must presume Stefano was
> right and you could not build a good example for comparison.
>
> We must be cautious about just what an EH antenna is. Given Stefano's
> reports of extreme difficulty to build this, it is apparent that
> anyone who reports otherwise has obviously NOT built the right
> antenna. Sorry, but you first have to prove you have an EH, not
> merely another radiating dummy load.
>
> 73's
> Richard Clark, KB7QHC

5394. Arrow Antenna SAM's more machines

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 20:56:45 UTC
From: arrow146@aol.com
Message-ID: <20020320155645.07719.00002409@mb-cp.aol.com>
Source record: 146431

Hello, to the Group.

Finely got time to take some photos of the new SAM's
(Semi Automated Machines)

I thought some of you might be interested is some of the machines I have made
to help make Antennas.

Take the Photo Tour of SAM's 1 - 7
At the top part of the main page.
<A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>

Some pretty neat machines, If I do say so myself.
Let me know what you think. Arrow146@aol.com
73 Al Lowe N0IMW

5395. Re: Antennas and aluminum siding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 21:27:06 UTC
From: Mel Martin <ve2dc@rac.ca>
Message-ID: <3C98FEAA.E12F5648@rac.ca>
Source record: 146433

The power is irrelevant. yes it will interact... but all antennas are a compromise so you may be pleasantly surprised... try it!

Scott wrote:
>
> I would like to put up an inverted L with the vertical section
> attached to my house (standoff insulator with insulated wire) and the
> horizontal section going from the house to a tree in the back yard.
> My question is whether the siding on the house will screw-up the
> tuning of this antenna. I will only run low power, 10 watts or less,
> thru it. Any suggestions on comments.
> Thanks - Scott W3BUG

5396. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 21:49:46 UTC
From: k7mem@myrealbox.com
Message-ID: <270a577d.0203201349.2a3d39bc@posting.google.com>
Source record: 146434

"Joe Jones" <JoeJones42@hotmail.com> wrote in message
news:<M_Ll8.26462$4I.2534778@bin4.nnrp.aus1.giganews.com>...
> I read about Yagis. I look at commercially sold Yagis. I don't get it.
>
> Please help me understand for once and for all:
>
> Do the reflectors and directors _need_ to be insulated from a conducting
> boom? I keep seeing both insulated and non-insulated units; I read the
> specs; I see no discernable patterns of difference, and it makes no sense
> to me.
>
> If it truly doesn't matter, could someone kindly explain to me (
> first-grade level, please) the theory which proves that this is irrelevant?
> If it _does_ matter, (which resonates in my heart), how, aside from outright
> lies, can manufacturers post the numbers that they do?
>
> Many, many, many TIAs. (Oh, my head hurts!)

Ralph Mowery did a pretty good job of explaining things but I thought
I would just add a little more.

You won't notice the differences in the antennas by just reading the
specs, unless the specs listed the number of elements, the element
spacing and the lengths of all the elements. With this information you
would have noticed that the elements for the antennas with non-insulated
elements are slightly longer than a corresponding element of a antenna
with insulated elements. If two antennas have the same number of elements
and the element spacing was about the same, they are going to have
specifications that are very close to one another.

The type of Boom, metalic or non-metalic, and the method of mounting
the elements effects the length of the antenna array elements.
Close proximity of a metalic boom to the antenna array elements
causes a shortening effect which raises it's operating frequency.
Lowering the operating frequency back to the design frequency would
require the elements to be lengthened. If the elements are actually
bonded to the metalic boom, as opposed to being insulated from the
boom by grommets, even more of an effect is realized. The precise
amount, to lengthen the elements by, is based on the design frequency
and the relationship of the Boom Diameter to the design frequency,
in Wavelength.

The difference factor is called the Boom Correction. The Boom Correction
for antennas with metalic booms where the elements are insulated, but
pass through the boom, is approximately 1/2 the Boom Correction applied

to an antenna where the elements are bonded to the boom.

As a side note, if you space the elements above or below a metalic boom on insulators such that the metal-to-metal spacing is greater than the boom radius, no Boom Correction is necessary.

More detail on this phenomenon can be had by consulting the ARRL Handbook. A very nice program, written in Basic by Gunter Hoch, DL6WU, can be obtained on the internet that is intended for designing VHF/UHF Yagis. The program takes into account the type of boom and the boom-to-element mounting. The output of the program is a antenna design that lists the element spacing and element lengths. It's relatively easy to change the boom-to-element mounting and see the difference it makes in the element lengths.

Just do a Yahoo search on "DL6WU" and you will get a bunch of hits that lead to a copy of the program source. Off hand, I don't remember where I obtained my copy.

If you are interested, I did a conversion of this program into a web page that is HTML/JavaScript driven. I don't have it out on a web site but I can send you the sources. It's not very big, ~150 KByes.

--
Martin E. Meserve, K7MEM

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

5397. feeding a zepp

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 21:58:44 UTC
From: IronHead <slipkid@kwiknet.net>
Message-ID: <nC7m8.1353$JFw2.64159884@news2.randori.com>
Source record: 146435

My next antenna is going to be an end fed zepp for 40M. My question is, how long does the twinlead have to be and can I put a balun on the end of that and run coax into my house? Any thoughts?

5398. Re: Auto Tuners-Greg-OT

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 22:26:14 UTC
From: G Blair <gblair@sympatico.ca>
Message-ID: <3C990C86.68B7BDB0@sympatico.ca>
Source record: 146436

Starr wrote:
>
> Slightly off-topic, but since Greg seems knowlegeable about Marine rigs ...I
> want to ask if he (or anyone) can point me toward a supplier for the
> parts I need to equip my sailboat with Marine SSB. The auto tuner,
> flatbraided wire connectors and counterpoise parts are no easily found by me
> ...yet.
> Icom 710, to be installed.

An Icom 710 is a nice rig. I have one on board as well as a Kenwood TS-50. If Harbour Control states to change to channel 849, it is 8-4-9-enter on the M710 vs consult a listing of frequencies for the ITU channel designations, select VFO A, dial up the receive freq, select VFO B, dial up the transmit freq, select VFO A, select SPLIT FREQ, and finally select Freq Lock on the Kenwood. What would rather do in an emergency???

ICOM creates a lot of marketing hype about the M710 being a 150 Watt radio. It is, 150 W PEP on SSB just like the TS-50. It is also 100 W on CW, RTTY or PACTOR just like the TS-50. The watt meter settled the power issue definitively.

I use an SGC SG230 auto tuner feeding the back stay as a delta loop formed by the back stay, the mast, and 1 inch tinned copper braid leading back toward the SG230 in the lazarette. The delta loop configuration does not require expensive and failure prone back stay insulators. It is a closed loop which presents less receiver noise and is more balanced than a back stay working against a ground. Tinned copper braid can be found at commercial electical suppliers.

I have assisted in many installations using just a random wire hoisted with a flag halyard. IMHO this is preferable to the back stay insulator route. However with a random wire or back stay, the counterpoise is critical.

If you have a metal toe rail, wire the toe rail, both port and starboard, to the ground point on the tuner. Our toe rails are wood.

I have a 100 sq ft ground plate and the delta return loop attaches to the ground plate enroute to the auto tuner. The ground plate forms the lightening protection for the mast.

I run tuned twin lead radials (see the Butternut website for measurements) port and starboard from the tuner forward.

The engine is grounded to the ground plate. The stanchions bases are bonded (tied) together and attached to the tuner ground. Thus the

engine mass and the life lines + bow/stern pulpit are used as a counterpoise.

The more counterpoise you have, the better the capacitive coupling to sea water and the better your above the water antenna tuner combo functions. I cannot emphasize the more counterpoise you can codger together, the better the whole thing will work.

We have not needed to lay copper foil as is common practice with a random wire or back stay antenna.

The tuners can be purchased through SGC, http://www.sgcworld.com, or the ICOM tuner through your ICOM dealer. West Marine sells copper foil as well as the ICOM radio and ICOM tuners.

A roll of copper roof flashing from your local building supplier is less expensive than the West copper foil. It all tunes green anyway in the salt environment.

One has to love the no hassle return policy that West has. If you don't like it (because it broke or did not do the job) you can return it for a full refund including sales tax. If you buy from your trusty ICOM dealer and it breaks out of warrantee or does not do the job, you own it. I had an expensive inverter fail after 4 years. It only had a 6 month factory warrantee. West gave me a full refund.

If you transit the Panama Canal, you can source ICOM items inexpensively at the Duty Free Zone near Colon on the Atlantic side of the canal. I would prefer to deal with West, http://www.westmarine.com.

5399. Re: feeding a zepp

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 22:39:34 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C990FA6.644867C6@IEEE.org>
Source record: 146437

IronHead wrote:
> My next antenna is going to be an end fed zepp for 40M. My question is, how
> long does the twinlead have to be and can I put a balun on the end of that
> and run coax into my house? Any thoughts?

An end-fed Zepp is 1/2WL (about 66 ft. on 40m). It is fed with 1/4WL of
open-wire line (or ladder-line). That's about 31 ft. of 450 ohm ladder-
line. IMO, you would be better off with a balanced antenna.
--
cheers, CAM http://www.qsl.net/w5dxp

5400. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 22:41:38 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <wgaKB1AiARm8EAcd@ifwtech.co.uk>
Source record: 146463

Martin Meserve wrote:
>More detail on this phenomenon can be had by consulting the ARRL
>Handbook. A very nice program, written in Basic by Gunter Hoch, DL6WU,
>can be obtained on the internet that is intended for designing VHF/UHF
>Yagis. The program takes into account the type of boom and the
>boom-to-element mounting. The output of the program is a antenna design
>that lists the element spacing and element lengths. It's relatively
>easy to change the boom-to-element mounting and see the difference it
>makes in the element lengths.
>
>Just do a Yahoo search on "DL6WU" and you will get a bunch of hits that
>lead to a copy of the program source. Off hand, I don't remember where
>I obtained my copy.

Probably from the web site below, in the 'VHF/UHF Long Yagi Workshop'
pages.

Anyone who has bookmarked my site, or has links from their own site,
please note that all the URLs have changed from .com to .co.uk

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
New e-mail: g3sek@ifwtech.co.uk
New website: http://www.ifwtech.co.uk/g3sek

5401. Re: R: EH antenna tests

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 22:43:29 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <omvh9ucn8eiv5k3r0r41mtvgprjd0lh3ud@4ax.com>
Source record: 146438

On Wed, 20 Mar 2002 21:56:04 +0100, "Alessandro Santucci I0SKK"
<i0skk@qsl.net> wrote:

>OK Rich,
>I'll try to answer, but I don't have the aim to convince you, so if you want
>can make your sample, anyway, and I think you'll be more able to make agood
>sample.

OK, so you do not intend to convince - a self fulfilling prophecy. As
for making a good example, you and Stefano do not seem to agree on
what exactly that is; why should I have to guess when neither of you
seem to be able to perform such a simple task? Don't you guys have an
expert in this who can discuss these things?

>However about the mine it is in my location and I have three samples, the
>first one, the right one (with the right measures, and that I used for
>tests, and the "zippiro" the model that my friend Nino IZ7DJR made) and
>anyone can come here in order to use and test, no problem at all.
>
>When I made the first test the antenna was mounted on my wife's broom......
>at 1 meter height!

You once again neglect to provide the distance above earth in this
regard. Which floor is your apartment on?

>Than the right sample (with measure according to Stefano model) was mounted
>at 7 meters or 8 meters over the roof.
>The same height was the apex of dipole we used for comparison.

Still no discussion of the usage of choking in any form. In fact, the
subject seems to be entirely evaded.

What is even more strange is that you elevated the EH 7 or 8 meters
OVER the roof. How tall is your apartment building? Why elevate it
all? According to your Gurus, this antenna is not affected by ground.
This is supposedly for the purpose of comparison to a dipole? None of
us will accept that as valid. The EH claims to be ground independent
and that means that you test it from ground level - not in the air. I
would offer there is a very simple test for this, but you have
announced you are not interested in the technical issues :-(

There is nothing in your response to indicate that both the EH and the
Dipole did not have radiating transmission lines of far greater length
than 1% claimed. In fact, this is the source of positive results you
have observed. It fools many non-critical observers who are happy for
any results. You only convince us that you are gullible.

You will note that none of these objections is based upon "opinion"
(except for being gullible - I suppose there are other, less
opinionated qualifiers that amount to the same thing).

>
>When I measured in direct wave I measured by 2 to Ther dB in favour of EH,
>and I think that according with an error of 2 dB, can say that the two
>antennas were equal in perfomance.

It is very difficult to measure accurately to 2dB on the average Ham
radio. Would you care to reveal how this increase in accuracy is
achieved?

You will note that this objection is not based upon "opinion."

>
>I used two different power level, 2 W out from TX, and 5 W out from TX.
>I didn't measure current,

Why not? This retains the evasion from the principle form of failure
for this model of antenna.

You will note that this objection is not based upon "opinion."

> I used the same power for the two antenas, dipole
>and EH.
>I didn't measure the roof dimension. The DX station gave me the same result
>with EH and dipole.

As well as the dummy load you offered in the last post....
None of this is very remarkable.

>
>OK I know the dipole is not in an optimum installation. But I've not to
>cerify any antenna, I have just the need to undertsna dif the EH can be used
>as antenna, and for my opinion is ok. I repeat I'm not involved in any
>business, I don't have any desider to convice anyone. My friends Mauro
>IK0CPS and Nino IZ7DJR, and Pino IW0BZD used other EH samples and we are
>happy of these. We enjoy radio,

A lot of happy people there (what a snooze). If you were happy with
dummy loads, we could all congratulate you as easily - opinions have
nothing to do with the merit of the design however.

>we are not business man in this fiedl so
>anyone can make test good test, real good test, but no one is forced to do
>so, and I think it's real good side of our hobby.

Uh Huh. What?

>I think it's not usefull to spend time to write messaghe, it's better to
>transmit or to construct devices. If you are interested make you own
>antenna, is you are not inerested don't do so: that's all. This is my simple
>opinion, sorry!

OK, your opinion is just that, and not to be confused with science, technical accuracy, or validation.

It is not an issue of me making an EH, it is an issue of yours or Stefano's operating at all. You have suggested that you are not interested in accurate measurements, unfortunately your opinion does not have much to offer, especially when you show every inclination to bail out.

>Anyway I think that can be usefull for everyone to know that exists and
>antenna like the EH and the possibility to copy it and to do by himself a
>sample. But really no one must do so.
>Thanks for attention.
>
>This is the last answer I do, as I don't use to download the NG news, so if
>you need, can you send me emails and I'll be glad to answer directly. Sorry
>but I don't like to be in disagreement with anyone! I'm not perfect... hi!
>Bye.
>
>72
>
>de
> Alex I0SKK
>

Hi Alex,

No answers to my specific questions I take it. This is a familiar lack of response for the EH/CFA/fractal topic in spite of their being fundamental and simple enquiries. Still and all, it does show your and Stefano's inability to take part in a technical discussion.

One lonesome, embarrasing testimonial up, one lonesome, embarrasing testimonial down. You must agree that the EH group does not present themselves as a very coherent nor a very technical crowd.

Sorry, but it still appears that the EH community cannot produce a single working EH for independent testing, and has failed consistently for more than 6 months.

You list several of your friends who have performed construction and use of this design. Have they enough technical understanding to report fully, and to respond faithfully to technical issues? You claim you are not that person; Stefano has clearly shown he is incapable; and both of you act like it is of no consequence. I am sure you will understand that we are not very interested in naive opinions such as what the two of you have offered.

73's
Richard Clark, KB7QHC

5402. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 23:45:18 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7b70p$jmrsf$1@ID-124126.news.dfncis.de>
Source record: 146439

Is EH just as good on receive as it is on transmit ?

If "reciprocity" works with EH antennas there's no need to make any transmission test prove how good they are. That should speed things up quite a bit.

Please publish results of this longest-running cliff-hanger ever in the next hour. It will soon be my bedtime.

5403. Re: Where to buy a halo

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-20 23:52:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7b7eh$jms0o$1@ID-124126.news.dfncis.de>
Source record: 146440

Halo's are on sale at a stall just outside the pearly gates. But you'll still need your security pass to get in.

5404. ampli AM

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 00:06:12 UTC
From: "CH. TORRE" <christophe.torre@wanadoo.fr>
Message-ID: <a7b88o$1mo$1@wanadoo.fr>
Source record: 146441

Good evening, Look for an ampli d�ca small 100W AM being able to evolve towards 1485Khz or 1800Khz.??? + antenna limps with coupling... If you have amplis of powers superieures merrci to contact me on the mail:
christophe.torre@wanadoo.fr
cordially, A+

CH. TORRE

christophe.torre@wanadoo.fr

action.radio@wanadoo.fr

5405. Current hot offer re: fwd: Check it out

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 00:23:49 UTC
From: steve_76_moore@yahoo.com
Message-ID: <e9ba031f.0203201623.485f16dc@posting.google.com>
Source record: 146442

Yup, is Free, but valid for U.S. residents only.

martin77smith@hotmail.com (martin) wrote:
>Hi,
>
>
>Forward this to your friend ...
>
>Get a Cellphone Magic Flash Detector for free while stock last.
>Limited offer on first come first serve only.
>http://track.floppybank.com/click-21949-81482
>

5406. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 00:43:55 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203201643.1bd46b7c@posting.google.com>
Source record: 146443

CAM <Cecil.A.Moore@IEEE.org> wrote in message n
>
> The vertical was first a ground mounted version with 8 buried radials
> a little over a year ago. When that didn't work, I elevated it 20ft with
> 8 elevated radials.

Of course, a ground mount with 8 radials is not going to be a
barnburner. But neither will one at 1/8 wave with 8 radials.I could
have told you that before you started. I don't really like ground
mount verticals unless there is no other choice.

I couldn't tell any difference in the performance,
> actually lack of performance.

The elevated should have been slightly better. But still not optimum
by any means.

I couldn't rototill my garden last year
> because of the ground radials. I tried each version for about six months.
> If I ever mention trying a vertical again, someone please have me committed.

Well ok. It's a shame you couldn't have tried one with the proper
number of radials for good performance though. That would be like me
testing a dipole, but only allowing it to lay within 2 ft of the
ground and then wondering why I wasn't really doing too hot to dx.
Mine worked so well going back to the dipole was a real letdown. I
don't work much 40m at night lately as a result. I've also heard of
others that had the same results, so I know it's not just me. I just
hope you don't really believe you made an accurate comparison between
the two types of antennas. You didn't. You minimized the most
important part of the vertical. I think to have a really fair test, if
the dipole is at 40 ft, the base of the ground plane should be also,
with at least a decent amount of radials. That puts each antenna's
points of max current at about the same height. When I say decent, I
mean at least the equal of 60 on the ground for a starter kit. Thats
how I made my test, and the vertical ate the dipole for lunch to dx.
Oh well... You have more room to grow lunch now. :) MK

5407. cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 00:52:48 UTC
From: "Bill Seward, KG4SAQ" <seward@northstate.net>
Message-ID: <8dbi9u4ldegf2boia4oa6i0rckenq6b9dc@4ax.com>
Source record: 146444

I'd like to start a discussion on routing the antenna cable in an auto. I'm looking at an antenna (for 2m) mounted near the rear of the vehicle, and I've come up with two ways to run the cable.

First, I thought about running it into the trunk, then up through the interior, hiding it behind door trim , across the bottom of the dash to the transceiver. But lately I've been thinking it would be far easier to run the cable under the car, up into the engine compartment and through the firewall.

I have considered putting the antenna up front and running through the firewall to it, but I think it will look awfully strange.

Any thoughts? Thanks.

Bill Seward KG4SAQ
http://web.northstate.net/~seward

5408. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 00:54:46 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7bb31$4krjd$1@ID-124126.news.dfncis.de>
Source record: 146445

> The vertical was first a ground mounted version with 8 buried radials
> a little over a year ago. When that didn't work, I elevated it 20ft with
> 8 elevated radials. I couldn't tell any difference in the performance,
> actually lack of performance.
==========
Cecil.

Did you retune the LENGTH radials of the radials when you elevated them ?

It's an absolutely vital question !

And did you do the corresponding operation when checking with Eznec ?

Reg.

5409. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 01:08:43 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203201708.4c928047@posting.google.com>
Source record: 146446

"stefano" <sgalast@tin.it> wrote in message news:<Fg%l8.8574$S52.219600@news2.tin.it>...
> dear Paolo P
> there are two possibilities:
> 1) is true
> 2) is not
>
> 50% and 50%.
> are you so sure to be in the right part?
> Please ask about the eh antenna to those many italian hams that are
> successfully using it.

I haven't heard a single one on the air. You would think with such gut wrenching power, they would be all across the band causing huge pileups left and right.

> In USA they don't have the evidence yet, but in Italy there are many
> evidences.

This is true. But as the song goes: Time is on our side, yes it is.

> Why are you closing your eyes?

I read better that way.

> The antenna is speaking it's self, I repeat when well built and well tuned a
> 1% wav EH is equalling a full size dipole.

The oceanfront property in Little Rock AR. still has your name on it. I stood on it's long winding drive just last week and caught a large halibut from a 38 year old septic tank using nothing but a 10m hamstick, about 30 ft of thin string, and a piece of rank cheese. I was just plain amazed. So I can relate to how you must feel in your quest for the ultimate wonderstick. 73, Markano

Or maybe I should rename myself Markoni? That has a better ring to it...More radioish sounding...

5410. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 01:49:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C993C41.218FBCAB@eznec.com>
Source record: 146447

Energy leaves your antenna by two propagation means, which are very different from each other.

One is the ground wave. Energy propagated by ground wave follows the contour of the ground. Only vertically polarized waves propagate by this means. The ground wave signal is attenuated quite rapidly with distance from the source, much more rapidly than the inverse of the distance (for field strength) or square of the inverse of distance (for power density) than is the rule for the sky wave. The attenuation is greater as the frequency increases, so in the middle of the HF range, communication of only a few miles is possible using the ground wave. The question was asked if the ground wave fizzles out and doesn't reach the ionosphere. The answer to this is yes. If fact, it never even goes in the direction of the ionosphere -- a wave launched straight out horizontally and propagating by ground wave follows the curvature of the Earth. At higher angles, the ground wave fades out even more quickly than horizontally launched waves. Ground wave is the primary propagation mode for AM radio broadcasting during the daytime, and for lower frequency stations like WWVB (60 kHz). Because of its rapid attenuation with distance, it's not of much use at HF except for local contacts. You'll find more information on ground wave propagation in the ARRL Handbook and Antenna Book.

The other means of propagation is the sky wave. Signals propagting by this means are attenuated only because of their spreading out, so the field strength decreases inversely with the distance, and the power density as the square of the inverse of the distance. This is the propagation means by which all HF communications of more than a few miles are made. At HF, beyond a few miles only the sky wave remains due to the rapid attenuation of the ground wave. The sky wave includes energy propagating directly from the antenna and energy which has reflected or refracted off the ground after leaving the antenna. These direct and reflected rays sum together to create a pattern that differs according to the antenna height. Although horizontally and vertically polarized signals react differently to reflection from the ground, both polarizations are propagated by sky wave.

A single antenna pattern can be drawn that will give the shape of the ground wave signal at all distances from the source, because the attenuation is the same for all parts of the pattern. This isn't true for ground wave signals, so if a pattern is drawn of the ground wave signal alone or a total signal including both ground and sky wave, the distance from the source has to be given. The pattern will have a different shape at each distance.

The standard and demo versions of EZNEC plot only the sky wave as its
far field output. This is the signal that exists at all distances beyond
a few miles at HF, or perhaps a few tens of miles at MF. If ground wave
amplitude is desired, you can use the near field analysis, since the
"near field" analysis is actually the complete field, near or far.

There's no fixed correlation between the sky wave at low angles and the
ground wave, except that if a change is made in antenna efficiency, the
ground and sky waves are affected the same amount. But you can't
determine what the ground wave is by looking at the sky wave field
strength at any elevation angle. Again, if you do want to determine the
ground wave amplitude (actually, the total field strength regardless of
propagation mode) with EZNEC, use the near field analysis.

Roy Lewallen, W7EL

Mark Keith wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote in message news:<3C94E1FF.2AEBA31D@IEEE.org>...
> > Mark Keith wrote:
> > > Now, would you agree that a local signal to a station using
> > > ground wave would be a very low angle. Correct?
> >
> > Yep, but EZNEC doesn't display the ground wave. Does that mean
> > the ground wave peters out and doesn't reach the ionosphere?
>
> Doesn't matter. All I'm showing is that the very low angle radiation
> doesn't seem to just fizzle out as you would expect if you went by
> modeling alone. I would think most ground wave type stuff on 10m is
> below 10 degrees or so. If the antennas at 1/2-3/4-1.0 ,etc wave up
> were as bad as the modeling seems to show, then they should be fairly
> lame to low angle ground wave stuff. That doesn't seem to be the case
> in the real world.
> >
> > > These pattern changes on verticals that I notice when
> > > modeling don't seem near as drastic in the real world. And in all my
> > > local ground wave tests, I've NEVER seen an antenna improve by being
> > > lower. Not once. I'm not saying it couldn't happen, or doesn't , I'm
> > > just saying I don't seem to notice that.
> >
> > Of course, the 1 dB difference would not be noticeable. What is
> > extremely noticeable for me is the average 4 S-unit advantage
> > that my dipole has over my vertical in (S+N)/N ratio. The noise
> > level is 2 S-units lower on the dipole and the average signal
> > strength is 2 S-units higher on the dipole.
>
> My noise was a bit higher on the vertical, but not too much. It didn't
> matter as the stronger signals overrode the extra noise. The s/n ratio
> to dx was much better on the vertical here. If the noise is 2 s units
> higher and the signals are 3-4 s units higher...That was the case for
> me except I don't think the noise was even 2 s units higher in my
> case. Maybe 1. Sometimes they were about the same if it was real

> quiet.
> >
> > I use the 40m vertical as the support for one end of my dipole
> > with the end of the dipole about ten feet from the vertical.
> > I'm wondering if the vertical acts as a reflector for the
> > dipole during off-the-end vertically polarized radiation from
> > the dipole. Guess I need to model both antennas together.
>
> I doubt it really being they are at right angles. There may be some
> interaction, but not enough to matter I bet. MK

5411. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 02:02:04 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C993F1C.6020607@sympatico.ca>
Source record: 146448

If I'm reading the depiction's right from the antenna book, the boom is
located at the neutral point of the sign wave that travels out from the
feed point of the dipole elements (center) The Reflector and Director(s)
have the same potential electrically by inductance and wouldn't need to
be isolated form each other. Sound right Doc/ Cam? Guess we better not
get into LOG booms, huh? :-)
--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

Joe Jones wrote:

> I read about Yagis. I look at commercially sold Yagis. I don't get it.
>
> Please help me understand for once and for all:
>
> Do the reflectors and directors _need_ to be insulated from a conducting
> boom? I keep seeing both insulated and non-insulated units; I read the
> specs; I see no discernable patterns of difference, and it makes no sense
> to me.
>
> If it truly doesn't matter, could someone kindly explain to me (
> first-grade level, please) the theory which proves that this is irrelevant?
> If it _does_ matter, (which resonates in my heart), how, aside from outright
> lies, can manufacturers post the numbers that they do?
>
> Many, many, many TIAs. (Oh, my head hurts!)
>
>
>
>
>

5412. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 02:17:03 UTC
From: richardharrison@webtv.net
Message-ID: <10770-3C99429F-43@storefull-2396.public.lawson.webtv.net>
Source record: 146449

Michele, IZ2EAS wrote:
If the EH antenna is able to work on 160 metres (and that is what we are told) it must also work on 1500 kHz as well.

Yes, and properly scaled, on 10 m, too.

Why not test the EH antenna at 10 m?

Erect a 10 m ground plane as a reference antenna. 100 metres away erect an EH. Bring the feedlines to a more or less central point for a / b switching to compare the antennas. As Reg noted, reception is test enough.

Unless the EH triumphs, its promoters will likely fault he results. I have experience with such a competiton with measurement transducers. We offered suppliers an opportunity to siubmit one sample of a production transducer for a competitive evaluation we would sponsor. We were going to buy at least hundreds of items from the winner of the competition. Every maker we ever heard of wanted to compete, and did. All the losers claimed their sample had been faulty or misapplied and asked for another chance. They all had the dog ate the homework stories to tell! We said, "Sorry, no second chances. We have a job to do now." The test winner`s transducers performed in the field as they had on test. We were happy and so were the suppliers.

Best regards, Richard Harrison, KB5WZI

5413. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 02:52:57 UTC
From: richardharrison@webtv.net
Message-ID: <19765-3C994B09-30@storefull-2394.public.lawson.webtv.net>
Source record: 146453

Bill Seward, KG4SAQ wrote:
"Any thoughts (on antenna and cable placement in an automobile)?"

Yes. The best antenna location is the center of the roof, but most users don`t want it there. Ahead of the rear deck lid, and off to the side, works for most users. It`s not in the way physically or visually.

The cable should be routed beneath the rear seat and floor mats all the way to the firewall where it emerges from beneath the mat and is routed to the radio. The cable is fully protected, out of the way, and unobtrusive.

Removal of the door thresholds on one side of the car, and the rear seat, makes the cable routing easy.

Best regards, Richard Harrison, KB5WZI

5414. Re: Arrow Antenna SAM's more machines

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 03:10:53 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C994F6F.336FAAE2@bellatlantic.net>
Source record: 146450

Arrow146 wrote:

> Hello, to the Group.
>
> Finely got time to take some photos of the new SAM's
> (Semi Automated Machines)
>
> I thought some of you might be interested is some of the machines I have made
> to help make Antennas.
>
> Take the Photo Tour of SAM's 1 - 7
> At the top part of the main page.
> <A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>
>
> Some pretty neat machines, If I do say so myself.
> Let me know what you think. Arrow146@aol.com
> 73 Al Lowe N0IMW

Al,

I love it! Thanks for taking the time and effort to
put up the pictures. It is fascinating!!

5415. Re: Convert wind speed plus square feet to pounds (force?)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 03:12:23 UTC
From: Mike Rofon <TheRealExray@netscape.net>
Message-ID: <3C994F97.DDCB5CBD@netscape.net>
Source record: 146451

hmbdude-no-spam@cotse.net wrote:
>
> How do I calculate the force exerted on a mast from the area of the antenna
> and the wind speed? I would like to test some tube I want to use as a mast
> and thought I could mount it horizontally and load it to see what the
> deflection is like.
>
> Steve

Wonder if this would work for you?
http://www.k2ah.com/dish/dish5.html
-WX4A

5416. Re: Where to buy a halo

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 03:13:37 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C994F7F.375565D8@shaw.ca>
Source record: 146452

Reg Edwards wrote:
>
> Halo's are on sale at a stall just outside the pearly gates. But you'll
> still need your security pass to get in.

You can't buy them! You have to earn them!

One fellow arrived at the Pearly Gates and was met by St.
Peter who
asked him to relate something nice he had done for someone.
The chap told St. Peter that he had encountered some Hell's
Anglels
punks bothering a young lady and told them to back off.
"That's nice," said St. Peter, "and when was that?"
"About two minutes ago!" replied the chap!
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5417. Re: Convert wind speed plus square feet to pounds (force?)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 03:18:08 UTC
From: Tim Taylor <tim-taylor@comcast.net>
Message-ID: <Qhcm8.14829$Gf.975823@bin2.nnrp.aus1.giganews.com>
Source record: 146454

psf=v^2/250 (v in mph)
ie
20 psf = 70.7 mph
30 psf = 86.6 mph
40 psf = 100 mph

psf = pounds per sq ft (force)

hope this help
73,
Tim K8XS
<hmbdude-no-spam@cotse.net> wrote in message
news:aG1iZHVkZQ==.b35ce72e7e231fde9158fa249ef3ed98@1016679914.cotse.net...
> How do I calculate the force exerted on a mast from the area of the
antenna
> and the wind speed? I would like to test some tube I want to use as a mast
> and thought I could mount it horizontally and load it to see what the
> deflection is like.
>
> Steve
>
>
>
>

5418. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 03:49:25 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <7vli9u01oanvmvftvs6ekv95hes66roj5n@4ax.com>
Source record: 146455

My vote would always be to keep as much of the coax inside the vehicle
as possible.

Dick - W6CCD
Remove 33 from address

On Wed, 20 Mar 2002 19:52:48 -0500, "Bill Seward, KG4SAQ"
<seward@northstate.net> wrote:

>I'd like to start a discussion on routing the antenna cable in an
>auto. I'm looking at an antenna (for 2m) mounted near the rear of the
>vehicle, and I've come up with two ways to run the cable.
>
>First, I thought about running it into the trunk, then up through the
>interior, hiding it behind door trim , across the bottom of the dash
>to the transceiver. But lately I've been thinking it would be far
>easier to run the cable under the car, up into the engine compartment
>and through the firewall.
>
>I have considered putting the antenna up front and running through the
>firewall to it, but I think it will look awfully strange.
>
>Any thoughts? Thanks.
>
>
>---------------------------------
>Bill Seward KG4SAQ
>http://web.northstate.net/~seward

5419. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 04:13:10 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C995DD6.8586E703@IEEE.org>
Source record: 146456

Mark Keith wrote:
> I just
> hope you don't really believe you made an accurate comparison between
> the two types of antennas. You didn't. You minimized the most
> important part of the vertical. I think to have a really fair test, if
> the dipole is at 40 ft, the base of the ground plane should be also,
> with at least a decent amount of radials. That puts each antenna's
> points of max current at about the same height. When I say decent, I
> mean at least the equal of 60 on the ground for a starter kit.

A vertical simply requires too much overhead for good results - 30 times
as much wire as a dipole, higher than a dipole, and much more of an eyesore
than a dipole. I put in 50 times as much work on the vertical as I did
on the dipole.
--
cheers, CAM http://www.qsl.net/w5dxp

5420. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 04:17:45 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C995EE9.A4282B3D@IEEE.org>
Source record: 146457

Reg Edwards wrote:
> Did you retune the LENGTH radials of the radials when you elevated them ?

I made the insulated elevated radials 33 ft. long and adjusted the
vertical height for system resonance. It was very close to 33 ft.

> It's an absolutely vital question !
>
> And did you do the corresponding operation when checking with Eznec ?

I made all elements 33 ft long with EZNEC and adjusted the frequency
to resonance.
--
cheers, CAM http://www.qsl.net/w5dxp

5421. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 04:26:02 UTC
From: richardharrison@webtv.net
Message-ID: <19765-3C9960DA-34@storefull-2394.public.lawson.webtv.net>
Source record: 146458

Roy Lewallen wrote:
"Ground wave is the primary propagation mode for AM radio broadcasting during the daytime and for lower frequency stations like WWVB (60 kHz)."

Yes, and ground wave does not fade away at night. It is the primary propagation mode for AM radio broadcasting during the nighttime, too. Sky wave is a nuisance at night to the medium wave broadcaster because it curtails his ground wave reception by destructive interference with the ground wave at the point, and beyond, where the sky wave skip zone ends.

Roy also wrote:
"Because of its rapid attenuation with distance, it`s (the ground wave) not of much use at HF except for local contacts."

Very true, but the value of local contacts should not be minimized. The locale can be enormous.

The ground wave is conveniently divided into two components, a surface wave and a space wave (says Terman). The surface wave is not good for much at frequencies higher than those used for medium wave brodcasting. But, space waves are used for land and mobile communications, including CB, FM and TV broadcasting, microwave relay, communications into the far reaches of space, etc.

Best regards, Richard Harrison, KB5WZI

5422. Re: Where to buy a halo

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 05:30:19 UTC
From: mensch90249@yahoo.com
Message-ID: <ndri9uk8atnkrv9224d8sl836d0vjrne44@4ax.com>
Source record: 146459

On 20 Mar 2002 15:35:50 GMT, derswede@aol.comspam.com (AA) wrote:

>>I am looking for the AEA 6m halo antenna.
>>Does anyone know where I can purchase one?
>
>If you can't find one, try the PAR Electronics omni. Works great. I use one
>for rover operation...light, disassembles quickly and seems to work much better
>than the whip I had been using (subjective here). For contact info, do a
>google search for par and antenna or omni.
>
>Cheers;
>A
AEA is no longer in business (at least in making antenna's) so the
odds of finding one new are quite slim. There are other options
though, as mentioned PAR has an omni 'triangle'; also you might look
into KB6KQ loops at http://www.kb6kq.com/index.html have spoken with
guys using them and they get out okay. I have an AEA that I use when
portable, it works - but if I had to do it over I'd go for a PAR or
KB6KQ as they seem better suited to transport (better 'profile' and no
ceramic insulators to break).

73,
Howard KE6MAK

5423. Re: Arrow Antenna SAM's more machines

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 05:39:03 UTC
From: KC7ZRU - Tate <73kc7zru73@arrl.net>
Message-ID: <3C9971F6.3FC9433@arrl.net>
Source record: 146460

Ya think the pics are cool, you should drop by his shop sometime.

Always helpful, has good ideas - some AMAZING 'home brewed' fabricatin
tools - and even a not so bad cuppa coffee. Better yet - seems he always
has time to show an interested ham around and answer what have to be
familiar questions over and over again.

I've had pleasure of visit'n Al's shop a couple times. He's always been
more interested in getting another ham on the air, better equipped,
ideas shared or more informed than in simply make'n a buck. He listens
too. Want's to know how folks are use'n stuff - what can be done to make
it better. Wether he built it origionaly or not.

You got an idea? He'd like to hear it.

73

ehsjr@bellatlantic.net wrote:
>
> Al,
>
> I love it! Thanks for taking the time and effort to
> put up the pictures. It is fascinating!!

--
Casper, WY | CARC Repeater
DN62tt | 146.940
"The Dungeon" online at http://go.to/kc7zru
"RTFM" is NOT a 'four letter' word!

5424. Re: EH antenna tests

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 05:58:37 UTC
From: <>
Message-ID: <a7bsqd$1tds$1@news1.sinica.edu.tw>
Source record: 146461

a look at http://www.qsl.net/iz7djr/ehc.htm and see nothing supports the
claims. A rubber duck antenna also radiates and makes qrp DX contacts.
the physical size seems to doom its limited radiating resistance. even
with proper ground and current balun.

73, bv2wn

'Doc (w5lz@icok.net) wrote:
: Here we go again...
: 'Doc

5425. ARNewsline 1282 - March 15 2002

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 06:02:19 UTC
From: radionews@aol.com
Message-ID: <20020321010219.08627.00004009@mb-md.aol.com>
Source record: 146462

Amateur Radio Newsline Report 1283 – March 15, 2002

Amateur Radio Newsline report number 1283 with a release date of Friday, March 15th, 2002 to follow in 5-4-3-2-1.

The following is a Q-S-T.

Restructuring at the FCC should not impact on Amateur Radio and a first for the Dayton Hamvention. These stories are first on Amateur Radio Newsline report number 1283 coming your way right now.

(Billboard Cart Here)

**

REGULATORY ISSUES : FCC REORGANIZES LATER THIS MONTH

A reorganization of the Federal Communications Commission is set to become final later this month. This, as the agency stresses that realignment of responsibilities between various bureaus will make it more efficient and help it better respond to a changing technological marketplace. Amateur Radio Newsline’s David Black, KB4KCH, takes a look at some of the changes.

--
It’s an independent government agency that reports directly to Congress. It’s mission is to regulate communications. One of the services it oversees is Amateur Radio, but most observers of the reorganization of the Federal Communications Commission see little impact on hobby communications.

As part of the reorganization a new Media Bureau will combine the duties of the current Cable and Mass Media bureaus. The goal of the combined bureau? To treat competitors of multiple entertainment delivery systems equally and consistently. This includes broadcasters, cable operators and satellite service providers to name only a few.

Other changes include a renamed Consumer and Governmental Affairs Bureau. Also, a realigned International Bureau still will handle satellite licensing but most policy issues will now be the domain of the newly created Media Bureau.

These are just a few of many changes taking place. Most appear aimed at commercial interests. For ham radio, C-B, G-M-R-S and most two-way radio users the shift will probably be transparent. In other words, for these spectrum users and most others, it looks like business as usual within a soon to be restructured FCC.

From the South-East Bureau in Birmingham Alabama, I’m David Black, KB4KCH, reporting for the Amateur Radio Newsline. Don.

--

Congress endorsed the plan late last year. The FCC then approved the overhaul in January. The changes will take effect March 25th. You can read more on the web at www.fcc.gov. (ARNewsline (tm) from published news reports)

**

RADIO LAW: FCC REFUSES TO SIDE WITH CB'ER IN LOCAL CITATION CASE

The FCC has refused to hear an appeal by an Illinois C-B operator who was convicted of Disorderly Conduct for using an 11 meter Class D Citizens Band Radio. Amateur Radio Newsline's Norm Seeley, KI7UP, has the details:

--
Gary D. White is among the first C-B operators dinged under a new authority granted by the Federal Government to states and municipal law enforcement agencies. Authority to control interference caused by operators of Class D 11 Meter C-B radio sets.

White was convicted on a state Disorderly Conduct charge of operating his C-B equipment in an unreasonably loud, offensive, harassing or threatening manner. He was not convicted of violating any FCC rules. White believed that the citation was based on interference to a neighbors telephone and television receiver. This in itself is not a violation of FCC Part 95 rules. And because of this he also believed that local authorities had no justification to sanction him. So he appealed the conviction to the FCC.

But the FCC says that the proof of guilt on the Disorderly conduct allegation is not in its preview to consider. This is because no FCC rules were violated. Also, under a law enacted by Congress in November of 2000, state and local governments are free to enact laws to enforce existing Part 95 Citizens Radio Service rules.

Bottom line. The FCC will not interfere in the case and White will have to find other avenues if he wishes to continue his appeals.

For the Amateur Radio Newsline, I'm Norm Seeley, KI7UP.

--

Congress enacted the law to give state and local authorities enforcement authority over 11 meter C-B operators due to the rising tide of unnecessary and harmful interference to other people using radio devices in near-by spectrum. This includes corded and wireless telephones, television receivers, stereo Hi-Fi sets and other consumer electronic gear. Ham radio is specifically exempted from the law and any ordinance it may be used to create. (W5YI Report)

**

HAM RADIO RIGHTS: NM. AND W.VA. JOIN THE PRB-1 BANDWAGON

The ARRL Letter reports that New Mexico and West Virginia have become the 14th and 15th states to adopt pro Amateur Radio antenna bills based on the limited

federal preemption known as PRB-1. Amateur Radio Newsline’s Jeff Clark, K8JAC, reports:

We have this report:

--
In New Mexico Governor Gary Johnson signed House Bill 314 on March 5th. This, after it easily passed both houses of the legislature last month with just two opposing votes during a short session that typically only deals with appropriations bills. Called New Mexico's "Emergency Communication Preservation Act" the measure was sponsored by State Representative Mimi Stewart and Senator Ramsay Gorham. It stipulates that municipal or county ordinances regulating Amateur Radio antennas cannot obstruct or preclude amateur radio service communications. Also, that such ordinances shall reasonably accommodate amateur radio service communications.

Here in West Virginia Governor Bob Wise signed House Bill 4335 into law on March 7th. The bill provides that antenna structures may be erected at heights and dimensions sufficient to accommodate amateur radio service communications but does not include a minimum regulatory height schedule. The measure also exempts Amateur Radio antenna towers constructed prior to the effective date from subsequent zoning regulation changes.

From Charleston West Virginia, I’m Jeff Clark, K8JAC.

--

In signing the West Virginia bill into law, Governor Wise, whose late father held the call sign W-A-8-A-Y-P, also proclaimed March 7 as Amateur Radio Operators Appreciation Day across the state. (ARRL)

**

Break 1

From the United States of America, We are the Amateur Radio Newsline, heard on bulletin stations around the world including the Northcoast Amateur Radio Club repeater serving Cleveland Ohio.

(5 sec pause here)

**

AMERICA AT WAR: NEW TERRORISM ALERT SYSTEM

The United States has a new color-coded terrorism warning system. It was revealed on Tuesday, March 12th by Homeland Security chief Tom Ridge.

The five-level system is a response to public complaints that broad terror alerts issued by the government since the Sept. 11 attacks raised alarm without providing useful guidance. The lowest-status warning is green, followed by blue, yellow, orange and red as the perceived dangers intensify.

As the terrorism warning system was unveiled, Ridge said that the nation is on yellow alert. This means that the United States is facing a significant risk

of danger but not the highest stage.

The alert system is in force immediately for federal agencies, and Ridge is urging state and local governments to adopt it, too. It will be subject to a 45-day comment period, after which it probably will be revised. It's not known what part if any Amateur Radio will play in the new enhanced terrorism alert scheme. (Published news reports)

**

ENFORCEMENT: TAKE THAT UNCOORDINATED REPEATER OFF THE AIR

The FCC has told the operator of an uncoordinated North Carolina repeater to stop interfering with a coordinated machine, even if it means immediately taking his system off the air. This is the edict handed down to the operators of the NY4X repeater by FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth, K4ZDH.

--
Hollingsworth: " We also notified Richard Howell, NY4X, of Greer South Carolina and John Parker, AG4AZ, of Brevard Norrth Carolina that upon reciept of the letter, the NY4X repeater that they operate had to either shut down, obtain coordination or submit a detailed plan to the Commission to prevent interference to the KU4OL [repeater]."

"Now this interference has been going on for quite some time. We notified Parker and Howell back in November that something had to be done. Nothing was accomplished in regard to coordination and nothing was done in regard to the interference."
--

Hollingsworth letter says that Howell and Parker had more than ample time to fulfill their obligation under Section 97.205 of the Commission's rules. And late word is that the repeater has been shut down. (FCC, RAIN)

**

ENFORCEMENT: TAKE THAT BROKEN REPEATER OFF THE AIR

The NY4X repeater is not the only machine currently under FCC scrutiny. Another one is in Northern California. This one is having technical problems and is causing interference to machines on adjacent channel pairs. Again, the FCC's Riley Hollingsworth, K4ZDH:

--
Hollingsworth: "We notified Wendall Peterson of Walnut Creek California, operator of the K6POU repeater that more than enough time has elapsed for him to correct the technical and control problems with the repeater. His earlier response to our inquiry showed that the bandwidth was indeed so wide that it caused problems to two other repeaters. We have gotten complaints about that. And the repeater system is just not operating in accordance with good Amateur practice."
--

Hollingsworth says that his office expects the problems with the repeater to be corrected or that the machine will be taken off the air. He also gave Peterson 20 days from the date of his letter to respond. (FCC, RAIN)

**

ENFORCEMENT: THE RESPONSIBILITY OF REPEATER OWNERS

The FCC enforcement involving the NY4X and K-6POU repeaters are just the latest in a series of actions aimed at cleaning up the problems that have been plaguing the F-M community. Whether it's an uncoordinated repeater causing havoc to a coordinated machine, or a long established system in need of maintenance, the FCC's Hollingsworth says responsibility comes with repeater ownership:

--
Hollingsworth: "We want to emphasize that repeaters are voluntary. Nobody has to put one up. But if you do put one up you have a responsibility to maintain it, to get coordination if that's necessary, and to operate in accordance with good Amateur practices, especially if other repeaters are being detrimentally affected."
--

In reality, the only things the FCC is asking of those who own and operate repeaters is to be good neighbors and to adhere to the proper technical standards. In this way, the repeaters themselves can better serve their service area and the ham radio community in it. (FCC, RAIN)

**

RESCUE RADIO: KNOWING WHERE YOU ARE IN THE MID WEST

If you drive the highways and by-ways of Kentucky, you need never worry again about where you are. And if you get in a bind, rescuers will be able to find you. That is, if you are a ham radio operator equipped with a mobile APRS station. Jack Parker, W8ISH, of Amateur News Weekly, says that in his part of the world it is a mode that is truly coming of age:

--
Good news from the Kentuckey Automatic Position Reporting Society" their network of APRS digipeters is growing like well bred Kentucky Race Horses.

According to Brian Walker, KC4FIE, several new sites will be coming on line very soon. New digi's are planned for Grand Rivers, Morgantown, Owensboro, Lawrenceburg, and Dry Ridge to name a few.

The Murry State University club has added a digipeter and two stations along the Kentuckey – Tennessee border have extended APRS coverage into that state. These efforts effective extend the Mid-West network of APRS digipeters established by the Tri-State Working Group in Ohio, Indiana and Illinois.

If you need more information on the Automatic Position Reporting System just check the APRS Working Group website at www.tawg.org.

Reporting for Amateur News Weekly, this is Jack Parker, W8ISH.

--

With interest in A-P-R-S growing and ham gear that includes the mode as a standard feature, look for a defacto nationwide network to be in place by the end of the decade. (ANW)

**

HAMVENTION 2002: HAM TESTS WILL BE AT THE HARA

The Dayton Hamvention has asked that we pass along a correction to some information in its recently mailed pre-show brochure. The pamphlet incorrectly lists Meadowdale High School as the venue for Amateur Radio license exams. This is incorrect. The Hamvention says that all license exams will be held at the HARA Arena Hamvention site. (Hamvention(r))

**

HAMVENTION 2002: QCWA BANQUET

And attention QCWA members. This years annual banquet in conjunction with the Dayton Hamvention will be hosted by the South West Ohio chapter and will be held on Friday, May 17th. The venue is Alex's Continental Restaurant near Miamisburg. Starting time is 7:30 P.M. and reservations are required.

This years speaker will be General Raymond Moorman. He will be talking about the United States Air Force Museum and plans for the upcoming Centennial of Flight celebration in 2003. For more information and to make reservations please contact Ed Sonnanstine by e-mail to EdSonny@aol.com (QCWA)

**

CONVENTIONS - UTAH: UTAH HAMFEST

The 2002 Rocky Mountain Division ARRL Convention and 2002 Utah Hamfest will be held July 12th to the 14th at Ruby's Inn at Bryce, Utah. The venue is near Bryce Canyon National Park. For more information please visit www.utahhamfest.org on the world wide web. (Utah Hamfest)

**

CONFERENCES: ARRL/TAPR DIGITAL COMMUNICATIONS CONFERENCE

Technical papers are being solicited for presentation at the 21st Annual ARRL and TAPR Digital Communications Conference. The event will be held this September in Denver, Colorado. Presentations will also be publicized in the Conference Proceedings. Submission of papers is due by August 5th and in-person presentation at the conference is not required for publication. Conference registration and additional details are available on the web at www.tapr.org/dcc (TAPR, ARRL)

**

BREAK 2

Here when you need us 52 weeks a year. We are the Amateur Radio Newsline, with links to the world from our only official website at www dot a r newsline dot

o-r-g.

(5 sec pause here)

**

NAMES IN THE NEWS: HELPING HAND NET

We want to take a moment to welcome a new and very interesting net to the Amateur Radio Newsline family. It is on the AD6XK repeater here in Los Angeles California on 145.440 MHz.

What makes this net very special is that its Control Operator Simon Rosconi, K6DXN, is visually impaired. According to Dave Estrada, KD6HDX, Rosconi lost his vision at age 6. Estrada says that even without sight, Rosconi works 40 hours a week, and still finds time to volunteer his time as control operator for the nets.

But Rosconi is not the only vision impaired ham involved. Estrada tells Amateur Radio Newsline that Brian Coponiti, KG6BVO, who is also partially blind, has also volunteered. Coponiti downloads and plays back Amateur Radio Newsline to the net.

Estrada adds that this particular repeater group also has two other operators that are visually impaired. They are Gary La Duke, WB6WJW and Ivan Simer, K6TTA. (KD6HDX)

**

NAMES IN THE NEWS: EDWARD T. CLEGG, W8LOY FAMILY CELEBRATION

A few weeks ago we told you about plans by the family of the late Edward T. Clegg, W8LOY, to celebrate the life of this ham radio pioneer. The gathering is being planned by Ed’s widow Martie, her daughter Linda and Linda’s husband Rob Mc Guffie, K2HZN. Recently, RAIN producer Hap Holly, KC9RP, had a chance to speak with Rob about the upcoming event:

--
NO TEXT AVAILABLE – AUDIO ONLY
--

Hap conducted an extensive interview with Rob Mc Guffie. It really tells the whole story of Ed Clegg and his famed Clegg Labs. Part 1 is online right now at www.rainreport.com or by telephone at 847-827-7246. (RAIN)

**

RADIO REGULATIONS: AVOIDING A PHONE NUMBER CRUNCH

The nation's supply of telephone phone numbers is depleting rapidly and the government is taking steps to make sure what is left lasts longer. Amateur Radio Newsline’s Henry Feinberg, K2SSQ, has more:

--
Over the past several years, area codes have multiplied to cope with the

explosion in technology. Regions have responded by splitting up area codes among geographic areas or laying another area code over an existing one.

But in 1996 the Federal Communications Commission banned such overlays dedicated to specific kinds of technology. The Commission enacted the ban because it considered separate area codes for cellular telephones phones and pagers unfair to wireless companies and their customers. This is because everyone would have to dial 10 digits instead of seven to reach wireless customers.

But states including California, Massachusetts and Ohio had been been asking for ways to prevent existing area codes from running out of phone numbers, the agency said. The FCC says that it will now hear proposals from states on how they intend to conserve area codes on a case-by-case basis, including plans to use technology-specific area codes.

For the Amateur Radio Newsline, I'm Henry Feinberg, K2SSQ, in West Orange New Jersey.

--

The FCC, which is responsible for overseeing the supply of phone numbers, says that without action the number pool will run out in less than ten years. (FCC)

**

HAM RADIO BUSINESS: A NEW HOME FOR VERTEX STANDARD/YAESU

Vertex Standard USA, better known in ham radio circles as Yaesu, is moving to a huge, beautiful new facility. The new address is Vertex Standard U-S-A, 10900 Walker Street, Cypress, California, 90630. The new main phone number is area code 714-827-7600. All e-mail addresses will remain the same but telephone extensions will change. Vertex Standard makes the move -- no joke -- on Monday, April 1st. (Vertex-Standard)

**

INTERNATIONAL-CANADA: VE7BFK IS NEW RAC ARDF COORDINATOR

Radio Amateurs of Canada has named Gordon Young, VE7BFK as it's news R-A-C National Amateur Radio Direction Finding Coordinator. Young replaces Perry Creighton, VA7PC who held that appointment for the past several years. (RAC)

**

CONTESTS: SOUTH WEST OKLAHOMA SPRINTS

The first ever South West Oklahoma Spring Sprints sponsored by the Lawton VHF Contesting Club will take place in just a few weeks. Sprints are short period contests held primarily on a specific band or using a specific mode. The South West Oklahoma Spring Sprints are band exclusive. The 2 meter sprint is on April 1st from 7 pm to 11 p.m. Central U-S time. The 70 centimeter sprint is April 13th also from 7 to 11 Central. Both are open to all Oklahoma hams living south of Interstate highway 40 and West of Interstate 35. For more

information e-mail ne0p@arrl.net (VHF Reflector)

**

DX

In DX, K8PT and K3PLV are in the Channel Islands and operating as MJ slash K8PT and MJ slash K3PLV from Jersey through the 19th of March. The emphasis is on CW and RTTY in the WARC bands during daylight and 30, 40 and 80 meters during the evenings. Q-S-L as directed on the air. (RSGB)

Also word that Laurence Howell, GM4DMA, who is now resident in Anchorage, Alaska, will be travelling to warmer climates. This, as part of his work for the youth development charity Raleigh International. Howell say that he plans to be active as V51 slash G4DMA from Namibia from the 16th of March for two weeks. Look for him on 160 through 6 meters as his work schedule allows. (RSGB)

**
THAT FINAL ITEM: A WEDDING AT HAMVENTION 2002

And finally this week, get ready for a first. The first ever wedding to be held at the Dayton Hamvention.

No, we are not kidding. For the first time in Hamvention history, wedding vows will be exchanged at the show. This as Cyndi Krieger and Mark Elliot, N8WZW, will be married Saturday, May 18th at the HARA Arena during Hamvention 2002.

Mark and Cyndi met about thirteen years ago through a mutual friend. On their first date Mark and Cyndi went out for dinner and a movie. According to Hamvention sources, they have been an "item" ever since.

Mark introduced Cyndi to amateur radio by going to a hamfest. Cyndi had no idea what a hamfest was, but it sounded interesting. It was and she was hooked! Cyndi is now studying for her license and may test for it before Hamvention weekend.

Why get married at Hamvention? Mark and Cyndi couldn't think of a better place to share their love for each other and for amateur radio than by getting married at the world's largest amateur radio trade show. The ceremony takes place at 3 PM in Forum Room 3 immediately following the Amateur Radio Newsline produced Ham Radio Town Meeting. (Hamvention (r))

**

NEWSCAST CLOSE

With thanks to Alan Labs, Amateur News Weekly, AMSAT, the ARRL, the CGC Communicator, CQ Magazine, the Dayton Hamvention, the FCC, the Ohio Penn DX Bulletin, Radio Netherlands, Rain, the RSGB and Australia's Q-News, that's all from the Amateur Radio Newsline(tm). Our e-mail address is newsline@arnewsline.org. More information is available at Amateur Radio Newsline's(tm) only official website located at www.arnewsline.org. You can also write to us or support us at Amateur Radio Newsline(tm), P.O. Box 660937,

Arcadia, California 91066.

Before we go, a reminder that the nominating period for the 2002 amateur Radio Newsline Young Ham of the Year is now open. No significant changes from last year. Nominees must be 18 or younger. Full rules and an application is on our website at www.arnewsline.org.

For now, with Bill Pasternak, WA6ITF, at the editors desk, I'm Don Wilbanks, KC5MFA saying 73, and we thank you for listening." Amateur Radio Newsline(tm) is Copyright 2002. All rights reserved.

5426. test

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 07:08:56 UTC
From: for_hum <for_hum@daybile.fr>
Message-ID: <a7c0qi$9ln$1@wanadoo.fr>
Source record: 146464

only test . sri
73

5427. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 07:49:52 UTC
From: n7ws@yahoo.com
Message-ID: <3c998fbc.130559288@news.triconet.org>
Source record: 146465

On Wed, 20 Mar 2002 17:49:53 -0800, Roy Lewallen <w7el@eznec.com> wrote:

[much good stuff snipped]
|
|A single antenna pattern can be drawn that will give the shape of the
|ground wave signal

Uh oh. Don't you mean sky wave here.

5428. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 08:09:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C999545.271208FC@eznec.com>
Source record: 146466

Yes, thanks. That should be sky wave, not ground wave signal. I
apologize for the slipup.

Roy Lewallen, W7EL

Wes Stewart wrote:
>
> On Wed, 20 Mar 2002 17:49:53 -0800, Roy Lewallen <w7el@eznec.com> wrote:
>
> [much good stuff snipped]
> |
> |A single antenna pattern can be drawn that will give the shape of the
> |ground wave signal
>
> Uh oh. Don't you mean sky wave here.

5429. Re: EH Antenna: any news ?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 08:13:16 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a7c4ms$h95$6@quark.scn.rain.com>
Source record: 146467

stefano <sgalast@tin.it> wrote:
> dear Paolo P
> there are two possibilities:
> 1) is true
> 2) is not

> 50% and 50%.

Sorry, those percentages have no relationship to your two listed possibilities. They could just as easily be 100% and 0%.

> are you so sure to be in the right part?
> Please ask about the eh antenna to those many italian hams that are
> successfully using it.

I once worked a 3000+ mile CW QSO using my dummy load as an antenna. This was on 40 meters in the novice segment.

Being able to have long QSOs is no indication that the antenna is good. It is always possible that the feedline is doing the radiating, and the "antenna" is just producing heat.

Your claims are meaningless. You need to publish such MEASURED values as field strengths at given distances from the antennas (your antenna AND the dipole), transmission line currents (if coax, then currents on the outside of the coax as well), VSWR at antenna, antenna input impedance at measurement frequencies, feedline impedance, coax and connector losses, etc.

--
Bill Nelson (billn@peak.org)

5430. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 08:18:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C999769.D844E965@eznec.com>
Source record: 146468

In my third edition of Terman's _Radio Engineering_, he uses "ground wave" the same as I did in my explanation, and "space wave" in place of what I've called "sky wave". I don't find any mention of "surface wave" in the book, although some writers use this in place of "ground wave". In the source you quote, where a "ground wave" has two components, does Terman speak of any radiation other than the "ground wave"? It seems rather odd to speak of a "ground wave" having a "space wave" component.

Roy Lewallen, W7EL

Richard Harrison wrote:
> . . .
> The ground wave is conveniently divided into two components, a surface
> wave and a space wave (says Terman). The surface wave is not good for
> much at frequencies higher than those used for medium wave brodcasting.
> But, space waves are used for land and mobile communications, including
> CB, FM and TV broadcasting, microwave relay, communications into the far
> reaches of space, etc.
>
> Best regards, Richard Harrison, KB5WZI

5431. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 08:45:55 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C999DA4.6A73151F@icok.net>
Source record: 146319

Bill,
Personally, I don't think it would make
any difference at all. Take your pick.
'Doc

5432. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 08:59:42 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <Sq9izwG+Dam8EAJq@ifwtech.co.uk>
Source record: 146322

VA3ATD wrote:
>If I'm reading the depiction's right from the antenna book,

You seem to be adding some words and interpretations all of your own, which make the whole thing seriously askew from reality.

It's very easy to add your own interpretations into something that isn't easy to understand - and yagis are not easy to understand at a first reading, or even a second or a third - so I strongly suggest that you re-read those books, and concentrate on what they really do say.

>the boom is located at the neutral point of the sign wave that travels
>out from the feed point of the dipole elements (center)

The "neutral point", as you put it, is just that - a point of zero size. The boom has a finite thickness and so it *does* have a detectable effect on the element.

It's also not accurate to think of the variation of current or voltage along the length of an element as a "travelling wave". It isn't going anywhere - the voltage and current distributions on the elements are best thought of as permanent *standing* waves. They E/I distributions have the same major features as sine/cosine waves (maxima and minima in the same places) but the shapes of those distributions differ a little from one element to the next.

Even more important, the overall amplitudes of the E/I standing waves are different on each element - often very different.

When you put a conducting boom in the middle of the element, you change its E/I distribution - not much in typical HF beams where the boom diameter is a small fraction of the element length, but even that can be enough to affect aspects of performance that are very frequency-dependent, such as front/back ratio.

On the other hand, when you're using a one-inch boom at say 1.3GHz, that is equivalent to a boom diameter of about 8 feet at 14MHz, so of course it has a very significant effect. That effect can still be allowed for, by making the elements longer, but then the correction becomes very large.

The correction depends on the element mounting method, and on the boom diameter in relation to the wavelength. Something else that you won't find in the books yet, because it's still a developing area: when boom corrections are large, the correction also becomes a function of the element lengths and diameter, so it isn't quite good enough to use a single value for all elements - see the article by VK2KU in QEX a

couple of years ago.

>The Reflector and Director(s) have the same potential electrically by
>inductance

You never read that in any book, for sure. As I said at the beginning, please do go back and read those books again, and concentrate on what they actually do say... as opposed to what *you* think they're trying to say. That difference really does matter.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
New e-mail: g3sek@ifwtech.co.uk
New website: http://www.ifwtech.co.uk/g3sek

5433. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 09:27:40 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <3C7D36FA6113F2BF.AF2131618035CCAE.0D44B372E9E83A3E@lp.airnews.net>
Source record: 146320

On Wed, 20 Mar 2002 19:52:48 -0500, "Bill Seward, KG4SAQ"
<seward@northstate.net> wrote:

>I'd like to start a discussion on routing the antenna cable in an
>auto. I'm looking at an antenna (for 2m) mounted near the rear of the
>vehicle, and I've come up with two ways to run the cable.

How far back to the removable parts of your center hump go? I've had
fair luck with routing through the back seat, and under the center
console to the dash. It left about 6" of coax exposed, but in a
fairly safe spot.

All my rooftop runs go behind the trim panels. This not only keeps
the coax out of sight, but it also gives an opportunity for visual
inspection of existing wiring. Spotting a rather toasted wire in the
YL's car during a feedline install turned a not-worth-the-expense
repair into a five minute splice job to get the interior light
functioning again.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

5434. Re: Mobile Ant on roof of Chevy K1500 P.U.?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 09:33:24 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <08B0A2DB4D93C9E3.1F4FFD41232F8F1D.8FEEEF60D1D96918@lp.airnews.net>
Source record: 146321

On Wed, 20 Mar 2002 01:12:51 GMT, Dennis Kaylor
<k4oxg@tampabay.rr.com> wrote:

>if you are worried about wind load i would suggest the 3 or 4 magnet mag mount
>once that thing is stuck to the roof you shouldnt have much worries about it
>coming off

Out of curiosity, how the hell does one get those things off without
scratching the paint? I've thought about getting one when I upgrade,
so I can put an HF rig in the YL's car without drilling any more
holes, and be able to move it to any other car that I use for a while,
but it seems the only way to remove the four or six magnet versions
would be to pry them off with a crowbar.

Heck, I've got the MFJ 5" magmount as my backup, and without the
antenna attached, there's no easy way to get that thing detached.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

5435. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 11:18:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7cfki$k5jog$1@ID-124126.news.dfncis.de>
Source record: 146323

For prctical purposes I would have thought the width of the boom has a
negligible effect on resonant frequency of an element. The boom merely
replaces the small portion of the element it displaces - albeit of larger
effective thickness.

The most critical dimension, the distance between the extremities of the
dipole, remains sensibly unaffected.

The effect of the boom probably has a smaller effect than the diameter or
thickness of the element itself because it extends over a much smaller
fraction of the overall element length.
--
****
Regards, Reg G4FGQ

==================================
Ian White, G3SEK <G3SEK@ifwtech.co.uk> wrote in message
news:Sq9izwG+Dam8EAJq@ifwtech.co.uk...
> VA3ATD wrote:
> >If I'm reading the depiction's right from the antenna book,
>
> You seem to be adding some words and interpretations all of your own,
> which make the whole thing seriously askew from reality.
>
> It's very easy to add your own interpretations into something that isn't
> easy to understand - and yagis are not easy to understand at a first
> reading, or even a second or a third - so I strongly suggest that you
> re-read those books, and concentrate on what they really do say.
>
> >the boom is located at the neutral point of the sign wave that travels
> >out from the feed point of the dipole elements (center)
>
> The "neutral point", as you put it, is just that - a point of zero size.
> The boom has a finite thickness and so it *does* have a detectable
> effect on the element.
>
> It's also not accurate to think of the variation of current or voltage
> along the length of an element as a "travelling wave". It isn't going
> anywhere - the voltage and current distributions on the elements are
> best thought of as permanent *standing* waves. They E/I distributions
> have the same major features as sine/cosine waves (maxima and minima in
> the same places) but the shapes of those distributions differ a little
> from one element to the next.
>
> Even more important, the overall amplitudes of the E/I standing waves

> are different on each element - often very different.
>
> When you put a conducting boom in the middle of the element, you change
> its E/I distribution - not much in typical HF beams where the boom
> diameter is a small fraction of the element length, but even that can be
> enough to affect aspects of performance that are very
> frequency-dependent, such as front/back ratio.
>
> On the other hand, when you're using a one-inch boom at say 1.3GHz, that
> is equivalent to a boom diameter of about 8 feet at 14MHz, so of course
> it has a very significant effect. That effect can still be allowed for,
> by making the elements longer, but then the correction becomes very
> large.
>
> The correction depends on the element mounting method, and on the boom
> diameter in relation to the wavelength. Something else that you won't
> find in the books yet, because it's still a developing area: when boom
> corrections are large, the correction also becomes a function of the
> element lengths and diameter, so it isn't quite good enough to use a
> single value for all elements - see the article by VK2KU in QEX a
> couple of years ago.
>
> >The Reflector and Director(s) have the same potential electrically by
> >inductance
>
> You never read that in any book, for sure. As I said at the beginning,
> please do go back and read those books again, and concentrate on what
> they actually do say... as opposed to what *you* think they're trying to
> say. That difference really does matter.
>
>
> --
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> New e-mail: g3sek@ifwtech.co.uk
> New website: http://www.ifwtech.co.uk/g3sek

5436. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 12:00:43 UTC
From: MD <ve3tmt@rac.ca>
Message-ID: <JXjm8.15649$XN1.1921644@news20.bellglobal.com>
Source record: 146324

"Bill Seward, KG4SAQ" <seward@northstate.net> wrote in message
news:8dbi9u4ldegf2boia4oa6i0rckenq6b9dc@4ax.com...
> I'd like to start a discussion on routing the antenna cable in an
> auto. I'm looking at an antenna (for 2m) mounted near the rear of the
> vehicle, and I've come up with two ways to run the cable.
>
> First, I thought about running it into the trunk, then up through the
> interior, hiding it behind door trim , across the bottom of the dash
> to the transceiver. But lately I've been thinking it would be far
> easier to run the cable under the car, up into the engine compartment
> and through the firewall.
>
> I have considered putting the antenna up front and running through the
> firewall to it, but I think it will look awfully strange.
>
> Any thoughts? Thanks.

Bill,

I've always followed the out of sight, out of mind rule. On all my HF installations I route the cable through the trunk, under the back seats, under the kick panels and bring it up under the dash. And don't lay the coax under any carpet where there will be feet! After a while it will get flattened and pinched. I use small cable ties to secure everything, and lock plugs on the carpet to hold everything in place. Just make sure to check for and RFI on the rig before you secure everything down. I followed the same rules installing my sound system (multiple amps in the trunk) and have not had a single problem in the 3 years I've owned the car.

Good luck,

Max

5437. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 15:38:42 UTC
From: richardharrison@webtv.net
Message-ID: <27815-3C99FE82-14@storefull-2395.public.lawson.webtv.net>
Source record: 146325

Roy Lewallen wrote:
"Energy propagated by ground wave follows the contour of the ground."

That is exactly what I would say too.

I don`t know what edition this copy of the "Radio Engineers` Handbook" is. Much of my library was ruined by a flood here in June 2001. Post flood, I could separate some pages in this volume, others I can`t. Just inside the front cover is stated: "The quality of the materials used in the manufacture of this book is governed by continuing postwar shortages". That approximately dates it.

On page 674 Terman says: "The ground wave is here considered to be that portion of the radio wave that is affected by the presence of the ground and that would account for all the energy reaching the receiver if it were not for ionospheric waves (sky waves) and tropospheric waves.

The ground wave can conveniently be divided into two components, a surface wave and a space wave. The surface wave travels along the surface of the earth. The space wave is the result of two component waves as illustrated in Fig.1, namely a direct wave and a ground-reflected wave. When transmitting and receiving antennas are both at the earth`s surface, these two components of the space wave are equal in magnitude (seems Terman assumes a perfect reflection here, but guess that it makes no difference if the result is that the space wave goes away upon contacting the ground) and opposite in phase, thereby canceling and leaving the surface wave as the only component of the ground wave. This is the case of "ground-wave" transmission of broadcast frequencies. However, as the antennas are raised the amplititude of the space wave rapidly increases, and it soon becomes the principal part of the ground wave. This is the condition existing at ultra-high frequencies when the antennas are raised a few wave lengths or more above the earth.

The magnitude of the ground wave, and of its individual components, the space and surface waves, is influenced by the resistivity and dielectric constant of the earth, the frequency, the height of transmitting and receiving antennas, the earth`s curvature, the distance to the transmitter, and the variation of refractive index of earth`s atmosphere with height.

There`s lots more, but I`m suffering eye and other strains trying to perfectly copy the print.

Best regards, Richard Harrison, KB5WZI

5438. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 16:15:59 UTC
From: richardharrison@webtv.net
Message-ID: <27816-3C9A073F-10@storefull-2395.public.lawson.webtv.net>
Source record: 146328

Max, VE3MT wrote:
"And don`t lay the coax under any carpet where there will be feet! After a while it will get flattened and pinched."

I have little experience with coax under automobile floor mats but lots of experience with hundreds of Motorola control head cable installations under the floor mats. We always used RG-8 cable with the radios and it will stand a lot of abuse. We tried to route the control head cables along the door thresholds where they were not subject to being stepped on. But not all installations are perfect. None the less it may be surprising that I never, ever, heard of any damage or problems due to routing a cable under a floor mat.

Best regards, Richard Harrison, KB5WZI

5439. gmrs manget mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 16:34:03 UTC
From: dan9125@aol.com
Message-ID: <90dcbbbd.0203210834.21f85cc1@posting.google.com>
Source record: 146326

Im looking for an magnet mount antenna to work with a GMRS portable
radio. Anyone know a good place to order one? I was hoping for one
with a BNC connector.
Thank-you
Dan9125@aol.com

5440. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 16:40:46 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <KQxE9PEO0gm8EAJn@ifwtech.co.uk>
Source record: 146327

Reg Edwards wrote:
>For prctical purposes I would have thought the width of the boom has a
>negligible effect on resonant frequency of an element.

In that case you would often be disappointed with the results. A whole generation of yagi builders found that out the hard way.

This is really not a matter for speculative debate. There is a lot of published experimental information about boom corrections, as they apply to various HF and VHF/UHF element-mounting methods, for example the QEX article by VK2KU, the ARRL books by Lawson (SK), Leeson, the ARRL Antenna Handbook, and various VHF/UHF books including 'The VHF/UHF DX Book'.

>The boom merely
>replaces the small portion of the element it displaces - albeit of larger
>effective thickness.
>
Yes and yes - but "small" is often enough to make a significant difference.

>The most critical dimension, the distance between the extremities of the
>dipole, remains sensibly unaffected.
>
That's "voltage thinking". Much more important is that the boom partially shunts the element's magnetic field at the centre where it is most intense. The shortening effect (in other words, the amount by which the element has to be lengthened to compensate) is typically a significant fraction of the boom diameter. At HF, where broad mounting plates are often used, the shortening can actually exceed the boom diameter.

>The effect of the boom probably has a smaller effect than the diameter or
>thickness of the element itself because it extends over a much smaller
>fraction of the overall element length.
>--
That is true, but as I said:

>> even that can be
>> enough to affect aspects of performance that are very
>> frequency-dependent, such as front/back ratio.
>>
It is difficult to accurately model boom effects with a program such as EZNEC, but such programs *will* show you how sensitive certain aspects of yagi performance can be to small changes in effective element length. That is your cue to go to the published references, find out what boom

corrections will apply to your element mounting system, and make sure
you use them.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
New e-mail: g3sek@ifwtech.co.uk
New website: http://www.ifwtech.co.uk/g3sek

5441. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 16:45:59 UTC
From: richardharrison@webtv.net
Message-ID: <28916-3C9A0E47-18@storefull-2397.public.lawson.webtv.net>
Source record: 146331

Joe Jones wrote:
"Do the reflectors and directors need to be insulated from a conducting boom?"

No.. But the lengths are slightly different for parasitic elements which are not insulated. It`s because the resonant length of an element is affected by its diameter as well as the length of the element. The effective diameter of a non-insulated element is slightly affected by its boom contact.

Best regards, Richard Harrison, KB5WZI

5442. Re: rohn 20

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 17:11:21 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a7d43l$1m6m$1@news1.tribune.com>
Source record: 146329

My book specified shims should be used on undersized masts and implied that they were included. They were not.

Using a caliper and doing some math, I determined that one half of a mast section would make the proper shim to put the mast in the correct position. Although my beam has turned on the mast once in high winds, the mast has never turned in the rotator.

My Rohn is used but I am fairly certain it is #25. It is 12+ inches on a side., I tried all sorts of positions to work the rotator inside the tower, and figured the only way to get the rotator inside the tower without pulling a diagonal, was to unhook the top section and put the rotator in from the bottom. I was not about to do that as it would make future servicing a nightmare! My Rotator is the G450 A not the XL. Perhaps there is a difference in case size, although one would expect that the light duty rotator I have would be the smaller of the two.

KA9CAR

Allodoxaphobia <QSB@QRM-QRN.net> wrote in message news:slrna9hnhr.gm9.QSB@animas.frontier.net...
> On Mon, 18 Mar 2002 12:50:21 -0600, KA9CAR scribbled:
> > I do not know how the size of the 450 compares to the 800sdx. But ...
> >
> > I had to remove one diagonal to get a Yaesu 450 in to my Rohn 25.
>
> ????!! I did not. I have the YAESU G-450-XL installed mid-way
> in the top section of my Rohn 25 tower. I home-brewed the base
> mounting plate -- which needs shims on at least one of the
> horizontal's to make it level. I agree with the YAESU-bolts-
> are-too-short observation. YAESU must've designed it to be
> installed on a pie tin.
>
> I did find that the 450 expected to twist a far larger diameter
> mast than the top section of the Rohn 25 could swallow. This
> results in an off-center rotation of the mast (if uncorrected)
> when using a mast that the top sleeve _can_ accept, and can/did
> cause binding. I solved *that problem* by using thickish metal
> shim plates in the rotator-to-mast clamping assy.
> It's been doing ok for several years now.
>
> hth es 73
> Jonesy
> --
> | Marvin L Jones | jonz | W3DHJ | OS/2

```
> | Gunnison, Colorado | @ | Jonesy | linux __
> | 7,703' -- 2,345m | frontier.net | DM68mn SK
```

5443. radio shack portable gmrs radio question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 17:13:27 UTC
From: dan9125@aol.com
Message-ID: <90dcbbbd.0203210913.78a2a07@posting.google.com>
Source record: 146330

I purchased a 5 watt Radio Shack Portable radio model#19-903.Does anyone know how to turn up the audio on this unit.It puts out a strong signal but the audio level is really low.I'm sure it can be adjusted but how??

thanks again----------> Dan9125@aol.com

5444. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 18:02:38 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203211002.11a06d99@posting.google.com>
Source record: 146332

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<27815-3C99FE82-14@storefull-2395.public.lawson.webtv.net>...
> Roy Lewallen wrote:
> "Energy propagated by ground wave follows the contour of the ground."
>
> That is exactly what I would say too.
>
> I don`t know what edition this copy of the "Radio Engineers` Handbook"
> is. Much of my library was ruined by a flood here in June 2001. Post
> flood, I could separate some pages in this volume, others I can`t. Just
> inside the front cover is stated: "The quality of the materials used in
> the manufacture of this book is governed by continuing postwar
> shortages". That approximately dates it.
>
> On page 674 Terman says: "The ground wave is here considered to be that
> portion of the radio wave that is affected by the presence of the ground
> and that would account for all the energy reaching the receiver if it
> were not for ionospheric waves (sky waves) and tropospheric waves.
>
> The ground wave can conveniently be divided into two components, a
> surface wave and a space wave. The surface wave travels along the
> surface of the earth. The space wave is the result of two component
> waves as illustrated in Fig.1, namely a direct wave and a
> ground-reflected wave. When transmitting and receiving antennas are both
> at the earth`s surface, these two components of the space wave are equal
> in magnitude (seems Terman assumes a perfect reflection here, but guess
> that it makes no difference if the result is that the space wave goes
> away upon contacting the ground) and opposite in phase, thereby
> canceling and leaving the surface wave as the only component of the
> ground wave. This is the case of "ground-wave" transmission of broadcast
> frequencies. However, as the antennas are raised the amplititude of the
> space wave rapidly increases, and it soon becomes the principal part of
> the ground wave. This is the condition existing at ultra-high
> frequencies when the antennas are raised a few wave lengths or more
> above the earth.
>
> The magnitude of the ground wave, and of its individual components, the
> space and surface waves, is influenced by the resistivity and dielectric
> constant of the earth, the frequency, the height of transmitting and
> receiving antennas, the earth`s curvature, the distance to the
> transmitter, and the variation of refractive index of earth`s atmosphere
> with height.
>
> There`s lots more, but I`m suffering eye and other strains trying to

> perfectly copy the print.
>
> Best regards, Richard Harrison, KB5WZI

I had heard of "space wave" in the context that Ternan uses it, but I don't use that a whole lot because it seems to confuse people. According to Termans description, the tests I ran on 10m used the "space wave". But myself, I tend to just lump them both together and call both the ground wave just for simplicity. But I still maintain that it doesn't matter for my purposes, as all I'm demonstrating is that the antenna is radiating at the "low" angle. What it does after it leaves the antenna and passes my "target station" doesn't matter for my uses. I still think using the ground or "space wave" is a good way to test lower angle performance. IE: below 10-15 degrees or so. It demonstrates that putting a vertical at 1/2 wave up or higher doesn't kill the low angle performance near as bad as you might think if you went by modeling alone. Besides, in many cases the max TOA is not too many db more than the lowest gain angles. Sometimes only 3-4 db or so. So thats not even an S units difference. Say if you had a vertical that had 6 dbi gain at 35 degrees, and 0 dbi gain at 5 degrees. Thats only an appx S unit's worth of difference to distant stations that would be receiving each of those selective waves not counting attenuation from the ionosphere ,etc. What happens after it leaves the antenna...I'm not concerned about that. MK

5445. Re: Rookie needs help with impedance matching a ferrite antenna w/ ...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 18:06:14 UTC
From: richardharrison@webtv.net
Message-ID: <27360-3C9A2116-15@storefull-2392.public.lawson.webtv.net>
Source record: 146333

Stevo wrote:
"The application guide for the IC says that the impedance is approx. 2 Mohms."

If that`s an input of 2 megohms, you don`t need to try to match it. You connect your tuned circuit directly across an impedance that high. Don`t sweat the reactance. You are going to add a lot of capacitance to your ferrite loop to resonate it at 60 KHz.

You probably don`t have a grid dip meter or selective voltmeter. You need a signal generator that tunes a range which includes 60 KHz. You can check circuit resonance by radiating a signal into the tuned circuit and checking circuit output. You need an isolation amplifier with high impedance, perhaps your receiver chip, to check for resonance.

Terman says:
"The design of coils with magnetic cores is normally carried out by a cut-and-try process."

You pick a cross section and space available for a winding and try wire sizes and details. Terman has numerous tables to help. Reg may even have a free program for calculations.

You increase pick up with a longer rod, or an external antenna coupled to your coil in a way which won`t detune it too much. Your Q will be limited by re-radiation which can`t be helped when you are using the coil as an antenna. Impedance matching is impractical.

Best regards, Richard Harrison, KB5WZI

5446. Re: Wierd Radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 18:53:37 UTC
From: Bill <notme@You.com>
Message-ID: <a7da7gjnm1@knossos.btinternet.com>
Source record: 146334
Cross-posted to: alt.ham-radio.vhf-uhf,alt.pirate.radio,rec.radio.amateur.antenna

Try Looking at
http://www.google.com/search?hl=en&ie=ISO-8859-1&oe=ISO-8859-1&q=Radio+Shack
+BTX-124&btnG=Google+Search

"Jester" <sluggo286@yahoo.com> wrote in message
news:2Rbl8.551$%n4.123289@news.uswest.net...
> I hope someone can offer some help with this one. A friend and myself
> bought a couple of used VHF radios and have thus far, been unable to find
> any service manuals about them. The local radio shops are stumped as
well,
> acting as if this is some sort of alien technology.
>
> Any insite into programing these little rascles is welcome.. Here's some
> info...
>
> Radio Shack BTX-124
> model 19-1205
> FCC ID: AAO19-1205
>
> sluggo286@yahoo.com
>
>

5447. Re: radio shack portable gmrs radio question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 19:33:28 UTC
From: Dick Hughes <rhughes33@cableone.net>
Message-ID: <f1ck9ukqhgdm3o9dp58adn7h1bitj9936b@4ax.com>
Source record: 146335

Are you talking about the volume control on receive? Or are you
talking about the amount of deviation on transmit? You can find the
information you want on the FCC website. The FCC ID is AAO1900903.
Be aware that it will take a calibrated audio generator and a
deviation meter to set the deviation correctly. You may just have a
defective unit. I would compare it against another first.

Dick - W6CCD

On 21 Mar 2002 09:13:27 -0800, dan9125@aol.com (Dan) wrote:

>I purchased a 5 watt Radio Shack Portable radio model#19-903.Does
>anyone know how to turn up the audio on this unit.It puts out a strong
>signal but the audio level is really low.I'm sure it can be adjusted
>but how??
>
> thanks again-----------> Dan9125@aol.com

5448. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 20:06:21 UTC
From: Sylvan Butler <Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Message-ID: <slrna9kfco.jnp.Znospam+noZs_0203@hpb13799Z.Zboi.hpZ.com.invalid>
Source record: 146356

On Thu, 21 Mar 2002 10:15:59 -0600 (CST), Richard Harrison <richardharrison@webtv.net>
wrote:
> of experience with hundreds of Motorola control head cable installations
> under the floor mats. We always used RG-8 cable with the radios and it
...
> on. But not all installations are perfect. None the less it may be
> surprising that I never, ever, heard of any damage or problems due to
> routing a cable under a floor mat.

With RG-8 under the mat... People don't smash it, they trip over it!

sdb

--
| Sylvan Butler | Not speaking for Hewlett-Packard | sbutler-boi.hp.com |
| Watch out for my e-mail address. Thank UCE. ##### change ^ to @ ##### |
They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety. --Benjamin Franklin, 1759
Fight terrorism, arm the population!

5449. Re: rohn 20

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 20:19:17 UTC
From: Allodoxaphobia <QSB@QRM-QRN.net>
Message-ID: <slrna9kg24.hg0.QSB@animas.frontier.net>
Source record: 146336

On Thu, 21 Mar 2002 11:11:21 -0600, KA9CAR scribbled:
> My book specified shims should be used on undersized masts and implied that
> they were included. They were not.

hmmm... I do not remember my booklet referring to shims.

> Using a caliper and doing some math, I determined that one half of a mast
> section would make the proper shim to put the mast in the correct position.
> Although my beam has turned on the mast once in high winds, the mast has
> never turned in the rotator.

And, I swag'ed it -- using 2 carefully selected unique-shaped-pieces-of-
steel-whose-origin-is-totally-unknown from 1 of my scrap boxes.

> My Rohn is used but I am fairly certain it is #25. It is 12+ inches on a
> side.,

Yep. Describes mine, too. It's about 30 years old now. Maybe the 'rise'
is different between the horizontal's. I don't believe I resorted to
some 'stunt' like bending one of the diagonal's out of the way....

Oh, well.... We've both got our collectionary up, and we're radiatin'.
Right? <g>

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | frontier.net | DM68mn SK

5450. Harris ATU for Auction

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 20:50:09 UTC
From: Martin John Hallsworth <Martin@NOSPAMg1gyc.demon.co.uk>
Message-ID: <1016744341.8450.0.nnrp-10.9e98acde@news.demon.co.uk>
Source record: 146337
Cross-posted to:
alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,uk.radio.amateur

http://page.auctions.shopping.yahoo.com/uk/auction/62026904
The reserve is 95GBP on this auction.

Have a look at my other auctions while you are passing !!
http://user.auctions.shopping.yahoo.com/uk/user/g1gyc

Thanks for looking

5451. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 21:06:29 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7di35$kg83m$1@ID-124126.news.dfncis.de>
Source record: 146338

As a rough guide, by what percentage does the boom in a typical 10 meter dipole change the resonant frequency relative to a boomless dipole, the dipole end-to-end distance remaining the same in both cases ?

And does inserting a boom increase or decrease the resonant frequency, again maintaining the end-to-end distance unchanged ?

Reg.

5452. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 21:41:01 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <tkJNw1BtNIm8EA$D@ifwtech.co.uk>
Source record: 146339

Reg Edwards wrote:

[I swapped the order of the questions]
>And does inserting a boom increase or decrease the resonant frequency, again
>maintaining the end-to-end distance unchanged ?

The boom "partially short-circuits" the middle of the dipole, making it
electrically shorter and thus raising the resonant frequency.

>
>As a rough guide, by what percentage does the boom in a typical 10 meter
>dipole change the resonant frequency relative to a boomless dipole, the
>dipole end-to-end distance remaining the same in both cases ?
>
For an HF dipole the main effect is likely to be due to other metalwork
(eg plates for U-bolts) rather than the boom itself, but as a *very*
rough guide there might be a 0.5-1% increase in resonant frequency. That
may not seem a lot, but it's always difficult to make an HF yagi cover
the whole band with good front/back ratio, so that small change when the
yagi is built can really mess up the careful computer design work. It
can be enough to move the frequency of best front/back ratio upwards
from the CW segment of the band to the phone segment, or a
phone-optimized yagi clear out of the band leaving very poor performance
at the low end.

At VHF/UHF the boom diameter is generally a much larger fraction of the
element length so the shifts can be 5% or even more, which is enough to
ruin the yagi's performance completely.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
New e-mail: g3sek@ifwtech.co.uk
New website: http://www.ifwtech.co.uk/g3sek

5453. Re: Where to buy a halo

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-21 23:49:19 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7drki$koj7p$1@ID-124126.news.dfncis.de>
Source record: 146340

Irv said -
> One fellow arrived at the Pearly Gates and was met by St.
> Peter who
> asked him to relate something nice he had done for someone.
> The chap told St. Peter that he had encountered some Hell's
> Anglels
> punks bothering a young lady and told them to back off.
> "That's nice," said St. Peter, "and when was that?"
> "About two minutes ago!" replied the chap!
==========

Irv, it's been 7 hours since I received your story and I'm still laughing.
It still hurts round the middle.

Reg.

5454. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 00:26:23 UTC
From: richardharrison@webtv.net
Message-ID: <26166-3C9A7A2F-77@storefull-2391.public.lawson.webtv.net>
Source record: 146341

Reg wrote:
"As a rough percentage---?"

I don`t have a clue.

The fatter a wire is, the less self inductance it has for a given length.

The self-inductance of an antenna conductor is part of the total self-inductance of an antenna circuit. It is also a part of the mutual inductance of an antenna circuit.

I don`t know the percentage change in parasitic element length that occurs when connecting the element to the boom.

I haven`t compared lengths of elements insulated vs elements connected, though I`ve built both types of yagis amd both types worked as advertised.

From glancing at TV antennas around me, I`m sure there is little cost benefit in using insulators for parasitic elements. The consumer TV antennas around me don`t insulate the parasitic elements.

My guess is that a connected boom makes the conductor (element) fatter for a short distance, thus the inductance may be smaller for a short distance. That might require a slightly longer conductor.

On the other hand, there are antennas of a different type that are shorter when fatter, for the same frequency.

I wouldn`t be surprised if some reader knows all about how the lengths change with and without insulation of the parasitic element connection to a yagi boon. It isn`t me.

Best regards, Richard Harrison, KB5WZI

5455. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 01:38:06 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7e223$kg99p$1@ID-124126.news.dfncis.de>
Source record: 146342

> Reg Edwards wrote:
> > Did you retune the LENGTH radials of the radials when you elevated them
?
==========
Cecil replied -
> I made the insulated elevated radials 33 ft. long and adjusted the
> vertical height for system resonance. It was very close to 33 ft.
==========
Reg then asked -
> >
> > And did you do the corresponding operation when checking with Eznec ?
==========
Cecil replied again -
> I made all elements 33 ft long with EZNEC and adjusted the frequency
> to resonance.
==========
Thanks Cecil for confirming what I thought you did.

So there's something wrong either with conclusions deduced from your experiments, or with the uncertainty of data inserted in Eznec. Take your pick! ;o)

But I know you don't take me too seriously. Most of us, both amateurs and professionals, are inclined to suffer from delusions of accuracy regarding both computer programs and our own observations. It's all due to neglect of elementary stastistics in our school days and present-day schools. Much of the rest of the world is better educated. We should heed them.

Cheers, Californian dry red tonight, Reg, G4FGQ.

5456. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 01:40:32 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3C9A8B90.7080702@sympatico.ca>
Source record: 146343

Sorry Ian,

Trying to over simplify things in my reply to the original post. The question was to do with how come some designs are insulated while others are not. Just a simple depiction showing it could be either way.

I sure can't blame the guy for being confused... I wondered the same thing for the longest time. I can sit down to read the ARRL antenna book and it takes 2 days to figure out a simple answer to a question some times. Like some of the threads I've followed on this NG hi hi!

Don't get me wrong, I love following this NG. But sometimes a simple question can spark a debate that rage's for days or weeks, back and forth (not to mention off into theoretical science and beyond) leaving some of the audience and/ or poster wondering what the final answer was. Maybe even what the question was in the first place by the time the dust clears.

Better entertainment then the TV!! :-)

take care.

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits"

5457. Re: Convert wind speed plus square feet to pounds (force?)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 02:18:15 UTC
From: Beach Bum <hmbdude@nospamcotse.com>
Message-ID: <MPG.170434406fb471b29896b8@news.onlynews.com>
Source record: 146344

Perfect, thanks!

In article <Qhcm8.14829$Gf.975823@bin2.nnrp.aus1.giganews.com>, tim-
taylor@comcast.net says...
> psf=v^2/250 (v in mph)
> ie
> 20 psf = 70.7 mph
> 30 psf = 86.6 mph
> 40 psf = 100 mph
>
> psf = pounds per sq ft (force)
>
> hope this help
> 73,
> Tim K8XS
> <hmbdude-no-spam@cotse.net> wrote in message
> news:aG1iZHVkZQ==.b35ce72e7e231fde9158fa249ef3ed98@1016679914.cotse.net...
> > How do I calculate the force exerted on a mast from the area of the
> antenna
> > and the wind speed? I would like to test some tube I want to use as a mast
> > and thought I could mount it horizontally and load it to see what the
> > deflection is like.
> >
> > Steve
> >
> >
> >
> >
>
>
>

5458. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 02:28:59 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7e4vt$kgf0n$1@ID-124126.news.dfncis.de>
Source record: 146345

Tony said -
> Sorry Ian,
> Trying to over simplify things in my reply to the original post.
==========

Tony, your modest apology does not really fit the bill. Don't stand for any intimidation. ;o) Most other contributors are guilty of overcomplicating what is a relatively trivial matter. If they should think about it.

The presence of the usual yagi boom is of much less consequence than the combined effects of the diameter of the antenna element, the height of the antenna above ground, the presence of trees, buildings, mast, power lines, phone lines, TV antennas, etc., in the near vicinity, and certainly a smaller effect than the disposition of and the ever present radiation from the feedline. KTIP = Keep things in proportion.

Yours, Reg G4FGQ

5459. Re: rohn 20

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 02:34:06 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a7e56u$qh2$11@quark.scn.rain.com>
Source record: 146346

KA9CAR <nospam@nospam.usa> wrote:

> Using a caliper and doing some math, I determined that one half of a mast
> section would make the proper shim to put the mast in the correct position.

The calculation is pretty trivial. Say that the rotator manual states that
the proper diameter mast is 2.5 inches. Now also assume that the diameter
of mast that will fit through the top of the tower is 2.0 inches.

The difference is 0.5 inches and the shim thickness must be 1/2 of that
difference or 0.25 inches. The shim goes between the rotator body and
the mast - not between the rotator u-bolt clamp and the mast.

--
Bill Nelson (billn@peak.org)

5460. Re: Screwdriver antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 02:51:53 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <tUwm8.138148$Yd.6992103@e3500-atl1.usenetserver.com>
Source record: 146347

Jess,

What I would do is simply wind a small coil about 1 1/2" dia of about 11
turns and 14 ga.
copper (doesn't have to be copper) solid wire. Attach one end to the bottom
of the an-
tenna on the stud (+) and the other end to ground nearby (-). Trim if needed
and you might
be surprised at how well it will work.

Jerry
K4KWH

www.qsl.net/k4kwh
Jess <jess711@netdoor.com> wrote in message
news:3c9846c0.13511855@news.netdoor.com...
>
> I am rather new to the screwdriver antenna. I have spent most of my
> ham life with vhf yagis and quads. I recently got a used screwdriver
> at a hamfest. The guy I got it from gave me two boxes and told me how
> to hook them up. He said that he knew that one of them wouldn't work,
> but couldn't remember which one. I got one of them sort of working.
> With a 5 ft whip on top I was able to get it on 10 meters ok. And to
> go from 10 meter to 15 metes it only takes about 1/2 inch more coil.
> And you can forget 20 metes completly. It is ok on 40 and 80 meters.
> But it is very touchy, especilly on 80. I
>
> I would like the group's opinion on the matching of screwdriver
> antennas. How much coil? What material, torroid or air? How many
> turns and what size wire..
>
> Jessie AD5JW
>
>

5461. Re: Rugged Duck TN2400SXR

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 02:55:47 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3c9aa106_3@news1.prserv.net>
Source record: 146349

Cushcraft probably would. They are still in business aren't they?
I would ballpark it at - 5 dBi without even knowing what it is, most ducks
are in there somewhere.

--
Crazy George
Remove NO and SPAM from return address
frankie <h9821889@eee.hku.hk> wrote in message
news:a7aogr$9lu$1@www.csis.hku.hk...
> Would anyone know the gain of this antenna(developed by Cushcraft
> Corporation)?
>
>

5462. looking for Jacob's Ladder plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 02:56:01 UTC
From: "Bill Seward, KG4SAQ" <seward@northstate.net>
Message-ID: <r47l9u0248lj8t1vtmge8g7d5hm44oaapj@4ax.com>
Source record: 146348

I'd like to try my hand a some antenna building, and the Jacob's
Ladder has cought my fancy. I found a site that will sell me one
http://www.atlanticwebpages.com/ve1ke/default.htm, but I'd like to try
my hand at it. Searching the web isn't getting anything. Does
someone know of a web site or a book that has the plans? Thanks.

Bill Seward KG4SAQ
http://web.northstate.net/~seward

5463. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 03:01:16 UTC
From: k3bu@aol.com
Message-ID: <20020321220116.06510.00000311@mb-cu.aol.com>
Source record: 146350

>
>I use the 40m vertical as the support for one end of my dipole
>with the end of the dipole about ten feet from the vertical.
>I'm wondering if the vertical acts as a reflector for the
>dipole during off-the-end vertically polarized radiation from
>the dipole. Guess I need to model both antennas together.
>--
>cheers, CAM http://www.qsl.net/w5dxp
>
>

That is too close for comfort and might be the reason for your unhappiness with comparison of both antennas. There is some coupling going on.
If you want to compare two antennas, they should be at least one wavelength apart.

Yuri. K3BU

5464. Re: looking for Jacob's Ladder plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 03:19:40 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3C9AA2B0.9ECD76CC@bellatlantic.net>
Source record: 146351

"Bill Seward, KG4SAQ" wrote:

> I'd like to try my hand a some antenna building, and the Jacob's
> Ladder has cought my fancy. I found a site that will sell me one
> http://www.atlanticwebpages.com/ve1ke/default.htm, but I'd like to try
> my hand at it. Searching the web isn't getting anything. Does
> someone know of a web site or a book that has the plans? Thanks.
>
> ---------------------------------
> Bill Seward KG4SAQ
> http://web.northstate.net/~seward

It looks like nothing more than a twin lead J-pole inside
a PVC pipe. See:
http://www.qsl.net/ke3fl/gif/jpole-tv.gif

5465. Q: multi-band vertical wire end-fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 04:01:50 UTC
From: Dust Might <alfaromeodiscovolante@hotmail.com>
Message-ID: <O0ym8.3000$oi.148952@newsread2.prod.itd.earthlink.net>
Source record: 146352

I currently build and use the J-pole wire half-wave design vertical mono-band end-fed antennas for 20, 17, 15, 12 and
10-meters, hung from a small rope 'n pulley 60-feet up a tree in my back yard (only one antenna at a time).

I have recently swapped for an HF plus 6-meter rig and obviously can build this (described above) antenna for 6-meters,
but since I have so much height to play with, what about an end-fed wire half-wave antenna combining 6 & 2 meters? OR
how about a 6 meter end-fed vertical wire antenna with higher gain (more than half wave)?

The J-pole design I'm building is constructed out of a half-wave of 14-gauge electrical wire over a 1/4 wave of Ladder
Line with rg-58 coax soldered across each side of the Ladder Line near the bottom of the J.

Any suggestions without me having to go borrow someone's ARRL Antenna guide book?
Thanks,
-Dusty wd4dx

5466. The transformer in a noise bridge circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 05:24:40 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0203212124.21d541f9@posting.google.com>
Source record: 146353
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

As I mentioned before, I would like to build a modified version of the SWR noise bridge shown on page 27-25 of _The ARRL Antenna Book_. The schematic is available at http://www.qsl.net/wq1rp/noisebrg.htm, as the New England QRP group sells a kit.

I should note that my version of the noise bridge will be an improved version of the MFJ-212 Matchmaker (http://www.mfjenterprises.com/products.php?prodid=MFJ-212). Please note that the MFJ-212 does NOT have the resistance or reactance dial, and my noise bridge will not either.

The NE555P chip interacts with the diodes and resistor to produce an output voltage that consists of a 1000 Hz square wave. When it interacts with the Zener diode, a broadband RF noise source is produced. The 2N2222A BJTs amplify the RF white noise signal.

Exactly what does the transformer and the rest of the circuit do? My general understanding is that the transformer sends the RF noise into the transmission line. Since there turns ratio is 1:1, the voltage and current ratios are 1:1. The RF noise is sent towards the antenna through the coaxial cable. Any mismatch between the coax and antenna results in reflected RF voltage, which propagates towards the receiver. The larger the reflected RF noise signal, the louder the noise you hear. Adjusting the resistance and reactance dials for the minimum noise reveals the feedpoint impedance.

Some questions:
1. What do the 82 microfarad and 47 microfarad capacitors between the transformer and antenna do? Are they part of an SWR bridge circuit?
2. When the RF voltage returns to the noise bridge, what prevents the transformer from coupling the RF back to where it originated? Or is it stopped at the back end of the last amplifier? (Sorry, I haven't studied transformers in 8 years and never really understood them in the first place.)
3. How would I modify the noise bridge to (gasp!) omit the resistance and reactance dials? Some of you might say that this circuit would no longer be a noise bridge, but the MFJ-212 lacks those dials. I simply want to send the RF noise to the receiver so that I can adjust the antenna and tuner for minimum noise (a byproduct of minimum SWR).
4. Where can I buy an Amidon BLN-43-2402 ferrite binocular core? What acceptable substitutes are there?

Jason Hsu, AG4DG
jason_hsu_802701@@@@yahoo.com
http://www.jasonhsu.com/ham_radio-technical.html

5467. Re: looking for Jacob's Ladder plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 05:33:44 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C9AC234.89D5AFF1@icok.net>
Source record: 146354

Bill,
Looks like a mighty expensive "J" pole antenna
to me! You might do a search for "J" pole, or take a
look in a 'Handbook' for how they're made. They aren't
difficult at all...
'Doc

5468. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 05:35:44 UTC
From: dandowell@sprintmail.com
Message-ID: <fa58693a.0203212135.7437a584@posting.google.com>
Source record: 146355

Does anybody here use the type of antennas that is the through glass type?? I could care less about the cable in the car stuff. How do you get the cable in/out of the auto. Drilling holes is out of the question. (new truck)

In the April issue of QST in the back. The Larson, on glass antenna is on sale.

Any body use this type. It sounds like a perfect deal. Mount it to the top of the back window of the truck.
I would appreciate any advice.

DAN

5469. Looking for help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 09:01:52 UTC
From: Tom <tom@goldgroup.co.uk>
Message-ID: <_ICm8.3214$Na6.422417@monolith.news.easynet.net>
Source record: 146357

I have an urgent requirement for 2 Antenna Design Engineers to work in the UK near Heathrow airport. The position is contract or permanent and requires engineers with planar antenna design experience in the frequency of 2 to 6 GHz.

If you have antenna design experience and would be interested in hearing more about this position, please contact Tom Puffett or Steve Buckfield on +44 1342 330500 or email jobs@goldgroup.co.uk

You will need a valid UK work permit for this position.

5470. Texas Bugcatcher ?'s

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 12:10:53 UTC
From: Presley Travis <presleytravis@nexet.net>
Message-ID: <3C9B1F4C.9E886D00@nexet.net>
Source record: 146358

Greetings,
I have one of the 6" coils, the #680...
over time some of the wire of the coil has gotten
loose and no longer nests snugly in its groove.
My question's, has anybody else experienced
this and if so, how did you remedy this?
tnx & vy 73,
KA4NNN

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5471. Re: cobbwebb antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 12:35:19 UTC
From: Mark Hall <vze2mhvc@bellatlantic.net>
Message-ID: <3C9B23C5.D323634A@bellatlantic.net>
Source record: 146359

Interesting antenna.. I'm wondering if I can make a 40 meter beam by placing a relay or even a Trap to open circuit the 20 meter elements on my 4-element Quad!

'73 KI4Z

JEEPMON wrote:

> Hey since I am new to this newsgroup I dont know if this antenna has been
> talked about much but does it work?
> http://www.g3tpw.ukgateway.net/
> I hope so.
> Has anybody put this desigh into one of the antenna programs to 'see' how
> well it works?
> But most important has anyone ever used this antenna?
> Please respond if so!
> Also on the website the creator said it has been reviewed in several
> magazines.
> They state that they used to advertise up until 1993 and the last magasine
> to review the antenna was in 1996.
> Does anyone have these reviews?

5472. Vertical Antenna Recommendation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 12:50:52 UTC
From: Lee Murrah <lee@murrah.com>
Message-ID: <MMFm8.33208$2q2.2560762@bin4.nnrp.aus1.giganews.com>
Source record: 146360

I have been inactive for quite a few years and am thinking about firing up the IC-720A on HF. I need an antenna, but I do not know what is available these days. I would like to have a simple, easy to use vertical that I could put out of sight in my back yard. Are the radialless verticals worth considering? Any recommendations?

5473. WTB: K5GW 10 element 2 Mtr beams

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 13:22:50 UTC
From: radio@matnet.com
Message-ID: <cda76db5.0203220522.27a56c5f@posting.google.com>
Source record: 146361

Hi I am looking for 8 to 10 10 element K5GW 2 meter beams or parts.
Broken, new, used, etc.
Steve KL7FZ

5474. Re: looking for Jacob's Ladder plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 13:47:12 UTC
From: k7mem@myrealbox.com
Message-ID: <270a577d.0203220547.75eb77a6@posting.google.com>
Source record: 146362

"Bill Seward, KG4SAQ" <seward@northstate.net> wrote in message
news:<r47l9u0248lj8t1vtmge8g7d5hm44oaapj@4ax.com>...
> I'd like to try my hand a some antenna building, and the Jacob's
> Ladder has cought my fancy. I found a site that will sell me one
> http://www.atlanticwebpages.com/ve1ke/default.htm, but I'd like to try
> my hand at it. Searching the web isn't getting anything. Does
> someone know of a web site or a book that has the plans? Thanks.
>
> --------------------------------
> Bill Seward KG4SAQ
> http://web.northstate.net/~seward

This is just a J-Pole made out of ladder line. The plans for these
things are all over the net. Try this link:

http://www.n6mrx.com/Antenna/antenna.htm

--
Martin E. Meserve, K7MEM

I respond to news groups and E-Mail on my own time and therefore
my responses may not be as timely as you, or I, would like them to
be. If I seem to be ignoring you, send me another E-Mail to jog my
memory. Opinions are my own and do not reflect the opinions of my
employer.

5475. Re: Texas Bugcatcher ?'s

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 14:12:28 UTC
From: Jim <NOSPAMk5ik@numail.org>
Message-ID: <9qem9uofl1qgs47el4jnbf1gp3nkgdiv74@4ax.com>
Source record: 146363

On Fri, 22 Mar 2002 07:10:53 -0500, Presley Travis
<presleytravis@nexet.net> wrote:

>Greetings,
>I have one of the 6" coils, the #680...
>over time some of the wire of the coil has gotten
>loose and no longer nests snugly in its groove.
>My question's, has anybody else experienced
>this and if so, how did you remedy this?
>tnx & vy 73,
>KA4NNN

Have you contacted Henry Allen for a solution?? Try him at
K5BUG@arrl.net

>
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

Jim

5476. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 14:23:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C9B3E67.5996E691@IEEE.org>
Source record: 146364

Dan Dowell wrote:
> Does anybody here use the type of antennas that is the through glass
> type?? I could care less about the cable in the car stuff. How do
> you get the cable in/out of the auto. Drilling holes is out of the
> question. (new truck)

I run the cable out the door past the weather-stripping on my
GMC pickup.
--
cheers, CAM http://www.qsl.net/w5dxp

5477. Re: Texas Bugcatcher ?'s

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 15:26:03 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <f2Im8.180$Eb5.19216@bgtnsc05-news.ops.worldnet.att.net>
Source record: 146365

> Presley Travis, KA4NNN, posts:
> Greetings,
> I have one of the 6" coils, the #680...
> over time some of the wire of the coil has gotten
> loose and no longer nests snugly in its groove.
> My question's, has anybody else experienced
> this and if so, how did you remedy this?

I have the same coil and have not experienced this
problem (mine is UV deterioration of the Delrin
rod -- cured with a paint job). It would seem
to me that a dab (just a dab) of epoxy in those
grooves, a little bit of clamp pressure to hold
the wire in the groove and an overnight cure would
fix it.

--
Jim Bromley, K7JEB k7jeb @ arrl.net
Glendale, Arizona

5478. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 16:17:17 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <c0RB0XANk1m8EAYZ@ifwtech.co.uk>
Source record: 146366

Reg Edwards wrote:
>Tony said -
>> Sorry Ian,
>> Trying to over simplify things in my reply to the original post.
>====================================
>
>Tony, your modest apology does not really fit the bill. Don't stand for any
>intimidation. ;o) Most other contributors are guilty of overcomplicating
>what is a relatively trivial matter. If they should think about it.
>
>The presence of the usual yagi boom is of much less consequence than the
>combined effects of the diameter of the antenna element, the height of the
>antenna above ground, the presence of trees, buildings, mast, power lines,
>phone lines, TV antennas, etc., in the near vicinity, and certainly a
>smaller effect than the disposition of and the ever present radiation from
>the feedline. KTIP = Keep things in proportion.

Reg joined this discussion yesterday, with a question that implied he
had never even heard of boom corrections. Today he's giving out advice.

In 35 years of building, designing, modeling and above all *using*
yagis, I've seen all the mistakes and made most of them myself -
including the one Reg is making about boom corrections.

Reg will always go his own way, but I'd hate for any 'innocent
bystanders' to follow his advice about this. If you ignore the boom
correction, you will cut all the elements too short, and your yagi will
perform worse than it should - at VHF and above, a lot worse!

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
New e-mail: g3sek@ifwtech.co.uk
New website: http://www.ifwtech.co.uk/g3sek

5479. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 16:53:49 UTC
From: Cboone@earthlink.net
Message-ID: <3C9B645B.E04C2928@earthlink.net>
Source record: 146367

NO IT IS NOT A JOKE!!!!!! The April Fool's Joke is in the front
of the issue btw!

A fullwave loop also resonates on harmonics...and this antenna IS
real...I built one on 80mtrs years ago...hung it off a 250ft
microwave tower...fed at the top with 70ohm coax...worked 80-10
with no problem...and what a signal!

Chris
WB5ITT

avatar wrote:
>
> I haven't seen it, but it probably is an April Fools article.
>
> Terrence R. Redding <terry@oltraining.com> wrote in message
> news:B8BA760E.164D%terry@oltraining.com...
> > Does this antenna look right to those on this list? I thought there was a
> > discussion here a few years ago that dismissed the idea of a single mast
> > diamond loop fed at the top of the mast by 50 ohms coax.
> >
> > Now I see an article in QST that says the antenna works - and works on 20,
> > 15, and 10.
> >
> > Does this fall in the same category as radiating with a light bulb? Yes,
> > you can use it as an antenna - but whether it appears to work or not, it
> > isn't truly a good design.
> >
> > Terry - W6LMJ
> >

5480. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 16:59:49 UTC
From: Cboone@earthlink.net
Message-ID: <3C9B65BB.9A36EB12@earthlink.net>
Source record: 146368

HUH??? A properly designed 5/8wave antenna has more signal at lower
Take Off Angles than a 1/4wave!!
Your statement below is incorrect when compared to actual antenna
theory....WHY do you think Class D AM stations (1kw omni) usually
like to run a 5/8wave antenna?? BETTER lower TO angle for local
coverage!

Chris
WB5ITT
Broadcast/telecom engineer
ARRL Technical Specialist

Mark Keith wrote:
> You would probably be better off with a well designed 1/4 wave ground
> plane on 2m than a 5/8 gp. The "usual" type of 5/8 gp is a bad design
> for low angle 2m use. You would want to make a "dual 5/8" collinear if
> you want to see any real improvement. I have given the formulas for
> 5/8's many times and should be in deja news. Rather than retype it all
> here, I'm going to give you a program which will calculate a 5/8 GP
> for any freq, and also includes the formulas in the program. This
> program also will do simple dipoles, etc, and also will do tuned
> stubs, quarter sections, etc. It's fairly handy. Reg's program will
> work also, but this one has a section made just for 5/8's. Look under
> "advanced antennas" in the program. I put the program on my server.

5481. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 17:19:53 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <5bpm9uk4kesnf386agsii8r7bl6lbahi23@4ax.com>
Source record: 146269

On Fri, 22 Mar 2002 16:17:17 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>
>Reg joined this discussion yesterday, with a question that implied he
>had never even heard of boom corrections. Today he's giving out advice.
>

Hi Ian,

Tomorrow there will be unzipped software for corrections; the day
after that, a statement that using software is ridiculous. Learn to
laugh at the antics punchinello offers with his dance of the old wife
(up a double and back).

Recipes for calibrated mud anyone? :-)

73's
Richard Clark, KB7QHC

5482. Re: Q: multi-band vertical wire end-fed antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 17:28:27 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <jeqm9usoa1do3osaslhj7nf47701sblvkt@4ax.com>
Source record: 146270

On Fri, 22 Mar 2002 04:01:50 GMT, "Dust Might"
<alfaromeodiscovolante@hotmail.com> wrote:

>I currently build and use the J-pole wire half-wave design vertical mono-band end-fed antennas for 20, 17, 15, 12 and
>10-meters, hung from a small rope 'n pulley 60-feet up a tree in my back yard (only one antenna at a time).
>
>I have recently swapped for an HF plus 6-meter rig and obviously can build this (described above) antenna for 6-meters,
>but since I have so much height to play with, what about an end-fed wire half-wave antenna combining 6 & 2 meters? OR
>how about a 6 meter end-fed vertical wire antenna with higher gain (more than half wave)?
>
>The J-pole design I'm building is constructed out of a half-wave of 14-gauge electrical wire over a 1/4 wave of Ladder
>Line with rg-58 coax soldered across each side of the Ladder Line near the bottom of the J.
>
>Any suggestions without me having to go borrow someone's ARRL Antenna guide book?
>Thanks,
> -Dusty wd4dx
>

Hi Dusty,

Try a Franklin Array (looks like multiple J-Poles in series - sort
of).

73's
Richard Clark, KB7QHC

5483. Re: The transformer in a noise bridge circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 17:30:24 UTC
From: richardharrison@webtv.net
Message-ID: <9367-3C9B6A30-53@storefull-2391.public.lawson.webtv.net>
Source record: 146271

Jason Hsu wrote:
"Exactly what does the transformer and the rest of the circuit do?'

The transformer is half the bridge circuit. The transformer has a center-tapped secondary. When identical ciurrents are supplied from ends of the secondary, identical and opposite currents flow from a center-tapped load to the centertapped secondary, if there is any current at all.

Another way to look at this is as a center-tapped voltage source connected to a center-tapped load. As there is no voltage difference between the center taps, no current flows between them.

Bridges are usually just two voltage dividers. When balanced, the ratios are equal, and there is no voltage difference between the two voltage divisions.

A tapped transformer can replace one of the dividers and the bridge excitation source too.

Jason also wrote: "Since the turns ratio is 1:1, the voltage and current ratios are 1:1."

True, when the bridge is balanced.

The transformer could be 2:1 or some other ratio as long as the load had the same ratio of impedances for a balance.

Jason also wrote: "The RF noise is sent towards the antenna through the coaxial cable."

The bridge need not be complicated by traveling wave considerations to explain its function. The noise bridge functions as an a-c bridge. The noise bridge is identical to a capacitance bridge except for the component values and the single frequency source usually employed in the capacitance bridge.

Jason also wrote: " What do the 82 picofarad and 47 picofarad capacitors---do?"

The book tells you, they weigh the range between capacitance or inductance.

If the unknown were a pure resistor, its value could be determined using only a purely resistive balance control.

If the unknown is an inductance, a capacitive reactance larger than the inductive reactance (a small capacitance) can be placed in series with

the unknown inductance. All the inductance is canceled and there is capacitive reactance to spare and be measured as the unknown reactance. By determining this reactance, we can infer the value of the inductance.

Jason also wrote: "When the RF voltage returns to the noise bridge, what prevents the transformer from coupling the RF back to where it originated?"

Draw a transfortmer with a primary and a center-tapped secondary. Load each end of the secondary with identical resistors to a common point.

Place a telephone receiver between the center tap and the common point.

Place a telephone transmitter across the transformer priamary.

Voila! We have a hybrid! One resistor is a 2-wire telephonne line (believe me!). The other is a balance network (identical in impedance with the phone line).

When the transmitter talks, the receiver is silent (We`ve eliminated the "side-tone"). Half the transmitter`s output has been absorbed by the balancing resistor. The other half has been absorbed by the 2-wire telephone line.

Now back to Jason`s question. This hybrid is the same as the noise bridge circuit. The 2-wire line is in the same place as his antenna feedline. The telephone transmitter is in the same place as his noise generator. The receiver is in the same place as his bridge detector.

So when energy comes back from the line, be it telephone or antenna line, some is lost in the balancing network, and some is coupled into the primary. This causes no problem to the telephone transmitter and supplies sound to the telephone receiver as it is intended to do.

The same will happen in the noise bridge as the circuit is the same. Reflected energy from the antenna feedline will reach the noise generator, but it certainly is smaller than that being generated by the bridge generator and causes no damage. The reflected energy will also feed the bridge detector, and correctly indicate a mismatched load..

Jason also wrote: How to omit the dials?

Replace the balancing network with 50 ohms. You will get balance by adjusting the load.

Jason also wrote: "Where can I buy an Amidon---?"

Surf the net.

Best regards, Richard Harrison, KB5WZI

5484. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 17:55:39 UTC
From: richardharrison@webtv.net
Message-ID: <12085-3C9B701B-53@storefull-2397.public.lawson.webtv.net>
Source record: 146272

Chris, WB5ITT wrote:
"A fullwave loop also resonates on harmonics..."

Maybe that`s why my prized Orr`s "Radio Handbook", 23 edition, has two versions:
A fullwave on page 22-10, and a 2-wave version with higher gain, on page 23-9. Both are bottom-fed.

Best regards, Richard Harrison, KB5WZI

5485. Re: rohn 20

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 18:12:56 UTC
From: KA9CAR <nospam@nospam.usa>
Message-ID: <a7fs39$2js$1@news1.tribune.com>
Source record: 146273

The calculator was to convert all of the metric measurments into inches. My book specified the maximum and minimum mast size in millimeters.

Sounds like they have different books out there.

:^)

jd

Bill Nelson <billn@spock.peak.org> wrote in message news:a7e56u$qh2$11@quark.scn.rain.com...
> KA9CAR <nospam@nospam.usa> wrote:
>
> > Using a caliper and doing some math, I determined that one half of a mast
> > section would make the proper shim to put the mast in the correct position.
>
> The calculation is pretty trivial. Say that the rotator manual states that
> the proper diameter mast is 2.5 inches. Now also assume that the diameter
> of mast that will fit through the top of the tower is 2.0 inches.
>
> The difference is 0.5 inches and the shim thickness must be 1/2 of that
> difference or 0.25 inches. The shim goes between the rotator body and
> the mast - not between the rotator u-bolt clamp and the mast.
>
> --
> Bill Nelson (billn@peak.org)
>

5486. Re: The transformer in a noise bridge circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 18:28:24 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <jnqm9u8pgqtcvffiiad4vjnfs67utmne69@4ax.com>
Source record: 146274
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 21 Mar 2002 21:24:40 -0800, jason_hsu@my-deja.com (Jason Hsu)
wrote:

snip

>Exactly what does the transformer and the rest of the circuit do?

This is the point of my suggesting YOU determine the minimum circuit configuration of a bridge. Jason, you should start doing your own homework by now and explaining to US how it works to both confirm your understanding and become an active rather than passive participant.

>
>Some questions:
>1. What do the 82 microfarad and 47 microfarad capacitors between the
>transformer and antenna do? Are they part of an SWR bridge circuit?

There are only six (6) capacitors shown, none more than 0.01 ï¿½Fd. You need to answer more questions than ask them at this point.

>2. When the RF voltage returns to the noise bridge, what prevents the
>transformer from coupling the RF back to where it originated?

Nothing - the consequences doesn't matter either. It is enough to accept that it does couple back (the whole point of an imbalance).

>Or is it
>stopped at the back end of the last amplifier? (Sorry, I haven't
>studied transformers in 8 years and never really understood them in
>the first place.)

Understanding the minutia of transformers is wholly unnecessary, they can be treated as black boxes if first you accept their principle application of isolation and balance. Do you grasp the operational necessities of the simple DC Wheatstone Bridge? No transformers there to cloud the issue, and everything works the same as the noise bridge. Visit the engineering section in a library at a community college for an hour.

>3. How would I modify the noise bridge to (gasp!) omit the resistance
>and reactance dials? Some of you might say that this circuit would no
>longer be a noise bridge, but the MFJ-212 lacks those dials.

The facetious reply would be to peel off the labels and remove the knobs.

Omitting the components would render it useless - unless you just want to listen to noise for no purpose.

>I simply
>want to send the RF noise to the receiver so that I can adjust the
>antenna and tuner for minimum noise (a byproduct of minimum SWR).

That won't happen in the direction you are moving.

>4. Where can I buy an Amidon BLN-43-2402 ferrite binocular core? What
>acceptable substitutes are there?
>
>Jason Hsu, AG4DG

Hi Jason,

I would have offered:
http://www.bytemark.com
as a source, but they seem intent on commercial suicide over the net by taking down working pages to replace them with the announcement of a new site being built. As alta vista revealed 515 references to the query "amidon ferrite" you could as easily find another vendor one would think.

I don't know why you are looking into binocular cores, but that is a move in the right direction; however, do you have a good reason (the right one that is)? Given your professed ignorance of transformers, you are in over your head to make changes in circuit design in advance of actually building a working, original model.

73's
Richard Clark, KB7QHC

5487. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 18:45:05 UTC
From: NM5K <nm5k@wt.net>
Message-ID: <3C9B7BB1.3522@wt.net>
Source record: 146275

>HUH??? A properly designed 5/8wave antenna has more signal at lower
>Take Off Angles than a 1/4wave!!
>Your statement below is incorrect when compared to actual antenna
>theory....WHY do you think Class D AM stations (1kw omni) usually
>like to run a 5/8wave antenna?? BETTER lower TO angle for local
>coverage!

>Chris
>WB5ITT
>Broadcast/telecom engineer
>ARRL Technical Specialist

Yes, but very few if any of the 5/8 GP designs for 2m are properly designed. In your broadcast case, you have the needed ground radials to provide a decent pattern. Most elevated 5/8's for 2m use only a set of 1/4 wave radials. This provides for a lousy pattern from a 5/8 GP. The pattern is skewed upwards off the horizon. You do not get this skewing on a 1/4 wave GP assuming the feedline is not radiating. So in the real world, many times the 1/4 wave will do better at the low angles needed for local 2m work. This is not just random theory. I have tested this in the real world. I once made a high quality 2m 5/8 GP from a larson coil. I used 4 1/4 wave radials. This antenna was greatly inferior to my 1/4 wave GP at the same height. I took it down after one day. Now, on the HF bands, there are many cases where the 5/8 will be the better antenna of the two, but on HF, the ultra low angle performance is not near as critical. I tested all lengths of verticals on 10m, and on that band the 5/8 was the best. But I also used longer radials on 10m, not 1/4 wave. To properly design a 5/8 antenna for 2m, I think the best route is a dual 5/8 antenna. IE: collinear. Anyway, running a ground mount 5/8 on the AM-BC band, and one on 2m elevated, are two totally different worlds. Anyway, I totally stand by my statements. I've tested them in the real world. I'll never use a "standard" 5/8 GP with 1/4 wave radials on 2m again. It was the pits. If I were to build a 5/8 antenna for 2m it would look like this: http://web.wt.net/~nm5k/58dual1.htm
The other pages show patterns from "standard" 5/8's antennas. Compare the standard 5/8 with 1/4 wave radials on page 3 to my improved version on page 5. No contest...
BTW, your call looks familiar.. Houston maybe? MK
--
http://web.wt.net/~nm5k

5488. Re: The transformer in a noise bridge circuit

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 19:11:43 UTC
From: k7itm@aol.com
Message-ID: <3200347.0203221111.47141b98@posting.google.com>
Source record: 146276
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

The transformer is an integral part of the bridge. To get zero going
to the receiver, the voltage at the top end and at the bottom end of
the transformer must be 180 degrees out of phase and equal magnitude.
That happens if the net impedance load on each end of the transformer
to common is the same. -- I'm not sure what schematic you're looking
at...I have the noisebrg.htm schematic up, and it shows only a 27pF
cap feeding the antenna from the transformer. If the "unknown" is
then 50 ohms, you get balance with a 27pF capacitance on the variable
and a 50 ohm setting of the variable. If you want to omit the
variables, just use a 50 ohm fixed on the top end and replace the
variable cap with a short circuit; on the bottom end you could omit
the cap (replace with a short) or use, say, a tiny 0.01uF cap to block
DC (dunno why you'd need it, though).

You should be able to get an Amidon part from Amidon Associates,
though when I visited their web site recently it looked like they are
discouraging direct purchase of small quantities. Do a Google search
for Amidon and you'll turn up other sources.

Cheers,
Tom

jason_hsu@my-deja.com (Jason Hsu) wrote in message
news:<f7d9a152.0203212124.21d541f9@posting.google.com>...
> As I mentioned before, I would like to build a modified version of the
> SWR noise bridge shown on page 27-25 of _The ARRL Antenna Book_. The
> schematic is available at http://www.qsl.net/wq1rp/noisebrg.htm, as
> the New England QRP group sells a kit.
>
> I should note that my version of the noise bridge will be an improved
> version of the MFJ-212 Matchmaker
> (http://www.mfjenterprises.com/products.php?prodid=MFJ-212). Please
> note that the MFJ-212 does NOT have the resistance or reactance dial,
> and my noise bridge will not either.
>
> The NE555P chip interacts with the diodes and resistor to produce an
> output voltage that consists of a 1000 Hz square wave. When it
> interacts with the Zener diode, a broadband RF noise source is
> produced. The 2N2222A BJTs amplify the RF white noise signal.
>
> Exactly what does the transformer and the rest of the circuit do? My
> general understanding is that the transformer sends the RF noise into
> the transmission line. Since there turns ratio is 1:1, the voltage and
> current ratios are 1:1. The RF noise is sent towards the antenna

> through the coaxial cable. Any mismatch between the coax and antenna
> results in reflected RF voltage, which propagates towards the
> receiver. The larger the reflected RF noise signal, the louder the
> noise you hear. Adjusting the resistance and reactance dials for the
> minimum noise reveals the feedpoint impedance.
>
> Some questions:
> 1. What do the 82 microfarad and 47 microfarad capacitors between the
> transformer and antenna do? Are they part of an SWR bridge circuit?
> 2. When the RF voltage returns to the noise bridge, what prevents the
> transformer from coupling the RF back to where it originated? Or is it
> stopped at the back end of the last amplifier? (Sorry, I haven't
> studied transformers in 8 years and never really understood them in
> the first place.)
> 3. How would I modify the noise bridge to (gasp!) omit the resistance
> and reactance dials? Some of you might say that this circuit would no
> longer be a noise bridge, but the MFJ-212 lacks those dials. I simply
> want to send the RF noise to the receiver so that I can adjust the
> antenna and tuner for minimum noise (a byproduct of minimum SWR).
> 4. Where can I buy an Amidon BLN-43-2402 ferrite binocular core? What
> acceptable substitutes are there?
>
> Jason Hsu, AG4DG
> jason_hsu_802701@@@@yahoo.com
> http://www.jasonhsu.com/ham_radio-technical.html

5489. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 19:28:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7g0nb$l9his$1@ID-124126.news.dfncis.de>
Source record: 146277

Beware the green-eyed monster !

5490. Re: Texas Bugcatcher ?'s

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 19:46:20 UTC
From: Presley Travis <presleytravis@nexet.net>
Message-ID: <3C9B8A0B.351BF8@nexet.net>
Source record: 146278

Thanks,
I thought as much, but good to use the greater knowlege pool
that is available.
vy 73,
KA4NNN

K7JEB wrote:

> > Presley Travis, KA4NNN, posts:
> > Greetings,
> > I have one of the 6" coils, the #680...
> > over time some of the wire of the coil has gotten
> > loose and no longer nests snugly in its groove.
> > My question's, has anybody else experienced
> > this and if so, how did you remedy this?
>
> I have the same coil and have not experienced this
> problem (mine is UV deterioration of the Delrin
> rod -- cured with a paint job). It would seem
> to me that a dab (just a dab) of epoxy in those
> grooves, a little bit of clamp pressure to hold
> the wire in the groove and an overnight cure would
> fix it.
>
> --
> Jim Bromley, K7JEB k7jeb @ arrl.net
> Glendale, Arizona

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5491. Re: feeding a zepp

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 20:04:02 UTC
From: goofy <dbeard@aoc.nrao.edu>
Message-ID: <a7g2nkone1@chaos.aoc.nrao.edu>
Source record: 146279

CAM <Cecil.A.Moore@IEEE.org> wrote in message
news:3C990FA6.644867C6@IEEE.org...
> IronHead wrote:
> > My next antenna is going to be an end fed zepp for 40M. My question is,
how
> > long does the twinlead have to be and can I put a balun on the end of
that
> > and run coax into my house? Any thoughts?

My isotropic Zepp runs like this ---------

Transmitter > antenna tuner > low pass filter > 50 ft. coax > choke ballun >
ground the shield > run Zepp up and out from there.

KC0KZE
D.J. Beard
National Radio Astronomy Observatory
Very Long Baseline Array
North Liberty, Iowa

5492. Re: I'm still confused...

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 21:04:16 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <kv6n9ukri08j8rletqgbb6d876cfkrvbmg@4ax.com>
Source record: 146280

On Fri, 22 Mar 2002 19:28:28 -0000, "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Beware the green-eyed monster !
>

Aw c'mon Punchinello, you don't really dance that well either! :-0
Step and turn single if you can.

73's
Richard Clark, KB7QHC

5493. Re: Texas Bugcatcher ?'s

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 21:43:36 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C9BA588.DED325EA@IEEE.org>
Source record: 146281

K7JEB wrote:
>
> > Presley Travis, KA4NNN, posts:
> > Greetings,
> > I have one of the 6" coils, the #680...
> > over time some of the wire of the coil has gotten
> > loose and no longer nests snugly in its groove.
> > My question's, has anybody else experienced
> > this and if so, how did you remedy this?
>
> I have the same coil and have not experienced this
> problem (mine is UV deterioration of the Delrin
> rod -- cured with a paint job). It would seem
> to me that a dab (just a dab) of epoxy in those
> grooves, a little bit of clamp pressure to hold
> the wire in the groove and an overnight cure would
> fix it.

Your previous coil had the problem. :-) A little dab
of epoxy fixed it.
--
cheers, CAM http://www.qsl.net/w5dxp

5494. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 22:02:59 UTC
From: k3bu@aol.com
Message-ID: <20020322170259.14633.00004019@mb-fc.aol.com>
Source record: 146282

>>Your statement below is incorrect when compared to actual antenna
>>theory....
-WB5ITT

>So in the real
>world, many times the 1/4 wave will do better at the low angles needed
>for local 2m work. This is not just random theory. I have tested this in
>the real world. I once made a high quality 2m 5/8 GP from a larson coil.
>I used 4 1/4 wave radials. This antenna was greatly inferior to my 1/4
>wave GP at the same height. I took it down after one day.
-NM5K

I will second that.
One measurement is better than 1000s of theories :-)
Same experience here. Friend, ex VE3NE SK who worked for Collins did some tests
5/8 vs 1/4 wave verticals on VHF and the clear winner was 1/4.
That's what they used for all the mobiles.
This can be easily verified, just tune in fringe 2m signal and swap antennas
and you will be convinced.

Yuri, K3BU

5495. Re: feeding a zepp

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 22:05:04 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <3C9BAA99.2B1C6439@earthlink.net>
Source record: 146283

IronHead wrote:

> My next antenna is going to be an end fed zepp for 40M.

Hi, "Ironhead,"

As Cecil says, a balanced dipole can be used
for several bands. J-pole/end-fed Zepp antennas
are intended as single band antennas
which could be just what you need/want.
See Cecil's web site http://www.qsl.net/w5dxp
for ways to match a dipole/feedline system
for many HF bands.

According to George (V3ERP, HAMCALC) Murphy's
version of my version of Gary (N3GO) O'Neil's
end-fed-zepp/J-pole program, starting dimensions
for a 40m Zepp are:

freq. = 7.1 MHz
end-fed 1/2 wave radiator = 65.8 ft
(Cecil's 66ft looks good.)
[3000 ohm radiator impedance assumed]

[300 ohm twinlead matching sections (not 450 ohm),
velocity factor about 0.80]
series matching section = 26.3 ft (85.34 e. deg)
[50 ohm feed point]
shorted shunt matching stub = 3.58 ft (11.63 e. deg)
[Total matching about 29.9 ft for 0.80 v.f.]

[Start a little long and trim the stub.]

Total length = 95.7 ft if stretched out/up straight.

[Note: total twinlead about 96 elec. degrees,
not the traditional 90 deg or 1/4 wavelength.
Smith Chart and t-line calculations agree.]

Some recommend making a choke coil of the coax
feed at the antenna for a balun function.

See Steve Yates's (AA5TB) web site
http://www.qsl.net/aa5tb
for a lot more info on end-fed antennas
and a link to Gary's Communications Quarterly
article, "From J to Zepp."

I can email Murph's j-pole Basic program
(in Hamcalc for a couple of years)
and also gwbasic.exe if you don't have it.
Murph will send the whole Hamcalc package CD
(300 programs) for US$7 to cover S&H from Canada.

Let us know how you do.

Cheers, 73,

Ron McConnell
w2iol

5496. Re: Rugged Duck TN2400SXR

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 22:26:12 UTC
From: frankie <h9821889@eee.hku.hk>
Message-ID: <a7gasjiug1@www.csis.hku.hk>
Source record: 146284

Thx. afterall, they reply as follows:
"TN2400SXR is an elevated feed (ground independant) flexible portable
antenna, exhbiting omni pattern (360 degrees) and about 2 dBi gain (about
the same as a full size dipole). The antenna comes with a TNC Male
connector and a right-angle swivel joint where it mounts, to be able to
change orientation."
"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:3c9aa106_3@news1.prserv.net...
> Cushcraft probably would. They are still in business aren't they?
> I would ballpark it at - 5 dBi without even knowing what it is, most ducks
> are in there somewhere.
>
> --
> Crazy George
> Remove NO and SPAM from return address
> frankie <h9821889@eee.hku.hk> wrote in message
> news:a7aogr$9lu$1@www.csis.hku.hk...
> > Would anyone know the gain of this antenna(developed by Cushcraft
> > Corporation)?
> >
> >
>
>

5497. Loop antenna Rectangle

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-22 23:03:47 UTC
From: "CH. TORRE" <christophe.torre@wanadoo.fr>
Message-ID: <a7gdbucjo1@wanadoo.fr>
Source record: 146285

Hello,
Search(research) shemas to make an antenna Loop rectangle. That it is sound
the impedance: 50ohms , 75 or 100 ohms for the connecting of the feeder for
a frequence of 1,5Mhz.. Is it Necessary to use a balum or can one link the
direct emeteur with the antenna with a coax of 50 ohms? Unless any depends
of the height of the antenna with regard to the ground? In +
Thank
--
CRIS
christophe.torre@wanadoo.fr

action.radio@wanadoo.fr

5498. Re: Loop antenna Rectangle

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 00:13:44 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C9BC8AF.93D786B0@icok.net>
Source record: 146286

Cris,
When using coaxial feed line it is necessary to match
impedances in some way. It can be by balun, or a 'matching'
section of feed line. A matching section of feed line is
always of some impedance value ~other~ than the impedance
of the remainder of the feed line. The most common matching
section is made using 75 ohm coax.
The antenna's height above ground does make a difference
in the antenna's input impedance.

I hope this translates well...
'Doc

5499. Re: Loop antenna Rectangle

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 00:14:43 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C9BC8DA.24ABAEC4@icok.net>
Source record: 146287

Cris,
When using coaxial feed line it is necessary to match
impedances in some way. It can be by balun, or a 'matching'
section of feed line. A matching section of feed line is
always of some impedance value ~other~ than the impedance
of the remainder of the feed line. The most common matching
section is made using 75 ohm coax.
The antenna's height above ground does make a difference
in the antenna's input impedance.

I hope this translates well...
'Doc

5500. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 00:16:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3C9BC97A.A87AD0FF@eznec.com>
Source record: 146288

The wonderful patterns you see for a 5/8 wave vertical assume a perfect ground plane, flat and infinitely large. If you make an accurate model of the antenna and its mounting (e.g. including radials or a car top and body), you'll find that the expected low-angle gain often isn't there. It's not so much a problem of bad theory as it is using the wrong theory for the problem.

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
>
> >>Your statement below is incorrect when compared to actual antenna
> >>theory....
> -WB5ITT
>
> >So in the real
> >world, many times the 1/4 wave will do better at the low angles needed
> >for local 2m work. This is not just random theory. I have tested this in
> >the real world. I once made a high quality 2m 5/8 GP from a larson coil.
> >I used 4 1/4 wave radials. This antenna was greatly inferior to my 1/4
> >wave GP at the same height. I took it down after one day.
> -NM5K
>
> I will second that.
> One measurement is better than 1000s of theories :-)
> Same experience here. Friend, ex VE3NE SK who worked for Collins did some tests
> 5/8 vs 1/4 wave verticals on VHF and the clear winner was 1/4.
> That's what they used for all the mobiles.
> This can be easily verified, just tune in fringe 2m signal and swap antennas
> and you will be convinced.
>
> Yuri, K3BU

5501. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 01:03:33 UTC
From: John Buck <kh7t@arrl.net>
Message-ID: <3C9BD46B.9040302@arrl.net>
Source record: 146289

I guess I just do not understand the assertions that 1/4 wave works
better than a properly designed 5/8 vertical.

I have A/B tested both many times on a mag mount on the top of my car or
on my pickup truck. In marginal locations for the 1/4 wave, in no case
has the 1/4 been better than the 5/8 in accessing the repeater.

My test conditions are for distant repeaters and not in an urban
environment where more high angle signal strength might be useful.

By the way a properly designed 5/8 is not just a longer wire tied to the
coax feed line. You can get away that with the 1/4 wave however.

Aloha,
John KH7T

5502. Re: Vertical Antenna Recommendation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 02:09:31 UTC
From: Dust Might <alfaromeodiscovolante@hotmail.com>
Message-ID: <vtRm8.6816$Tk.370158@newsread1.prod.itd.earthlink.net>
Source record: 146290

Yes, there are several variations of vertical hf antennas, multi or mono band, some with very short radials (do a
google.com search under *amateur vertical antenna*).

Do you have a tall tree or trees? For a real unnoticed model, I use simple home-brew end-fed wire 1/2-wl antennas on 20
to 2 meters, (a wire variation of the common Jpole design) hanging from a string, shot over a branch high up in one of
my trees. I can explain in detail if you are interested in this route.
-Dusty

"Lee Murrah" <lee@murrah.com> wrote in message
news:MMFm8.33208$2q2.2560762@bin4.nnrp.aus1.giganews.com...
: I have been inactive for quite a few years and am thinking about firing up
: the IC-720A on HF. I need an antenna, but I do not know what is available
: these days. I would like to have a simple, easy to use vertical that I
: could put out of sight in my back yard. Are the radialless verticals worth
: considering? Any recommendations?
:
:
:

5503. Re: HELP needed in understanding Bode Plots

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 03:01:22 UTC
From: jim dorey <skaar@ns.sympatico.ca>
Message-ID: <3C9BF003.6030900@ns.sympatico.ca>
Source record: 146291
Cross-posted to: rec.radio.amateur.antenna,alt.engineering.electrical,sci.electronics.design,sci.electronics.basics

time for us to set a manufacturing facility to build robotic mines and
shaped charge launchers, we'd only need fred, no the rest of our ground
troops, and that's just to decide where to send the bots.

Bob Wilson wrote:

> Speaking as a Canadian, yer absolutely right on the money. What other
> country do you know of that had to charter a plane to get its troops
> overseas (maybe that should be "troop") as we recently did?
>
> Bob.
>
>

--
www.skaar.101main.net from 20:00 to 7:30 AST, ask for free access to the
hidden directories, may be full time soon
www.geocities.com/skaar0 for the full time version, i put the newest
stuff on my home site
moderator of dopereason and wildsteam@yahoogroups.com
DOM and proud!!!

5504. Frankenstein's transmission line

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 05:08:22 UTC
From: Al Lorona <w6wqc@dslextreme.com>
Message-ID: <a7h2up$l40c4$1@ID-49117.news.dfncis.de>
Source record: 146292

In the classic 1931 film 'Frankenstein' one of the more spectacular devices in the laboratory consisted of two vertical metal rods in a V configuration. An arc is established at the apex and travels upwards toward the higher impedance (wider gap) open end where it extinguishes. Immediately thereafter a new arc is struck at the apex and the process repeats.

The device approximates, at least visually, an open wire trapered unterminated transmission line.

The questions are these:

1. Why does the arc travel upwards towards the higher impedance gap?
2. What determines the velocity of the arc's ascent?
3. If the device is rotated 90 degrees so that the rods are horizontal, or upside down for that matter, does the arc still travel toward the open end?
4. If the vertical rods are parallel does the arc still travel upwards? If not why not?
5. In a tapered unterminated transmission line onto which a sinusoidal EM wave in launched and arc-over occurs will the arc travel toward the open end? If not why not?

I have not been able to find any references to this phenomena. 73, AL

5505. Re: Frankenstein's transmission line

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 05:47:44 UTC
From: Tom Kindel <tkindel@austin.rr.com>
Message-ID: <4GUm8.46798$Dv6.2078348@typhoon.austin.rr.com>
Source record: 146293

"Al Lorona" <w6wqc@dslextreme.com> wrote in message
> In the classic 1931 film 'Frankenstein' one of the more spectacular
devices
> in the laboratory consisted of two vertical metal rods in a V
configuration.
> An arc is established at the apex and travels upwards toward the higher...

This device is commonly called a "Jacobs Ladder". I built one in my high school electronics class using a 15KV neon sign transformer and some 1/8" welding rod.

> 1. Why does the arc travel upwards towards the higher impedance gap?

The arc ionizes the air and is hot. Heat causes the arc to rise.

> 2. What determines the velocity of the arc's ascent?

Not sure how to explain it, but in a room with a breeze, the speed of the rising arc varied quite a bit on mine.

> 3. If the device is rotated 90 degrees so that the rods are horizontal, or
> upside down for that matter, does the arc still travel toward the
> open end?

The arc will try to rise with the heat untill the gap between the wires is too far for the voltage to jump across. When the gap is too far for the voltage to jump, the arc dissapates and the arc reforms at the shortest gap.

> 4. If the vertical rods are parallel does the arc still travel upwards? If
> not why not?

Yes, the arc will go up. Heat again. I've seen some Jacob's Ladders where the arc would stop at the top.

> 5. In a tapered unterminated transmission line onto which a sinusoidal EM
> wave in launched and arc-over occurs will the arc travel toward
> the open end? If not why not?

Not sure on this one, but I assume it would behave the same as I describe above.

> I have not been able to find any references to this phenomena.

Go to www.google.com and do a search on "Jacobs Ladder". This page also has some construction instructions and a little discussion on theory.
http://misty.com/people/don/jacobs.htm

Hope that helps.
--

Tom Kindel
NW5B, NAR 40705 L2, TRA 6382 L2
"Modesty is for those who have no Talent."
- Lazarus Long -

5506. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 07:59:47 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203222359.428ed9f3@posting.google.com>
Source record: 146294

John Buck <kh7t@arrl.net> wrote in message news:<3C9BD46B.9040302@arrl.net>...
> I guess I just do not understand the assertions that 1/4 wave works
> better than a properly designed 5/8 vertical.
>
> I have A/B tested both many times on a mag mount on the top of my car or
> on my pickup truck. In marginal locations for the 1/4 wave, in no case
> has the 1/4 been better than the 5/8 in accessing the repeater.
>
> My test conditions are for distant repeaters and not in an urban
> environment where more high angle signal strength might be useful.
>
> By the way a properly designed 5/8 is not just a longer wire tied to the
> coax feed line. You can get away that with the 1/4 wave however.
>
> Aloha,
> John KH7T

But you are talking a mobile antenna. I'm talking about an elevated 5/8 wave ground plane. Again two different worlds depending on the size and place of mounting on the car. I've seen a 5/8 win many times over a 1/4 wave on a car or truck, but those have much more metal area than a set of 1/4 wave radials. Also it depends on the terrain. Many in mountain or uneven alt terrains prefer 1/4 waves because they have a wider beamwidth and are less critical. But say here in the Houston area where it's pretty flat, a 5/8 is the best way to go on a car. You will have less picket fencing for one thing with the 5/8 around this area and better range usually. But a 5/8 up in the air on top of a set of 1/4 wave radials? The pits. In fact, I tried a ringo ranger 2 also around the same time I did those comparisons. "About 1984-85". The lowly 1/4 wave ground plane with 8 sloping radials was very close in performance to the ringo ranger 2 with the decoupling kit. Thats fairly impressive for an antenna that costs nearly nothing. Sure, the RR2 is tall and has a bit of gain, but if the 1/4 GP's tip is the same height as the tip of the RR2, not much difference really between the two. MK

5507. Monthly Pointer To Twistedhed FAQ

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 09:20:31 UTC
From: keyclownslappa@hotmail.com
Message-ID: <ce9e428e.0203230120.4e2d509@posting.google.com>
Source record: 146295
Cross-posted to: rec.radio.cb,rec.radio.swap,rec.radio.amateur.policy,rec.radio.amateur.antenna

http://www.geocities.com/keyclownslappa/twistworld.jpg

http://www.geocities.com/keyclownslappa/twistworld.jpg

http://www.geocities.com/keyclownslappa/twistworld.jpg

http://www.geocities.com/keyclownslappa/twistworld.jpg

5508. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 10:20:07 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <3F3EBF1BEE5CA82A.E038B60D44917B9F.C9E7DFEB95281C74@lp.airnews.net>
Source record: 146296

On 21 Mar 2002 21:35:44 -0800, dandowell@sprintmail.com (Dan Dowell)
wrote:

>Drilling holes is out of the question. (new truck)

Rest assured that by driving it off the lot, you've already devalued
it far more than a carefully drilled, properly sealed hole ever will.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

5509. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 14:05:47 UTC
From: Harold Burton <hwburton@swbell.net>
Message-ID: <%Y%m8.2313$Tg4.801183903@newssvr11.news.prodigy.com>
Source record: 146297

"Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net> wrote in message
news:3F3EBF1BEE5CA82A.E038B60D44917B9F.C9E7DFEB95281C74@lp.airnews.net...
> On 21 Mar 2002 21:35:44 -0800, dandowell@sprintmail.com (Dan Dowell)
> wrote:
>
> >Drilling holes is out of the question. (new truck)
>
> Rest assured that by driving it off the lot, you've already devalued
> it far more than a carefully drilled, properly sealed hole ever will.

I believe most new autos will have an existing
hole somewhere in the floor with a plastic plug in it. Run your wires thru a
hole in the plug and
put in a new plug if you remove the wires.

5510. Re: Frankenstein's transmission line

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 14:38:08 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C9C9350.613403A4@IEEE.org>
Source record: 146298

Al Lorona wrote:
> 3. If the device is rotated 90 degrees so that the rods are horizontal, ...
> does the arc still travel toward the open end?

Tom answered your questions but apparently missed the horizontal condition
for this one. For two horizontal wires, the arc will find the point where
the wire is closest and will stay there.
--
cheers, CAM http://www.qsl.net/w5dxp

5511. Re: Frankenstein's transmission line

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 15:43:22 UTC
From: richardharrison@webtv.net
Message-ID: <9367-3C9CA29A-198@storefull-2391.public.lawson.webtv.net>
Source record: 146299

Tom Kindel answered the Jacob`s ladder questions very well. It`s heat that makes the sustained arc rise until the gap is too wide. It stops and a new arc starts across the narrow spacing.

Cecil answered the horizontal tapered line question. There is no rising heated plasma propelling the arc along a horizontal line, so it stays where the cap is narrow.

In arc gaps provided across transmission lines, transformers, and broadcast radio tower base insulators for arc initiation to protect other equipment from high voltage surges, the gaps are topped with Jacob`s ladders. These would extinguish arcs from the available apparatus power which follow on after the initial surge is gone.

Problem is, the initial flashover often occurs elsewhere across a wider spacing instead of the narrow arc gap provided for the purpose. The stationary arc must be instantaneously interrupted by killing the power to the arc.

Broadcast stations often isolate the transmission line for d-c (capacitors in series with it). A d-c relay coil and its power supply are connected in series and shunted across the transmission line (r-f chokes provide isolation). Arcs in the transmission line complete the d-c circuit to the relay coil. It actuates and its contacts break the circuit in the transmitter`s interlock system, momentarily dropping the radio from the air. The relay is de-energized, the interlock circuit is once again complete, and the transmitter automatically returns to the air.

Best regards, Richard Harrison, KB5WZI

5512. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 16:04:25 UTC
From: richardharrison@webtv.net
Message-ID: <9367-3C9CA789-200@storefull-2391.public.lawson.webtv.net>
Source record: 146300

Harold Burton wrote:
"I believe most new autos will have an existing hole somewhere in the floor with a plastic plug in it. Run your wires through a hole in the plug and put in a new plug if you remove the wires."

Many autos have rear mounted power raised and lowered antennas. The wire and cable for these is kept inside the car for protection.

Commercial 2-way radios are installed the same way. It`s best by test to install that way.

Best regards, Richard Harrison, KB5WZI

5513. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 16:33:31 UTC
From: richardharrison@webtv.net
Message-ID: <9367-3C9CAE5B-204@storefull-2391.public.lawson.webtv.net>
Source record: 146302

Dan Dowell wrote:
"How do you get the cable in/out of the auto?"

As Cecil said, you can carefully place it where the door opens and closes on the cable without problems. I`ve done this with a magnetic roof mounted antenna.

Truckers often clamp the antenna to a rear-view mirror, and have no mounting or cable holes.

Best regards, Richard Harrison, KB5WZI

5514. Re: Texas Bugcatcher ?'s

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 16:42:05 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <xf2n8.1987$se.199510@bgtnsc04-news.ops.worldnet.att.net>
Source record: 146301

> Cecil, W5DXP, replied:
> Your previous coil had the problem. :-) A little dab
> of epoxy fixed it.

That was probably one of the results of its close
encounter with the garage door. Glad to know I
wasn't blowing smoke.

--
Jim Bromley, K7JEB k7jeb @ arrl.net
Glendale, Arizona

5515. Re: Looking for advise how to make a 5/8 wave vertical!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 17:21:20 UTC
From: richardharrison@webtv.net
Message-ID: <8702-3C9CB990-150@storefull-2392.public.lawson.webtv.net>
Source record: 146304

Yuri, K3BU wrote:
"That`s what they (Collins) used for all mobiles (1/4-wave)."

It`s been best for me too.

Broadcast radio stations do very well with 5/8-wave verticals to increase radiation in the horizontal plane. But, they don`t bang into tree limbs, bridges, parking facility obstacles, etc. The broadcaster also has 120 lengthy radials under his 5/8-wave vertical to complete the antenna`s circuit.

Mobile users have the obstacles, matching losses (A full-length 5/8-wave isn`t resonant.), and an iffy ground. So, their success is spotty.

Best regards, Richard Harrison, KB5WZI

5516. Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 17:41:11 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u9pfhnatjpqt9d@corp.supernews.com>
Source record: 146303
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

I'd like to thank you one and all for your kind considerations of the AM radio problem I posted a couple of weeks ago. After all considerations were in and evaluated, the winner was an NE605 using the RSSI port for detection, a conventional 21.4 MHz. IF, and a toggled, or shared tone comparator. If you go through all the birdie and tweet combinations of dual IF strips working in close proximity, it is far easier to tame the beast using a single channel. Again, thanks for sharing your thoughts.

Now let me pose you one more problem and I'll be quiet for a while. Suppose you are inside a steel building (or more properly, an aluminum can) and can only have something the size of a tupperware sandwich box on the outside of the can. Anybody got any trickery to get the relative bearing on a signal in the AM broadcast band? That is, if the can can rotate (and Yan can cook) horizontally relative to the signal, how can I tell (without mechanically rotating the sandwich box, which is firmly bolted to the outside of the can) where the signal is coming from relative to one end of the can or the other? (The classic ADF question.)

I know it can be done with orthogonal horizontal loops and a vertical sense antenna and driving the loop to the cardioid null with a goniometer, but is there a better modern way to do it? I've seen switched antenna designs using pin diodes, but this was all at VHF where the antennas were comparable to a quarter wave. I need to keep the antennas inside the sandwich box.

Jim

5517. What is this antenna I just bought?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 19:12:33 UTC
From: Martin Peters <martin.peters@ntlworld.com>
Message-ID: <nt4n8.4419$Dr3.769777@news6-win.server.ntlworld.com>
Source record: 146305

Just got back from Pickett's Lock radio rally and beside the usual
connectors and
adaptors, I bought (for £9) an active antenna made by California Amplifier -
Part No 540001.

Done various searches but come up with nowt. The seller said "It's 78MHz to 2.8GHz and requires 1.8 volts - most scanners have this on their antenna sockets."

I don't think so...................

Moving swiftly on, the entire device is encapsulated in a plastic tube arrangement, is about 24 cm long and 3 cm in diameter. Termination is a tiny SMB connector.

They had broken one open for punters to look at its innards. The antenna element appeared to be a band of 1cm wide copper wound around a expanded polystyrene former, barbershop pole-fashion. The former is about 2cm in diameter and 15cm long. This fed the amp - all the usual SMD stuff - in a tin enclosure.

Any ideas what this may be good for. Is it a helix antenna, designed for use end-onat, say 3GHz, or, as the man said, a wideband VHF/UHF omni? Any ideas?

Emailed CalAmp but they probably have better things to do.

Any thoughts appreciated - Martin

5518. Re: Loop antenna Rectangle

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 19:14:59 UTC
From: richardharrison@webtv.net
Message-ID: <21921-3C9CD433-59@storefull-2398.public.lawson.webtv.net>
Source record: 146307

Chris Torre wrote:
"---to make an antenna loop---, for a frequency of 1.5 MHz.

You have NO sky wave at 1.5 MHz, daytimes. You must rely on ground wave propagation. There is NO ground wave propagation of horizontally polarized waves over the ocean or reasonably good earth. The only use for horizontally polarized waves at 1.5 MHz is at night at distances beyond a large skip-zone distance which omits local coverage. The only exception for local coverage using horizontal polarization is by elevating antennas to great heights so that you have a "line-of-sight" between antennas.

Horizontal loops are horizontally polarized. Their electrostatic lines of force are between different sides of the antenna and with the earth. Unless they are high above the earth, the vertical polarization this height produces is small just like their height, and doesn`t amount to much. Even with height above ground, displacement current shrinks with height, and the vertically polarized radiation shrinks too.

A vertical loop above earth can be vertically polarized. It depends on where it is fed. The problem is that it is more expensive and difficult to make omni-directional than is a single tower over a radial system. Broadcast stations the world over use vertical towers as radiators because they are best by test.

Forget a loop. It is no good for you.

Best regards, Richard Harrison, KB5WZI

5519. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 19:23:51 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <spkp9uop47obpmb2mmaje5t9ka03ejgro0@4ax.com>
Source record: 146306
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

On Sat, 23 Mar 2002 09:41:11 -0800, "Jim Weir" <jim@rst-engr.com>
wrote:

>I'd like to thank you one and all for your kind considerations of the AM
>radio problem I posted a couple of weeks ago. After all considerations were
>in and evaluated, the winner was an NE605 using the RSSI port for detection,
>a conventional 21.4 MHz. IF, and a toggled, or shared tone comparator. If
>you go through all the birdie and tweet combinations of dual IF strips
>working in close proximity, it is far easier to tame the beast using a
>single channel. Again, thanks for sharing your thoughts.
>
>Now let me pose you one more problem and I'll be quiet for a while. Suppose
>you are inside a steel building (or more properly, an aluminum can) and can
>only have something the size of a tupperware sandwich box on the outside of
>the can. Anybody got any trickery to get the relative bearing on a signal
>in the AM broadcast band? That is, if the can can rotate (and Yan can cook)
>horizontally relative to the signal, how can I tell (without mechanically
>rotating the sandwich box, which is firmly bolted to the outside of the can)
>where the signal is coming from relative to one end of the can or the other?
>(The classic ADF question.)
>
>I know it can be done with orthogonal horizontal loops and a vertical sense
>antenna and driving the loop to the cardioid null with a goniometer, but is
>there a better modern way to do it? I've seen switched antenna designs
>using pin diodes, but this was all at VHF where the antennas were comparable
>to a quarter wave. I need to keep the antennas inside the sandwich box.
>
>Jim
>

Hi Jim,

I would offer that the success of the VHF model you are familiar with
is not in the antennas being comparable to a quarterwave, it was with
the distance between them being of significant distance from the
others so that a phase difference could be easily resolved between
distant pairs.

Your descent into the AM band, as well as shrinking the distance
between sensors (antennas if you will) compounds the difficulty in
resolving phase differences (really a time difference, which resolves
to phase the be-all and end-all of finding the direction). This is
not to say it is impossible, merely expensive. Given the double
whammy, you will be looking for differences of a partial degree

(rather than 10's or 100's of degrees). This is freely translated back into time differences which are the same the world over, however you could only reliably find that difference at the zero crossing of the signal at the different sensors (antennas). The VHF model, however, can operate quite usefully with comparisons anywhere along the slope of the received signal because the physical system imposes a large phase shift between antennas in relation to the wavelength.

Your VHF model actually would have the boon of the integration of the entire wave to eliminate the effects of noise. $$On the other hand, the zero crossing mandate for the AM band also comes with the risk of noise providing false information.$$

73's
Richard Clark, KB7QHC

5520. Re: Screwdriver antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 20:56:48 UTC
From: Leland Cox <lcox107nospam@comcast.net>
Message-ID: <3C9CECA3.7080506@comcast.net>
Source record: 146308

Jess,
The 20 meter match should be with just a little more coil than the 15 meter band, Only a few turns of coil. Try cleaning the outside face of the coil with fine sand paper or emery cloth. It is touchy! a couple turns make a big difference on frequency!
Les, AA4F

Jess wrote:

> I am rather new to the screwdriver antenna. I have spent most of my
> ham life with vhf yagis and quads. I recently got a used screwdriver
> at a hamfest. The guy I got it from gave me two boxes and told me how
> to hook them up. He said that he knew that one of them wouldn't work,
> but couldn't remember which one. I got one of them sort of working.
> With a 5 ft whip on top I was able to get it on 10 meters ok. And to
> go from 10 meter to 15 metes it only takes about 1/2 inch more coil.
> And you can forget 20 metes completly. It is ok on 40 and 80 meters.
> But it is very touchy, especilly on 80. I
>
> I would like the group's opinion on the matching of screwdriver
> antennas. How much coil? What material, torroid or air? How many
> turns and what size wire..
>
> Jessie AD5JW
>
>
>

5521. DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 21:13:00 UTC
From: NI4L <ni4l@charter.net>
Message-ID: <3C9CEFDC.2FA19934@charter.net>
Source record: 146309

--

NI4L CUSTOM RESONANT DIPOLE
LEGAL LIMIT ++ CUSTOM MADE CENTER FED DIPOLE
Made with the same components used by our military forces today
Custom made to YOUR FREQUENCY of operation
Let me take the hassle out of making a RESONANT DIPOLE for you.
Click here for more info... http://www.angelfire.com/nb/ni4l/

5522. Re: looking for Jacob's Ladder plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 22:03:28 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <QY6n8.70743$7B2.1682655@news1.east.cox.net>
Source record: 146310

You mean J-pole? A jacob's Ladder is a vertical Wire Vee that is used
to demonstrate how an electrical arc will generate heated ionized air--
the arc will slowly rise up the wires until the spread is far enough that
the
arc estinquishes and the process starts over again. You'll need an old
model spark coil or something similar to generate the HV.

Pete

"Bill Seward, KG4SAQ" <seward@northstate.net> wrote in message
news:r47l9u0248lj8t1vtmge8g7d5hm44oaapj@4ax.com...
> I'd like to try my hand a some antenna building, and the Jacob's
> Ladder has cought my fancy. I found a site that will sell me one
> http://www.atlanticwebpages.com/ve1ke/default.htm, but I'd like to try
> my hand at it. Searching the web isn't getting anything. Does
> someone know of a web site or a book that has the plans? Thanks.
>
> ---------------------------------
> Bill Seward KG4SAQ
> http://web.northstate.net/~seward

5523. Re: DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 23:48:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7j4au$lnj5u$1@ID-124126.news.dfncis.de>
Source record: 146311

Whoever said there is one born every minute made a considerable
underestimation insofar as State Side is concerned.

5524. Re: DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-23 23:51:50 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C9D150E.E25A4004@icok.net>
Source record: 146312

NI4L,
Does anyone actually but any of your dipoles?
'Doc

5525. ARNewsline 1284 - March 22 2002

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 01:13:06 UTC
From: radionews@aol.com
Message-ID: <20020323201306.07580.00000705@mb-fi.aol.com>
Source record: 146313

Amateur Radio Newsline™ Report 1284 - March 22 2002

Amateur Radio Newsline report number 1284 with a release date of
Friday, March 22nd, 2002 to follow in 5-4-3-2-1.

The following is a Q-S-T. Ham radio and the FCC join forced to find a wayward transmitter jamming a fire department radio. This story is first on Amateur Radio Newsline report number 1284 coming your way right now.

(Billboard Cart Here)

**

RESCUE RADIO: HAMS ASSIST IN TRACKING DOWN WAYWARD TRANSMITTER

Ham radio operators teamed up with the FCC to track down a wayward transmitter. One that was making communications very difficult for the Fallbrook California fire department. It took place the weekend of March 10th. Amateur Radio Newsline’s Norm Seeley, KI7UP, has the rest of the story:

--

Milt Davies, KD6UBA, is Division Chief of the North County Fire Protection District. He was the first to identify the problem as radio frequency interference.

Davis described the annoying signal as being an unmodulated carrier pock-marked with strange data-like bursts. Sometimes the jamming transmitter was on-the-air all the time. Sometimes it was on and off. And at still other times the signal almost disappeared - transmitting only a few seconds in a 10 or 20 minute span.

Davies recognized the problem as on-channel jamming. He also knew that he needed outside help. That's when the FCC and the local ham radio community were notified.

First to try was the FCC. As you know, the agency has a series of permanent direction finding stations on the West Coast. These can be operated by remote control from Washington, D.C..

The FCC's weekend duty officer attempted to pinpoint the source of the interference using them, but with only partial success. Some of the locations were down for servicing. The result was a single line-of-bearing. This meant that the interfering transmitter could be anywhere along a 45 mile path.

To help home-in on the transmitter's location, members of the Palomar Amateur Radio Club were called out. They were asked to listen to the fire dispatch frequency and give signal strength reports on the unmodulated carrier. These

reports, coupled with the FCC's own line-of-bearing, pointed to the City of Vista, or vicinity.

Now the hunt again became the domain of the FCC. Bill Zears, the District Director in charge of the FCC's San Diego Field Office, arrived with a sophisticated direction finding vehicle. Zears drove to Fallbrook for his first good bearing. That sent him off toward the rugged eastern portion of Vista.

At about the same time, a fire broke out in the Camp Pendleton military complex which borders Fallbrook. The jamming signal was preventing firefighters working the Pendleton fire from communicating directly with their Dispatch Center.

Zears stayed on the job as Sunday afternoon turned into evening. Finally, enough direction finding bearings were available to pinpoint the wayward transmitter to a 30' tower atop a hill in east Vista.

The Vista Fire Department was called. The Battalion Chief on duty offered immediate help. It turns out that a local ham had brought him up-to-speed on the interference case earlier in the day.

Then another ham recalled that the City of Vista once had a transmitter up on the suspect peak. That old VHF transmitter dated back to the days before most communications had moved to the 800 MHz band. He also knew that the old box just happened to be tuned to Fallbrook's current VHF dispatch frequency - because that was Vista Fire's old frequency!

The crew lost no time in getting up the hill and confirming the location of the offending transmitter. Nobody knows why power was still connected. Probably an oversight by some long forgotten radio installer. None the less, it caused the Vista's Fire Department to unintentionally jam Fallbrook, but pulling the power plug made the interference go away.

For the Amateur Radio Newsline, I’m Norm Seeley, KI7UP.

--

Thanks to the cooperation of everyone involved and the tenacity of FCC District Director Bill Zears, the situation had a happy ending. (W6VR)

**

OLYMPICS FOLLOW-UP: HANDI-HAM CARRIES OLYMPIC FLAME

The 2002 Winter Olympics may be over, but now comes word that a visually impaired ham radio operator was among those who had the honor of carrying the Olympic Torch.

Kitty Hevener, WB8TDA, and her trusty guide dog SunStar, carried the Olympic Flame on Saturday January 19th. This, as it made its way to Salt Lake City Uath. Kitty’s segment took the flame up to the gates of Fort Point, in the shadow of San Francisco California’s Golden Gate Bridge.

According to the Handi Hams, Kitty Hevener, WB8TDA, is active with that group as well. Handi Hams says that she is a regular volunteer at the annual California Radio Camp held at Camp Joan Mier in Malibu California every March.

You can see photos of WB8TDA carrying the Olympic Torch at www.graystuff.com/gallery/kitty. (HandiHams)

**

ECONOMICS: JAPANS ECONOMIC RECESSION MAY AFFECT RADIO PRICES

The price of ham radio gear and other goods manufactured in Japan may soon change, but its unclear if it will be up or down. This on word that Japan's economy has fallen into the worst recession in at least two decades. The last time the Japanese economy contracted for three quarters straight was in 1993, when it shrank at around 0.1 percent each quarter. Before that, Japan had never seen even two back-to-back quarters of contraction - the usual definition of a recession - since the government began keeping such records in 1980. (ARNewsline(tm) from published news reports and ARNewsline(tm)interviews.)

**

EMERGING TECHNOLOGY: WSJT TAKING ON THE WORLD

Meantime, a new mode of operation seems to be taking Amateur Radio by storm. We have reported on it before: WSJT. And it lets everyone get in on what used to be the esoteric operation called meteor scatter. Q-News Graham Kemp, VK4BB, looks at the way WSJT is taking on the world:

--

WSJT is a digital mode, designed specifically for meteor scatter communications. It stands for Weak Signal communications by Joe Taylor K1JT. Its advantage for is that it sends extremely fast in a standard SSB bandwidth at 147 characters per second or about 1700 words per minute. By virtue of this speed it is possible to send two call signs and a signal report in a tenth of a second meteor ping.

The equipment to make WSJT contacts is fairly modest. A two meter SSB transceiver and a computer -- a Pentium, at least 75 MHz is the main hardware required. Then you need a simple PSK-31 interface box, as described in March 2000 AR magazine and some WSJT software.

An RF power output of 50 is the practical minimum, with 100 watts providing a worthwhile improvement. A major advantage with WSJT is the small antenna system required. A five element Yagi will do as well as a 10 element Yagi.

From Q-News Australia, I'm Graham Kemp, VK4BB for the Amateur Radio Newsline.

--

More information and the necessary software is at the official WSJT website. Its in cyberspace at pulsar.princeton.edu/~joe/K1JT. (Q-News)

**

Break 1

From the United States of America, We are the Amateur Radio Newsline, heard on bulletin stations around the world including the CARES repeater on 146.73 MHz and serving Gulfport Mississippi.

(5 sec pause here)

**

ENFORCEMENT: THAT CHARGE SHOULD NEVER HAVE BEEN FILED

The FCC has told a Midway, Tennessee ham that his complaint about a club repeater has no basis in fact:

--

Hollingsworth: “We dismissed a complaint filed by Jeffrey Bible, K4MFD, of Midway Tenneseee. His complaint was against the Andrew Johnson Radio Club repeater W4WC which is located on an adjacent tower.”

“We found that despite allegations, the W4WC repeater had not lost coordination just because of a move. The move was within the coordinators limits. In fact, the repeaters have been operating for years with no problems.”

--

That was the FCC’s Riley Hollingsworth, K4ZDH who also says that both parties are coordinated, so both will have to work together to solve any interference that might arise. (FCC, RAIN)

**

ENFORCEMENT: FCC REFUSES TO INTERVENE IN ATV REPEATER DISPUTE

The FCC has also declined to intervene in a dispute involving two Mid-West Amateur Television repeaters. One owned by a major radio club and the other by an individual. The main reason. There is no coordination for ATV in the area. The FCC’s Riley Hollingsworth explains:

--

Hollingsworth: We notified Adrian Oaks, KB8GRJ, of Xenia Ohio that we would not get involved in a dispute that he has with the Dayton amateur Radio Association over the operation of an ATV repeater. Dayton’s repeater, W8BI, has started occasionally operating on frequencies registered to Oaks. I emphasize registered nor coordinated. There is no coordination program there for ATV repeaters. But there’s no showing of actual interference.”

“DARA uses it for 20 to 45 minutes a week. It makes the repeater codes available to all so that anyone receiving interference can shut off the repeater. It is (also) willing to adjust operating times to accommodate other ATV users.”
--

Hollingswoth says that there is no real conflict and therefore the situation does not warrant any FCC enforcement action. (FCC, RAIN)

**

ENFORCEMENT: PRE OPERATION LEADS TO LICENSE SETASIDE

The FCC has told a newly licensed ham that his license grant has been set aside. In a letter to John A Green, KG4RFI, of Mobile Alabama, the commission says that it has information which indicates that he operated on the W4IAX repeater and was also heard at various times on repeaters on 146.685 and 147.090 MHz in the Baldwin County area. The FCC says that all of these transmissions were made during a time that Green did not hold am Amateur service license.

Green was given twenty days from the date of the FCC letter to him to write back and explain certain issues. This includes any instances between the cancellation of his General Class license on September 14, 2001 and the grant of his Technician Class license on January 24, 2002 in which he operated any Amateur Radio transmitting equipment. (FCC)

**

BAMES IN THE NEWS: KD7DDG LOOSES AZ MAYORAL RACE

A follow-up to the story of Tim Weaver, KD7DDG, who was running for the office of Mayor of Glendale Arizona. Well, the votes have been counted and Weaver was not successful in his bid to oust the eight year incumbent Mayor who had the backing of the firefighters union.

The count showed that Weaver had polled only about 24% of the votes needed. Weaver says that the results were disappointing, but respectable for someone outspent and out-volunteered. (RAIN)

**

NAMES IN THE NEWS: RAIN CONTINUES CLEGG RETROSPECTIVE

Hap Holly, KC9RP tells ius that this weeks RAIN Report is part two of a retrospective look at famed ham radio pioneer Edward T. Clegg, W8LOY. This as seen through the eyes of his son-in-law Rob Mc Guffie, K2HZN. Its on line right now in digital streaming audio at www.rainreport.com or analog telephone audio at 827-847-7246. (RAIN)

**

NAMES IN THE NEWS: N9RLA FIRST CENTRAL DIVISION ROVER CERTIFICATE

Some names in the news. First is Dan Evans, N9RLA, who has taken first place as a rover station in the ARRL Central Division. This in the June 2001 VHF contest. Dan is from Scottsburg Indiana. (VHF Reflector)

**

NAMES IN THE NEWS: K8JAC NAMED KANAWHA HAM OF THE YEAR

Also, congratulations to Amateur Radio Newsline's own Jeff Clark, K8JAC. This, after being named Kanawha Valley Amateur Radio Operator of the Year 2002.

A ham since 1981, Clark's Amateur Radio volunteer activities include the post of Emergency Coordinator of Kanawha County, West Virginia. He is also Publicity Director of the Kanawha Amateur Radio Club, editor of the clubs newsletter and technical coordinator of the W8GK repeater. But thats not all. The local ARES group, which Clark coordinates receives high marks from county officials and is often called on to provide communications during civic events and emergencies.

Clark received his award on Saturday, March 16th at Charleston Hamfest. Another Amateur Radio Newsline anchor, Jim Damron, N8TMW, had the honor of making the presentation to K8JAC. (ARNewsline(tm))

**

NAMES IN THE NEWS: WA6ITF TO SPEAK IN JOPLIN MO

Amateur Radio Newsline producer Bill Pasternak, WA6ITF, will be the featured banquet speaker on Saturday April 13th at the Joplin Hamfest. The venue is the John Q. Hammon Trade Center in Joplin Missouri.

Situated about halfway between Tulsa Oklahoma and Kansas City, the Joplin Hamfest is a 200+ table event. It also features spacious parking with easy access, wide aisles, forums, ham radio testing and prizes.

Interested? More information is on the web at www.joplin-arc.org. (ARNewsline(tm))

**

BREAK 2

Here when you need us 52 weeks a year. We are the Amateur Radio Newsline, with links to the world from our only official website at www.arnewsline.org.

(5 sec pause here)

**

ANNIVERSARY: HAPPY 20TH ANNIVERSARY HEIL SOUND

This week marks the 20th anniversary of a very special company. We are talking about Heil Sound Limited. And when you talk about Heil Sound, you are really talking about its founder Bob Heil, K9EID.

Over the years, Bob Heil has been an audio consultant, an inventor, a musician and lots more. Looking back, He says that everything harkens back to his first love. His hobby. Amateur Radio:

--

Heil: "It's been an incredible ride from a little kid playing pipe organ in the Fox (theater)n through playing with my Harvey-Wells and SX-99 which I still have, and understanding what it took to make all of these things.

“Then I started building different transmitters and then started building sound equipment.”

“We actually changed the world. We are the guys that figured out how you stack and hang speakers. Why? Because I could set up a Rohn 25G (tower) and hang speakers higher than anybody else because of my ham radio.”

--

After years of touring with such number one acts as the Eagles, Bob decided to give something back to the hobby that had lead to his success. Thats how Heil Sound Limited was born.

--
Heil: My life has evolved around 45 years of being K9EID, and I will always be so grateful to everybody in this hobby for allowing me to do my thing and along the way to help someone. Thats the bottom line that we are able to help somebody and it makes me real happy to be able to do that.”
--

Bob is now celebrating the beginning of the company’s third decade with a number of new and innovative products for every aspect of ham radio voice operations. You will get to see all of them in a few weeks and meet Bob in person at Hamvention 2002. (ARNewsline(tm))

**

HANDI HAMS: E-NEWSLETTER MAILING CHANGE

The Handi Hams says that it is changing the way in which the groups weekly e-letter is being distributed in HTML format. According to Handi Hams Pat Tice, WAZ0TDA, constant barrages of virus threats to Microsoft Outlook makes it risky to continue maintaining the HTML list in Microsoft Outlook. So the group is moving its list to a mailer called Group Mail. This says Tice will be bring with it minimal risk of sending a virus to the group of HTML subscribers. The text subscribers continue to receive the e-letter through Yahoo Groups. (HandiHams)

**

EVENTS: 2002 WEAK SIGNAL BANQUET

Tom Whitted, WA8WZG, reports over the VHF Reflector that tickets are now on sale for the 10th annual Weak Signal Banquet. This year the gathering will again be held in Dayton Ohio on Hamvention weekend. If you are interested in attending, more information is in cyberspace at www.wa8wzg.com. (VHF Reflector)

**

INTERNATIONAL - CANADA: RAC SM ELECTION RESULTS

From our neighbors to the North comes word that Tom Caithness, VE1GT is the interim Section Manager for Canada’s Maritime Provences. He was elected for a two-year term, which began March 1st.

Also, Derek Hay, VE4HAY was recently re-elected Section Manager in the Manitoba for a two-year term snd Joe Craig, VO1NA has been re-elected Section Manager for the Newfoundland and Labrador Section for a two-year term. Both take office on July 1st.

All three ran unopposed in their respective Radio Amateurs of Canada sections. This eliminated the need for a balloted election. (RAC)

**

DX

In D-X, the big story is of coarse Ducie Island. The VP6DI team came on the air on March 17th and its was bedlam. Take a listen.

--
audio here
--

Ducie Island is a small, uninhabited atoll in the South Pacific and is part of the Pitcarin Island chain. It is also among the rarest DXCC entities in the world as proven by the recording you just heard. It was made in Australia by VK4DX using a Kenwood TS-570D transceiver and posted to his contest website. (Audio courtesy VK4DX)

**

THAT FINAL ITEM: ARDF CHAMPIONSHIPS IN ATLANTA

And finally this week, the calendar says that its spring and hams around the country are turning to outdoor activities such as new antennas and hidden transmitter hunting. Here's your chance to prove you're the best at the latter activity, as Newsline's Joe Moell K0OV explains:

--

The biggest annual event in on-foot hidden transmitter hunting is early this year, so time is getting short if you want to take part.

The Second USA ARDF Championships will be April 19-21 at Franklin Roosevelt State Park near Pine Mountain, Georgia. That's about 70 miles southwest of the Atlanta airport. No matter what your level of skill or experience at radio-orienteering, you'll be welcome. Experts will be vying for positions on Team USA as it travels to Slovakia for the World Championships later this year. Beginners will be picking up the best RDF techniques from these experts, and learning how to put on similar events in their home towns.

The official deadline to register for the national championships is April 6, but Georgia Orienteering Club urges you to let them know you're coming by March 29, so they can plan food for the picnic supper on Friday and the spaghetti dinner on Saturday.

Learn more about what it's like to be in the ARDF Championships by reading about last year's event in the March issue of QST, and in December and January's issues of 73 Magazine. There's lots more on the subject at my Web site -- www.homingin.com -- plus a link to the registration site for the Pine

Mountain events. That's homingin -- one word -- homingin.com

From sunny southern California, where we're soon having our third practice session of the year to get ready for the championships, this is Joe Moell K-zero-Oscar-Victor for Amateur Radio Newsline.

--

Again, that website is www.homingin.com (K0OV)

**

NEWSCAST CLOSE

With thanks to Alan Labs, Amateur News Weekly, AMSAT, the ARRL, the CGC Communicator, CQ Magazine, the FCC, the Ohio Penn DX Bulletin, Radio Netherlands, Rain, the RSGB and Australia's Q-News, that's all from the Amateur Radio Newsline(tm). Our e-mail address is newsline @arnewsline.org. More information is available at Amateur Radio Newsline's(tm) only official website located at www.arnewsline.org. You can also write to us or support us at Amateur Radio Newsline(tm), P.O. Box 660937, Arcadia, California 91066.

Before we go, a reminder that the nominating period for the 2002 amateur Radio Newsline Young Ham of the Year is now open. No significant changes from last year. Nominees must be 18 or younger. Full rules and an application is on our website at www.arnewsline.org.

For now, with Bill Pasternak, WA6ITF, at the editors desk, I'm Roy Neal, K6DUE, saying 73, and we thank you for listening." Amateur Radio Newsline(tm) is Copyright 2002. All rights reserved.

5526. Re: DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 01:36:35 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <D4an8.1692$n%1.1040@nwrddc03.gnilink.net>
Source record: 146314

You'd perhaps be surprised at how many of out latest crop of "no-code Extras" MUST buy their HF
dipoles - because they haven't yet mastered the intricate art of computing proper resonant antenna
lengths - OR figured WHAT materials to use, or where to obtain them... 8^)

Now, for MY part, *I* sell them the extra-durable, non-conducting SKY HOOKS to suspend them from...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"'Doc" <w5lz@icok.net> wrote in message news:3C9D150E.E25A4004@icok.net...
> NI4L,
> Does anyone actually but any of your dipoles?
> 'Doc

5527. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 01:50:42 UTC
From: Bryan Martin <bryanmmartinNOSPAM@comcast.net>
Message-ID: <B8C29B24.6379%bryanmmartinNOSPAM@comcast.net>
Source record: 146315
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

in article u9pfhnatjpqt9d@corp.supernews.com, Jim Weir at jim@rst-engr.com wrote on 3/23/02 12:41 PM:

> Now let me pose you one more problem and I'll be quiet for a while. Suppose
> you are inside a steel building (or more properly, an aluminum can) and can
> only have something the size of a tupperware sandwich box on the outside of
> the can. Anybody got any trickery to get the relative bearing on a signal
> in the AM broadcast band? That is, if the can can rotate (and Yan can cook)
> horizontally relative to the signal, how can I tell (without mechanically
> rotating the sandwich box, which is firmly bolted to the outside of the can)
> where the signal is coming from relative to one end of the can or the other?
> (The classic ADF question.)
>

I recall a radar direction finder that used four stationary directional antennas (basically just four waveguide feed horns) pointing In four different directions . The bearing to the signal was derived by comparing the signal strength of the four antennas. If you divided your sandwich box into 3 or 4 different compartments with metal shields and put an antenna in each section you might be able to rig up something similar for the AM broadcast band. Perhaps using ferrite coil antennas?

Bryan Martin

5528. Re: looking for Jacob's Ladder plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 02:18:30 UTC
From: Harold Burton <hwburton@swbell.net>
Message-ID: <WHan8.70789$Xa5.4165689548@newssvr30.news.prodigy.com>
Source record: 146316

" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
news:QY6n8.70743$7B2.1682655@news1.east.cox.net...
> You mean J-pole? A jacob's Ladder is a vertical Wire Vee that is used
> to demonstrate how an electrical arc will generate heated ionized air--
> the arc will slowly rise up the wires until the spread is far enough that
> the
> arc estinquishes and the process starts over again. You'll need an old
> model spark coil or something similar to generate the HV.

No, a ham named Floyd Everett invented an antenna he calls the Jacobs
Ladder. I found a site about it by doing a search for "Jacobs Ladder
Antenna".

5529. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 03:03:21 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <Ylbn8.33715$Ff3.3436623@news20.bellglobal.com>
Source record: 146318
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

"Jim Weir" asked:
> Suppose you are inside....an aluminum can (help!)

...like an airplane?

> and can only have something the size of a
> tupperware sandwich box on the outside of
> the can.

How about 8.60" wide, 1.75" tall, 16.60" long ? Slightly bigger than a sandwich box, but not by very much.

> Anybody got any trickery to get the relative
> bearing on a signal in the AM broadcast band?

Yes, Rockwell Collins (bless their little hearts)...
www.rockwellcollins.com/ecat/gs/AN_ARN-149V.html?smenu=104

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

5530. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 03:21:39 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7jgqe$ljusa$1@ID-124126.news.dfncis.de>
Source record: 146219

Dear Cec,

You have my heart-felt sympathies about your garden.

As you may know, when I changed my mode of living some years back and returned to the same garden I played in 65 or so years ago and made use of the same poles, still standing without any preservatives my father first made use of, I began ploughing it up, yard by yard, in order to insert shallow-buried radials.

I suppose, on average, over the years, there has been an increase in received signal level of something less than an S-unit. What the improvement might have been in the reverse direction has always been uncertain. S-meter reports via QSL cards have never been renouned for their accuracy.

The end result, you may be pleased to hear, insofar as the garden is concerned has been beneficial. It has returned, all of its own volition, to a nature wild-life reserve. A miniature Safari Park.

There are creatures now living in it I never knew existed 65 years back when the countryside had already been poluted by 150 years of coal mines, blast furnaces, steam hammers and steel nuts, bolts and washers. I now have toads, foxes, squirels, hedgehogs, wood-lice, un-named birds plus some creepy-crawlies which could have originated only in outer space.

All of which I'm certain are grateful for my idle laziness and neglect to use weedkillers in my small patch of land. None of my neighbours have ever complained about the clouds of dandelion seeds which float from my garden on to theirs in September. Neither have they ever complained about the wierd contraptions which loom over my house and fence, appear and disappear every 12 months or so.

People round here, the not-so-long-ago descendents of young mothers who carried their babies on their backs down the coal mines to earn a half-penny an hour for a crust of bread, are most accommodating and understanding. There's been only one case of TVI and a choke in the downlead in this neighbourhood in the last 76 years.

So there you are Cecil. Scatter some weeds. Allow your back yard to revert to nature. Hang up your 45 in its beautifully polished pigskin leather holster and make friends with the rattlers. Your DX cannot but improve with time.

****
Regards, Reg G4FGQ
Download a free program.
Http://www.g4fgq.com

****

CAM said
> I sacrificed my garden for 8 buried
> radials for that vertical. I just today took down the vertical and ripped
> out the radials. Time for a new garden.

5531. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 03:48:38 UTC
From: richardharrison@webtv.net
Message-ID: <11169-3C9D4C96-106@storefull-2395.public.lawson.webtv.net>
Source record: 146221

Jim Weir wrote:
"If the can can rotate vertically----how can I tell---where the signal is coming from?"

This seems to be the case of a fixed loop on a conveyance which can be pointed in any direction, and the loop is capable of broadcast reception.

Maybe I don`t understand the question because I think the standard ancient solution fits this problem. A loop though ever so small has sharp nulls on its axis. The ambiguity of not knowing if you are coming or going is solved with a stationary sense antenna.

If the system has to be very tiny to avoid drag, you may need very high gain and very low noise indeed. Aren`t there composite materials which are electrically transparent and extremely strong so that a salient loop assembly would not be required?

If external antennas are yet needed, why not use a tiny yagi working with UHF TV broadcasts?

Why hasn`t the global positioning systems made all the other systems obsolete?

When I fly across the oceans, the position of the aircraft is constantly displayed on on an LCD color screen map with the current position pinpointed for the amusement of the passengers. This isn`t determined from tuning in low and medium frequency stations, surely.

Best regards, Richard Harrison, KB5WZI

5532. WTB Heathkit Antenna Tuner 2060A

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 03:49:51 UTC
From: Don <DON-COM@attbi.com>
Message-ID: <z1cn8.110440$q2.11049@sccrnsc01>
Source record: 146220

WTB

Heathkit 2060A antenna tuner in good condition at a reasonable price.

Don W6PJJ
Sacramento, CA
don-com@attbi.com

5533. Re: DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 04:34:07 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C9D5735.7F18CFE9@shaw.ca>
Source record: 146222

'Doc wrote:
>
> NI4L,
> Does anyone actually but any of your dipoles?
> 'Doc

Just like the 'Jacob's Ladder' J-poles. There is always
someone
who will take advantage of the less informed members of what
used
to be the ham fraternity!
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5534. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 04:46:07 UTC
From: Jerome Liebler <lieblerj@earthlink.net>
Message-ID: <3C9D5D41.80DCE406@earthlink.net>
Source record: 146223
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

Jim,
The two orthogonal loops, with ferrite cores of course, are sufficient if the carrier phase relationship can be observed. As one turns the loop through null the phase reverses. It's been done in Omega receivers where a sense antenna is impossible. This one is probably best with some DSP but conceptually I'll try to give a picture. Think of separate receivers for each antenna but each receiver is a direct conversion quadrature receiver. A quadrature receiver uses two mixers with the LOs having a 90 degree phase shift in this case the LOs are shared between the two receivers. The carrier magnitude is the sum of the squares of the outputs of each receiver. Bearing +or-180 degrees can be computed from the magnitudes and the 180 degree ambiguity resolved by looking at phase which is why the complex demodulation. The phase of one carrier relative to the local oscillator is arc tan (out1/out2) where out1 is the mixer with the reference LO and out2 is the output of the mixer with the 90 degree phase shift.
Quatrature direct conversion receivers are frequently used as FSK pager receivers and some implementations use a single LO but a 90 degree phase shift in the input channel..

Regards
Jerry

Jim Weir wrote:

> I'd like to thank you one and all for your kind considerations of the AM
> radio problem I posted a couple of weeks ago. After all considerations were
> in and evaluated, the winner was an NE605 using the RSSI port for detection,
> a conventional 21.4 MHz. IF, and a toggled, or shared tone comparator. If
> you go through all the birdie and tweet combinations of dual IF strips
> working in close proximity, it is far easier to tame the beast using a
> single channel. Again, thanks for sharing your thoughts.
>
> Now let me pose you one more problem and I'll be quiet for a while. Suppose
> you are inside a steel building (or more properly, an aluminum can) and can
> only have something the size of a tupperware sandwich box on the outside of
> the can. Anybody got any trickery to get the relative bearing on a signal
> in the AM broadcast band? That is, if the can can rotate (and Yan can cook)
> horizontally relative to the signal, how can I tell (without mechanically
> rotating the sandwich box, which is firmly bolted to the outside of the can)
> where the signal is coming from relative to one end of the can or the other?
> (The classic ADF question.)
>
> I know it can be done with orthogonal horizontal loops and a vertical sense
> antenna and driving the loop to the cardioid null with a goniometer, but is

> there a better modern way to do it? I've seen switched antenna designs
> using pin diodes, but this was all at VHF where the antennas were comparable
> to a quarter wave. I need to keep the antennas inside the sandwich box.
>
> Jim

5535. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 04:49:33 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u9qmmshr5qds7e@corp.supernews.com>
Source record: 146224
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

Excuse me, sir, and I mean no offense because I know you were simply trying to help.

Showing me some hardware that ostensibly does what I am trying to do is fairly useless UNLESS you can explain what is hidden inside the potted antenna AND how they are using what is inside the antenna to do the job. King/Bendix has had a combined sense/loop antenna for twenty years, but unless we can come to some understanding of WHAT the technology is and HOW it is doing the job, simple references to another commercial product are worthless.

Jim

> Yes, Rockwell Collins (bless their little hearts)...
> www.rockwellcollins.com/ecat/gs/AN_ARN-149V.html?smenu=104

5536. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:00:14 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <w3dn8.33965$Ff3.3490144@news20.bellglobal.com>
Source record: 146225

"Richard Harrison"
> Why hasn`t the global positioning systems made
> all the other systems obsolete?

GPS only derives 'direction' if you're moving.

5537. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:05:00 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C9D5E7C.6CBC8C3A@IEEE.org>
Source record: 146226

Reg Edwards wrote:
> So there you are Cecil. Scatter some weeds. Allow your back yard to revert
> to nature. Hang up your 45 in its beautifully polished pigskin leather
> holster and make friends with the rattlers. Your DX cannot but improve with
> time.

To late, Reg. I mowed it today and hopefully can get my rototiller running
on Monday. Before the vertical took over my garden, I kept the entire
neighborhood in tomatoes for six weeks.
--
cheers, CAM http://www.qsl.net/w5dxp

5538. Re: DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:06:56 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3C9D5EF0.249358A3@IEEE.org>
Source record: 146227

'Doc wrote:
>
> NI4L,
> Does anyone actually but any of your dipoles?
> 'Doc

Would you need two of them to but them? :-)
--
cheers, CAM http://www.qsl.net/w5dxp

5539. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:07:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7jn05$lp3b2$1@ID-124126.news.dfncis.de>
Source record: 146228
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

Jim, you sound to me like someone who is capable of working it out for
yourself from simple basic principles.

5540. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:08:46 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u9qnqu2e3ndrb2@corp.supernews.com>
Source record: 146229
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

"Jerome Liebler" <lieblerj@earthlink.net> wrote in message
news:3C9D5D41.80DCE406@earthlink.net...
> Jim,

> The two orthogonal loops, with ferrite cores of course,

I'm not an "of course" kind of guy. I fail to understand the necessity for ferrite in the core of the loops other than to concentrate the magnetic field, which will be there, ferrite or no.

are sufficient if
> the carrier phase relationship can be observed.

So are we saying that simple measurement of carrier phase relationship of two orthogonal loops are sufficient to determine bearing? I can't resolve the 180° ambiguity in my brain. Help me here. Seems to me that you can tell direction with an ambiguity, but it requires a third antenna to resolve the fore-aft problem.

As one turns the loop through
> null the phase reverses.

With a fixed antenna, one cannot turn the loop without turning the aluminum can, which was part of the "can't do" criteria of the original problem. And no, the phase doesn't reverse, it goes through an instantaneous shift from zero to 360°, which is the same phase.

Think of separate receivers for each antenna but
> each receiver is a direct conversion quadrature receiver. A quadrature receiver
> uses two mixers with the LOs having a 90 degree phase shift

That's fine for spot frequency. However, as you tune across the band, the LO phase shifter cannot track a constant 90° shift.

Forgive me. I'm dense. I'm an analog cat in a room full of digital rocking chairs. Treat me kindly.

Jim

5541. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:15:07 UTC
From: Jerome Liebler <lieblerj@earthlink.net>
Message-ID: <3C9D640D.C2DD5C8A@earthlink.net>
Source record: 146230
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

Jim,

The ferrite (while not absolutely necessary) is to make the physical loop smaller, it has the effect of multiplying the loop area by the permeability of the core, a result that I could not find in any literature but have proven experimentally and analytically.

Regards
Jerry

Jim Weir wrote:

> "Jerome Liebler" <lieblerj@earthlink.net> wrote in message
> news:3C9D5D41.80DCE406@earthlink.net...
> > Jim,
>
> > The two orthogonal loops, with ferrite cores of course,
>
> I'm not an "of course" kind of guy. I fail to understand the necessity for
> ferrite in the core of the loops other than to concentrate the magnetic
> field, which will be there, ferrite or no.
>
> are sufficient if
> > the carrier phase relationship can be observed.
>
> So are we saying that simple measurement of carrier phase relationship of
> two orthogonal loops are sufficient to determine bearing? I can't resolve
> the 180ï¿½ ambiguity in my brain. Help me here. Seems to me that you can
> tell direction with an ambiguity, but it requires a third antenna to resolve
> the fore-aft problem.
>
> As one turns the loop through
> > null the phase reverses.
>
> With a fixed antenna, one cannot turn the loop without turning the aluminum
> can, which was part of the "can't do" criteria of the original problem. And
> no, the phase doesn't reverse, it goes through an instantaneous shift from
> zero to 360ï¿½, which is the same phase.
>
> Think of separate receivers for each antenna but
> > each receiver is a direct conversion quadrature receiver. A quadrature
> receiver
> > uses two mixers with the LOs having a 90 degree phase shift
>

> That's fine for spot frequency. However, as you tune across the band, the
> LO phase shifter cannot track a constant 90ï¿½ shift.
>
> Forgive me. I'm dense. I'm an analog cat in a room full of digital rocking
> chairs. Treat me kindly.
>
> Jim

5542. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:23:15 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <2smq9uoao2o0vb5krreninh53321jn36q6@4ax.com>
Source record: 146231

On Thu, 21 Mar 2002 00:18:49 -0800, Roy Lewallen <w7el@eznec.com> wrote:
>In my third edition of Terman's _Radio Engineering_, he uses "ground
>wave" the same as I did in my explanation, and "space wave" in place of
>what I've called "sky wave". I don't find any mention of "surface wave"
>in the book, although some writers use this in place of "ground wave".
>In the source you quote, where a "ground wave" has two components, does
>Terman speak of any radiation other than the "ground wave"? It seems
>rather odd to speak of a "ground wave" having a "space wave" component.

Roy, my references limit the use of the term "sky wave" to signals refracted
by the ionosphere, ie what we commonly call "skip".

The space wave is any signal taking the direct line of sight path, or variations
such as signals reflected off of terrestrial obstacles, or directed by various
tropospheric bending and ducting phenomena.

The ground wave is the signal coupled into the air/ground interface. It follows
terrain contours much the same way as a signal propagates along a G-line.

At most points inside groundwave range, the signal at the receiver is a
mixture of the space wave and the groundwave signals. At the edge of
the first skip zone, the skywave is added to the mix. This results in a
number of multipath fading situations, not easily modeled in detail.

Gary

5543. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:37:51 UTC
From: Jerome Liebler <lieblerj@earthlink.net>
Message-ID: <3C9D6964.2AF39018@earthlink.net>
Source record: 146232
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

Jim,
Sorry I didn't finish the comments.
Remember the field theory of magnetic induction, the right hand rule for a moving (or time varying) magnetic field inducing a voltage in a conductor. The phase is 180 degrees different if the signal comes from aft instead of from for. Rotating the loop was to help under stand the phase shift. not part of the solution.
The 90 degree phase shift can easily be maintained with a digitally derived LO. That's part of why some DSP would help. Think of a counter addressing a table containing a sin function and the same counter addressing a cosine table. (not the best way but easy to visualize) and the output each of the tables goes to a DAC.

Jim Weir wrote:

> "Jerome Liebler" <lieblerj@earthlink.net> wrote in message
> news:3C9D5D41.80DCE406@earthlink.net...
> > Jim,
>
> > The two orthogonal loops, with ferrite cores of course,
>
> I'm not an "of course" kind of guy. I fail to understand the necessity for
> ferrite in the core of the loops other than to concentrate the magnetic
> field, which will be there, ferrite or no.
>
> are sufficient if
> > the carrier phase relationship can be observed.
>
> So are we saying that simple measurement of carrier phase relationship of
> two orthogonal loops are sufficient to determine bearing? I can't resolve
> the 180ï¿½ ambiguity in my brain. Help me here. Seems to me that you can
> tell direction with an ambiguity, but it requires a third antenna to resolve
> the fore-aft problem.
>
> As one turns the loop through
> > null the phase reverses.
>
> With a fixed antenna, one cannot turn the loop without turning the aluminum
> can, which was part of the "can't do" criteria of the original problem. And
> no, the phase doesn't reverse, it goes through an instantaneous shift from
> zero to 360ï¿½, which is the same phase.
>
> Think of separate receivers for each antenna but
> > each receiver is a direct conversion quadrature receiver. A quadrature

> receiver
> > uses two mixers with the LOs having a 90 degree phase shift
>
> That's fine for spot frequency. However, as you tune across the band, the
> LO phase shifter cannot track a constant 90ï¿½ shift.
>
> Forgive me. I'm dense. I'm an analog cat in a room full of digital rocking
> chairs. Treat me kindly.
>
> Jim

5544. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:45:16 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <KJdn8.34117$Ff3.3506848@news20.bellglobal.com>
Source record: 146233
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

Jim was looking for the technology inside a small LF DF...

I suggested:
> Yes, Rockwell Collins (bless their little hearts)...
www.rockwellcollins.com/ecat/gs/AN_ARN-149V.html?smenu=104

"Jim Weir" gently grumbled:
> Excuse me, sir, and I mean no offense because I know
> you were simply trying to help. Showing me some
> hardware that ostensibly does what I am trying to do is
> fairly useless UNLESS you can explain what is hidden
> inside the potted antenna AND how they are using what
> is inside the antenna to do the job.
> ...but unless we can come to some understanding of
> WHAT the technology is and HOW it is doing the job,
> simple references to another commercial product are
> worthless.

Well, such 'leads' are never worthless...

Although I'm familiar with the ARN-194 product from my work, let's see what information is publically available on the Internut.

First browse the R-C website, not much else there...

I wonder if this sort of technology is patented ?
www.uspto.gov
Select search collection <Patents>
Click on <Advanced search>
Enter: 'ttl/direction and ttl/finding' (ttl = title)
Uh oh... 137 hits - that's too many... let's add R-C
Enter: ttl/direction and ttl/finding and an/rockwell (where an=assignee)
Bingo !
Hit #5 is:

Patent # 3,967,280, "Direction finding system with integrated loop and sense antenna assembly", filed: June 29, 1976 (must be expired by now ?).
Assigned to Rockwell.

You can find this patent directly on:
http://patft.uspto.gov/netahtml/srchnum.htm
Enter: '3967280'
It is all laid out, chapter and verse. The images are .tiff and you might need a plug-in to view them. For some reason, my PC is using the QuickTime plug-in to view them. Your mileage may vary...

Sorry it took so long...I had to give my son a bath in the middle of this...

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

5545. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:45:36 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7jp89$ltdfj$1@ID-124126.news.dfncis.de>
Source record: 146235

Cec said -
> Before the vertical took over my garden, I kept the entire
> neighborhood in tomatoes for six weeks.
==========
Cec, in this over-populated hungry world your community spirit is very much to be admired. But unles rattlesnakes have a liking for tomatoes you won't get much admiration from rattlesnakes.

To break from tomatoes, oil, cattle and JR, you could try farming mice.
;o)

5546. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 05:46:12 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u9qq13i9662a0c@corp.supernews.com>
Source record: 146234
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

The theory of how to do it from about four ways is not difficult. The devil is in the details of how somebody else has done it and avoiding the days and months of blind alleys and such.

Jim

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message news:a7jn05$lp3b2$1@ID-124126.news.dfncis.de...
> Jim, you sound to me like someone who is capable of working it out for
> yourself from simple basic principles.
>
>
>
>

5547. Re: DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 06:10:42 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C9D6DD7.1A759286@icok.net>
Source record: 146236

CAM,
Not if it's a 'half assed' antenna...
'Doc

5548. Slightly OT: Tesla's patents

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 06:40:13 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <fxen8.34251$Ff3.3529047@news20.bellglobal.com>
Source record: 146237

Fun with patents...

The patents of Nikola Tesla listed...
http://www.mall-usa.com/BPCS/grant_tesla.html

...may be viewed on-line.
http://patft.uspto.gov/netahtml/srchnum.htm
(Enter the patent number)

You'll need a .tif plug-in or viewer to view the patents.

5549. Re: Screwdriver antenna matching

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 06:49:35 UTC
From: jess711@netdoor.com
Message-ID: <3c9d773d.6221704@news.netdoor.com>
Source record: 146238

Sounds cheap enough (always a factor). I will give it a try and
hopefully will be a ham on the road.

Jessie AD5JW

On Thu, 21 Mar 2002 21:51:53 -0500, "Jerry Oxendine"
<joxendi@bellsouth.net> wrote:

>Jess,
>
>What I would do is simply wind a small coil about 1 1/2" dia of about 11
>turns and 14 ga.
>copper (doesn't have to be copper) solid wire. Attach one end to the bottom
>of the an-
>tenna on the stud (+) and the other end to ground nearby (-). Trim if needed
>and you might
>be surprised at how well it will work.
>
>
>Jerry
>K4KWH
>
>www.qsl.net/k4kwh
>Jess <jess711@netdoor.com> wrote in message
>news:3c9846c0.13511855@news.netdoor.com...
>>
>> I am rather new to the screwdriver antenna. I have spent most of my
>> ham life with vhf yagis and quads. I recently got a used screwdriver
>> at a hamfest. The guy I got it from gave me two boxes and told me how
>> to hook them up. He said that he knew that one of them wouldn't work,
>> but couldn't remember which one. I got one of them sort of working.
>> With a 5 ft whip on top I was able to get it on 10 meters ok. And to
>> go from 10 meter to 15 metes it only takes about 1/2 inch more coil.
>> And you can forget 20 metes completly. It is ok on 40 and 80 meters.
>> But it is very touchy, especilly on 80. I
>>
>> I would like the group's opinion on the matching of screwdriver
>> antennas. How much coil? What material, torroid or air? How many
>> turns and what size wire..
>>
>> Jessie AD5JW
>>
>>
>
>

>

5550. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 07:18:55 UTC
From: Jerome Liebler <lieblerj@earthlink.net>
Message-ID: <3C9D80B5.E673C68A@earthlink.net>
Source record: 146239
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

Jim,
The method I've described works whenever there is an output from both recievers it fails at each of the 4 nulls but tracking and remembering the bearing during those nulls in a moving can shouldn't be a problem. To help see that it's a 180 degree phase change as a loop is rotated thru null consider an air core transformer that allows one winding to be rotated about an axis perpendicular to it's axis. The phase between the windings certainly isn't the same either side of null unless we swap leads as we rotate thru null. The H field from that transmitter is no different than the field of the hypothetical transformer.

Regards
Jerry

Jerome Liebler wrote:

> Jim,
> Sorry I didn't finish the comments.
> Remember the field theory of magnetic induction, the right hand rule for a
> moving (or time varying) magnetic field inducing a voltage in a conductor. The
> phase is 180 degrees different if the signal comes from aft instead of from
> for. Rotating the loop was to help under stand the phase shift. not part of
> the solution.
> The 90 degree phase shift can easily be maintained with a digitally derived
> LO. That's part of why some DSP would help. Think of a counter addressing a
> table containing a sin function and the same counter addressing a cosine table.
> (not the best way but easy to visualize) and the output each of the tables goes
> to a DAC.
>
> Jim Weir wrote:
>
> > "Jerome Liebler" <lieblerj@earthlink.net> wrote in message
> > news:3C9D5D41.80DCE406@earthlink.net...
> > > Jim,
> >
> > > The two orthogonal loops, with ferrite cores of course,
> >
> > I'm not an "of course" kind of guy. I fail to understand the necessity for
> > ferrite in the core of the loops other than to concentrate the magnetic
> > field, which will be there, ferrite or no.
> >
> > are sufficient if
> > > the carrier phase relationship can be observed.
> >
> > So are we saying that simple measurement of carrier phase relationship of

> > two orthogonal loops are sufficient to determine bearing? I can't resolve
> > the 180ï¿½ ambiguity in my brain. Help me here. Seems to me that you can
> > tell direction with an ambiguity, but it requires a third antenna to resolve
> > the fore-aft problem.
> >
> > As one turns the loop through
> > > null the phase reverses.
> >
> > With a fixed antenna, one cannot turn the loop without turning the aluminum
> > can, which was part of the "can't do" criteria of the original problem. And
> > no, the phase doesn't reverse, it goes through an instantaneous shift from
> > zero to 360ï¿½, which is the same phase.
> >
> > Think of separate receivers for each antenna but
> > > each receiver is a direct conversion quadrature receiver. A quadrature
> > receiver
> > > uses two mixers with the LOs having a 90 degree phase shift
> >
> > That's fine for spot frequency. However, as you tune across the band, the
> > LO phase shifter cannot track a constant 90ï¿½ shift.
> >
> > Forgive me. I'm dense. I'm an analog cat in a room full of digital rocking
> > chairs. Treat me kindly.
> >
> > Jim

5551. Re: DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 07:28:51 UTC
From: CW <clinton.magers@attbi.com>
Message-ID: <Tefn8.104706$702.21366@sccrnsc02>
Source record: 146240

Length of a dipole is on the technician exam. In any case, you think that knowing Morse code (at a higher rate, it is still required) would some how make people more capable of building antennas?
--
CW
KC7NOD

"Gary - KJ6Q" <davison7@gte.net> wrote in message news:D4an8.1692$n%1.1040@nwrddc03.gnilink.net...
> You'd perhaps be surprised at how many of out latest crop of "no-code Extras" MUST buy their HF
> dipoles - because they haven't yet mastered the intricate art of computing proper resonant antenna
> lengths - OR figured WHAT materials to use, or where to obtain them... 8^)
>
> Now, for MY part, *I* sell them the extra-durable, non-conducting SKY HOOKS to suspend them from...
>
> --
> Gary - KJ6Q
> **********
> Two things we'll never see:
> 1. Perpetual motion...
> 2. A liberal Democrat complaining
> about "Too much government"
> "'Doc" <w5lz@icok.net> wrote in message news:3C9D150E.E25A4004@icok.net...
> > NI4L,
> > > Does anyone actually but any of your dipoles?
> > > 'Doc
>

5552. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 07:52:38 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <bqDzMrAGXYn8EwRQ@jmwa.demon.co.uk>
Source record: 146242
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

I read in sci.electronics.design that Jim Weir <jim@rst-engr.com> wrote
(in <u9qnqu2e3ndrb2@corp.supernews.com>) about 'Direction finding', on
Sat, 23 Mar 2002:
>That's fine for spot frequency. However, as you tune across the band, the
>LO phase shifter cannot track a constant 90ï¿½ shift.

There are several analogue ways of achieving that; broadband 90 degree
phase network, PLL and no doubt other that I don't recall at present. It
can also be done digitally, and mixers accept square waves quite
happily.
--
Regards, John Woodgate, OOO - Own Opinions Only. http://www.jmwa.demon.co.uk
Interested in professional sound reinforcement and distribution? Then go to
http://www.isce.org.uk
PLEASE do NOT copy news posts to me by E-MAIL!

5553. Re: cable routing in an auto

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 08:30:21 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <m33r9u46pfrds99vu4acjl45r3951tvs1v@4ax.com>
Source record: 146241

On Sat, 23 Mar 2002 04:20:07 -0600, "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
wrote:
>On 21 Mar 2002 21:35:44 -0800, dandowell@sprintmail.com (Dan Dowell)
>wrote:
>>Drilling holes is out of the question. (new truck)
>
>Rest assured that by driving it off the lot, you've already devalued
>it far more than a carefully drilled, properly sealed hole ever will.

Amen, Joe! I actually prefer taking a battery powered drill to the
dealership, so I can mount the radios and antennas before rolling
the truck off of the lot. I loathe being in a vehicle without working
radios.

Gary

5554. Re: Loop antenna Rectangle

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 11:49:49 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C9DBD50.F4531ECA@icok.net>
Source record: 146243

Richard,
Unless I totally misunderstood what he was asking,
he only wanted to know how to match a loop to a 50 ohm
impedance. He didn't say he was using it for any
particular purpose...
'Doc

5555. Cutting a 28MHz Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 12:16:50 UTC
From: * <rong5@mindspring.com>
Message-ID: <a7jd33$2qm$1@slb1.atl.mindspring.net>
Source record: 146317

I have a Larsen NMO 27 whip antenna with base coil. The whip is 49". Does anyone have a cutting chart they could provide which will tell me where to cut the whip for various 10 meter freqs? Email is rong5@mindspring.com

5556. Re: Loop antenna Rectangle

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 12:51:15 UTC
From: richardharrison@webtv.net
Message-ID: <21920-3C9DCBC3-256@storefull-2398.public.lawson.webtv.net>
Source record: 146244

Doc, W5LZ wrote:
"---he only wanted to match a loop to a 50-ohm impedance."

Doc may have missed the first chapter of this story. Cris is trying to build a broadcast station. He asked how it is done in a previous posting, and in this posting asks how to match a loop to 50-ohms at 1.5 MHz.

At 1.5 MHz, a loop is almost surely the wrong transmitting antenna because of propagation at that frequency. Only ground waves propagate during daylight hours. A horizontal loop launches horizontally polarized waves which do not propage by ground wave. The sea or good soil shorts them out. So, a horizontal loop is no good in the daytime on 1.5 MHz.

A vertical loop, if it is fed at the right place, can launch vertically polarized waves which will propagate at 1.5 mhz during daylight hours. The only vertical loop which is non-directional is compressed into the equivalent of a folded dipole. A simple vertical mast is less problematic and a better bargain. That is why all broadcasters use them.

Best regards, Richard Harrison, KB5WZI

5557. Re: DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 14:16:20 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c9ddfd0$1_3@news.iglou.com>
Source record: 146245

Check out the Radio Works catalog for instance. There you will find all
kinds of pre-made wire antennas for those no-coders.

--
Steve Ellington N4LQ.
"Gary - KJ6Q" <davison7@gte.net> wrote in message
news:D4an8.1692$n%1.1040@nwrddc03.gnilink.net...
> You'd perhaps be surprised at how many of out latest crop of "no-code
Extras" MUST buy their HF
> dipoles - because they haven't yet mastered the intricate art of computing
proper resonant antenna
> lengths - OR figured WHAT materials to use, or where to obtain them...
8^)
>
> Now, for MY part, *I* sell them the extra-durable, non-conducting SKY
HOOKS to suspend them from...
>
> --
> Gary - KJ6Q
> **********
> Two things we'll never see:
> 1. Perpetual motion...
> 2. A liberal Democrat complaining
> about "Too much government"
> "'Doc" <w5lz@icok.net> wrote in message news:3C9D150E.E25A4004@icok.net...
> > NI4L,
> > Does anyone actually but any of your dipoles?
> > 'Doc
>

5558. Re: looking for Jacob's Ladder plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 14:20:24 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <Igln8.78022$7B2.1816113@news1.east.cox.net>
Source record: 146246

Thanks for the info.. Never heard of the Jacob's Ladder antenna. I wonder
if it resembles the original in appearance.

pete

"Harold Burton" <hwburton@swbell.net> wrote in message
news:WHan8.70789$Xa5.4165689548@newssvr30.news.prodigy.com...
>
> " Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
> news:QY6n8.70743$7B2.1682655@news1.east.cox.net...
> > You mean J-pole? A jacob's Ladder is a vertical Wire Vee that is used
> > to demonstrate how an electrical arc will generate heated ionized air--
> > the arc will slowly rise up the wires until the spread is far enough
that
> > the
> > arc estinquishes and the process starts over again. You'll need an old
> > model spark coil or something similar to generate the HV.
>
> No, a ham named Floyd Everett invented an antenna he calls the Jacobs
> Ladder. I found a site about it by doing a search for "Jacobs Ladder
> Antenna".
>
>

5559. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 14:28:00 UTC
From: Mel Martin <mel@NOSPAMinterlink.net>
Message-ID: <8pln8.2050$vD.71052@wagner.videotron.net>
Source record: 146247

I built a triangular apex fed loop for 160 and was pleasantly surprised to find it was also an excellent antenna on 80M... didn't even require any special matching...

<Cboone@earthlink.net> wrote in message news:3C9B645B.E04C2928@earthlink.net...
> NO IT IS NOT A JOKE!!!!!! The April Fool's Joke is in the front
> of the issue btw!
>
> A fullwave loop also resonates on harmonics...and this antenna IS
> real...I built one on 80mtrs years ago...hung it off a 250ft
> microwave tower...fed at the top with 70ohm coax...worked 80-10
> with no problem...and what a signal!
>
> Chris
> WB5ITT
>
> avatar wrote:
> >
> > I haven't seen it, but it probably is an April Fools article.
> >
> > Terrence R. Redding <terry@oltraining.com> wrote in message
> > news:B8BA760E.164D%terry@oltraining.com...
> > > Does this antenna look right to those on this list? I thought there was a
> > > discussion here a few years ago that dismissed the idea of a single mast
> > > diamond loop fed at the top of the mast by 50 ohms coax.
> > >
> > > Now I see an article in QST that says the antenna works - and works on 20,
> > > 15, and 10.
> > >
> > > Does this fall in the same category as radiating with a light bulb? Yes,
> > > you can use it as an antenna - but whether it appears to work or not, it
> > > isn't truly a good design.
> > >
> > > Terry - W6LMJ
> > >

5560. Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 14:33:38 UTC
From: monte.carroll@nashville.com
Message-ID: <3c9dd933.260709152@news.nashville.com>
Source record: 146248

Good morning ladies and gentlemen. The tower is about ready to tilt up and mount, and I need some coax to run from the shack to the antennas - probably around 150 feet.

There will be two runs. One is from a 100 watt HF rig to a G5RV. The other is for a 6 watt 2-meter HT (may upgrade to a 50 watt unit later) to a J-pole. They will travel out of my 3rd story shack, down to the first level, across to the garage, over the garage roof to the tower.

What is your suggestion for coax? I would like the best deal - not necessarily the cheapest or most expensive - for my situation. And where do you recommend I purchase it? Thank you for your efforts.

Monte B. Carroll
WC4MBC
Nashville, Tennessee, USA

5561. Re: Vertical Antenna Recommendation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 15:24:35 UTC
From: IronHead <slipkid@kwiknet.net>
Message-ID: <Scmn8.297$HxK2.14549162@news2.randori.com>
Source record: 146249

Hi,
I am interested in this type of antenna for the 40M band. Can you give
some specifics on construction. Also will this antenna operate on higher
bands with a tuner. Thanks for help.

"Dust Might" <alfaromeodiscovolante@hotmail.com> wrote in message
news:vtRm8.6816$Tk.370158@newsread1.prod.itd.earthlink.net...
> Yes, there are several variations of vertical hf antennas, multi or mono
band, some with very short radials (do a
> google.com search under *amateur vertical antenna*).
>
> Do you have a tall tree or trees? For a real unnoticed model, I use simple
home-brew end-fed wire 1/2-wl antennas on 20
> to 2 meters, (a wire variation of the common Jpole design) hanging from a
string, shot over a branch high up in one of
> my trees. I can explain in detail if you are interested in this route.
> -Dusty
>
> "Lee Murrah" <lee@murrah.com> wrote in message
news:MMFm8.33208$2q2.2560762@bin4.nnrp.aus1.giganews.com...
> : I have been inactive for quite a few years and am thinking about firing
up
> : the IC-720A on HF. I need an antenna, but I do not know what is
available
> : these days. I would like to have a simple, easy to use vertical that I
> : could put out of sight in my back yard. Are the radialless verticals
worth
> : considering? Any recommendations?
> :
> :
> :
>
>

5562. Re: Slightly OT: Tesla's patents

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 15:48:01 UTC
From: K7RZF <k7rzf@attbi.com>
Message-ID: <Rymn8.103094$ZR2.39378@rwcrnsc52.ops.asp.att.net>
Source record: 146250

Amazing list, isn't it??!! Someone should tell the world leaders about this one:

68 568,177 1896 September 22 Apparatus for Producing Ozone

"J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca> wrote in message news:fxen8.34251$Ff3.3529047@news20.bellglobal.com...
> Fun with patents...
>
> The patents of Nikola Tesla listed...
> http://www.mall-usa.com/BPCS/grant_tesla.html
>
> ...may be viewed on-line.
> http://patft.uspto.gov/netahtml/srchnum.htm
> (Enter the patent number)
>
> You'll need a .tif plug-in or viewer to view the patents.
>
>
>
>

5563. Quad Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 15:51:04 UTC
From: Raymond Hansmeier <rhansmeier@attbi.com>
Message-ID: <6Bmn8.105012$af7.56458@rwcrnsc53>
Source record: 146251

I am looking for Quad parts for an HF antenna. Spider/Hubs/Spreaders. Anyone have any they are not using?

Ray Hansmeier
K7FU
rhansmeier@attbi<NoSpam>.com

remove <nospam> for email.

5564. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 15:58:46 UTC
From: zeus@myth.demon.co.uk
Message-ID: <7lsr9u8pnd1spj829cuj3ehote49a2519u@4ax.com>
Source record: 146252
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

Two orthogonal ferride rod antennas and a third one offset and
shielded for directionality? No messing about with signal phase, just
strength. Although that might need to be offset by more than the space
available. Might be interesting if you could get hold of a 'Y' shaped
ferrite.

Thinking about this a different way. Given that you have even a vague
idea of where you are, could you not just use 2 orthogonal ferrite
antennas and take readings from several AM transmitters? This would
need information regarding the relative location of the transmitters
maybe, but you would need that for position fixing anyway.

Mike

On Sat, 23 Mar 2002 09:41:11 -0800, "Jim Weir" <jim@rst-engr.com>
wrote:

>Now let me pose you one more problem and I'll be quiet for a while. Suppose
>you are inside a steel building (or more properly, an aluminum can) and can
>only have something the size of a tupperware sandwich box on the outside of
>the can. Anybody got any trickery to get the relative bearing on a signal
>in the AM broadcast band?

5565. Re: looking for Jacob's Ladder plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 16:40:08 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <z=6dPJYAo2lDBgq+SEEIrUtVB=Ke@4ax.com>
Source record: 146253

" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote:

>Thanks for the info.. Never heard of the Jacob's Ladder antenna. I wonder
>if it resembles the original in appearance.

It appears to be a j-pole that's been finagelled to broadband it over the whole two-meter band. I just wonder, though, if in the finagelling, you lose a little power.

Bob
k5qwg
>
>pete
>
>"Harold Burton" <hwburton@swbell.net> wrote in message
>news:WHan8.70789$Xa5.4165689548@newssvr30.news.prodigy.com...
>>
>> " Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
>> news:QY6n8.70743$7B2.1682655@news1.east.cox.net...
>> > You mean J-pole? A jacob's Ladder is a vertical Wire Vee that is used
>> > to demonstrate how an electrical arc will generate heated ionized air--
>> > the arc will slowly rise up the wires until the spread is far enough
>that
>> > the
>> > arc estinquishes and the process starts over again. You'll need an old
>> > model spark coil or something similar to generate the HV.
>>
>> No, a ham named Floyd Everett invented an antenna he calls the Jacobs
>> Ladder. I found a site about it by doing a search for "Jacobs Ladder
>> Antenna".
>>
>>
>

5566. Re: DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 16:44:47 UTC
From: Martin Peters <martin.peters@ntlworld.com>
Message-ID: <Zonn8.11331$Dr3.1793420@news6-win.server.ntlworld.com>
Source record: 146254

There is always
> someone
> who will take advantage of the less informed members of what
> used
> to be the ham fraternity!

Yep - over here (UK) http://www.theantman.co.uk will sell you an 20m long wire antenna for £25 or a 180m one for £100 - about 150 USD. A counterpoise is up to an extra £20.

Wish I'd thought of it first.

5567. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 16:54:11 UTC
From: monte.carroll@nashville.com
Message-ID: <3c9e03dc.271632341@news.nashville.com>
Source record: 146255

I just discovered various lengths of RG-8 in the basement. What is your opinin of running some smallish coax like RG-58/u out of the rigs for 100 feet then connecting to the RG-8 for the rest of the run to the antenna?

I would prefer to have small cable in the shack for ease of manipulation.

Monte B. Carroll
WC4MBC
Nashville, Tennessee, USA

5568. Please repeat info re vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 17:21:58 UTC
From: fazamy@aol.com
Message-ID: <20020324122158.19974.00000449@mb-ck.aol.com>
Source record: 146256

Recently, there was some discussion about a vertical antenna that works well without radials. Can someone please repeat the recommendations?

Thanks,
Evan
KB2AMY

5569. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 17:26:30 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u9s327baqsaffa@corp.supernews.com>
Source record: 146257
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

> Well, such 'leads' are never worthless...

Not if you are good at doing some world-class websurfing, as you obviously are. My hat is off to you, sir, and I apologize for using "worthless" in the text.

> You can find this patent directly on:
> http://patft.uspto.gov/netahtml/srchnum.htm
> Enter: '3967280'

Precisely correct. And exactly what I was looking for. The idea of using active devices to take the hi-z loop and transforming it into something that will drive a low-z cable isn't new, but I'm surprised that as late as 1975 that they could patent such a device. Even with the drawings and explanations, though, the sense antenna remains somewhat of a mystery. Any further leads on this?

> It is all laid out, chapter and verse. The images are .tiff and you might
> need a plug-in to view them.

Yes, I did, but the patent office webmaster really has it all together. They even specify the version of TIFF you need and point you to a free plugin.

>
> Sorry it took so long...I had to give my son a bath in the middle of this...

Thanks for your help. Hope your son survived the dunking.

Jim

5570. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 17:49:06 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <mkon8.4598$ov6.3940@nwrddc04.gnilink.net>
Source record: 146258

IF you are willing to accept the accompanying losses, preferring the convenience of smaller cable
sizes, some of the newer "mini-RG8" probabbly is a better choice than RG-58... Seems a shame tho'
with the obvious expense and effort spent on the REST of the installation, to then compromise the
function of the system by use of lossy, inefficient feedlines...

For a good online source of various feedlines and accessories, see:

http://www.cablexperts.com

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

"Monte B. Carroll" <monte.carroll@nashville.com> wrote in message
news:3c9e03dc.271632341@news.nashville.com...
>
> I just discovered various lengths of RG-8 in the basement. What is
> your opinin of running some smallish coax like RG-58/u out of the rigs
> for 100 feet then connecting to the RG-8 for the rest of the run to
> the antenna?
>
> I would prefer to have small cable in the shack for ease of
> manipulation.
>
>
> Monte B. Carroll
> WC4MBC
> Nashville, Tennessee, USA

5571. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 18:15:54 UTC
From: Pete Goudreau <goudpj@SPAMmac.com>
Message-ID: <uJon8.2073$ub3.1725@newsread2.prod.itd.earthlink.net>
Source record: 146259

In article <3c9dd933.260709152@news.nashville.com>,
monte.carroll@nashville.com (Monte B. Carroll) wrote:

> There will be two runs. One is from a 100 watt HF rig to a G5RV. The
> other is for a 6 watt 2-meter HT (may upgrade to a 50 watt unit later)
> to a J-pole. They will travel out of my 3rd story shack, down to the
> first level, across to the garage, over the garage roof to the tower.
>
> What is your suggestion for coax? I would like the best deal - not
> necessarily the cheapest or most expensive - for my situation. And
> where do you recommend I purchase it? Thank you for your efforts.

Hard to beat BuryFlex from DavisRF

http://www.davisrf.com/ham1/coax.htm

The stuff is directly buriable, abrasion resistant, and noncontaminating
as well as having very low loss. And it's relatively cheap. No
financial connection, just a satisfied customer. Oh, and you can use
std PL-259s, no special connectors or tools.

FWIW,
Pete, AD5HD (ex-WB5RKC)

5572. Re: looking for Jacob's Ladder plans

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 18:23:50 UTC
From: ve7poi <ve7poi@arrl.net>
Message-ID: <3C9E19B6.6366573F@arrl.net>
Source record: 146260

it found here
http://www.atlanticwebpages.com/ve1ke/default.htm
73 Rod de ve7poi
Harold Burton wrote:
>
> " Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
> news:QY6n8.70743$7B2.1682655@news1.east.cox.net...
> > You mean J-pole? A jacob's Ladder is a vertical Wire Vee that is used
> > to demonstrate how an electrical arc will generate heated ionized air--
> > the arc will slowly rise up the wires until the spread is far enough that
> > the
> > arc estinquishes and the process starts over again. You'll need an old
> > model spark coil or something similar to generate the HV.
>
> No, a ham named Floyd Everett invented an antenna he calls the Jacobs
> Ladder. I found a site about it by doing a search for "Jacobs Ladder
> Antenna".

5573. Re: Quad Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 19:11:25 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C9E24DB.C8CB6D32@tampabay.rr.com>
Source record: 146261

hey ray
here are two websites that sell that stuff

www.max-gain.com

www.cubex.com

Raymond Hansmeier wrote:

> I am looking for Quad parts for an HF antenna. Spider/Hubs/Spreaders. Anyone
> have any they are not using?
>
> Ray Hansmeier
> K7FU
> rhansmeier@attbi<NoSpam>.com
>
> remove <nospam> for email.

5574. Re: Vertical Antenna Recommendation

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 19:19:37 UTC
From: Dust Might <alfaromeodiscovolante@hotmail.com>
Message-ID: <dFpn8.2649$xa5.84593@newsread1.prod.itd.earthlink.net>
Source record: 146262

The band this half-wave antenna will operate on really depends on how much height you have to suspend it from (I have
only used it in a vertical position, or it could be mounted horizonally, I guess). This antenna is 3/4-wl of any
particular band overall, so can be quite long if used on 30, 40 or 75 meters. Having some distance between the earth and
bottom of this antenna is nice too.

As far as using a *tuner* for operation of another band outside of what frequency this antenna would be cut for, well
sure, I guess a tuner can be used to tune nearly any metal object...but no, these antenna's are designed to be used for
the band in which they are cut for.

For a basic understanding and description of its basic design: do a google search of *emergency j-pole or pocket j-pole
antennas*. Most results will yield either a 2 meter or 440mhz antenna constructed entirely out of 300 twin-lead wire;
whereas the one's I build for hf are constructed using 16-gauge electrician's coated (black for stealth) wire for the
top 1/2-wl portion attached to 450-ohm ladder-line for the 1/4-wl portion, finished with a 2-foot section of rg-58
coming down the bottom attached with wireties (to the ladder-line).

Earlier, someone mentioned incorporating the *Franklin Array* or Raser antenna design within this style (described
above) for increased gain, but I am still reading up on those arrays....Mighty Interesting, though!

-Dusty

"IronHead" <slipkid@kwiknet.net> wrote in message
news:Scmn8.297$HxK2.14549162@news2.randori.com...
: Hi,
: I am interested in this type of antenna for the 40M band. Can you give
: some specifics on construction. Also will this antenna operate on higher
: bands with a tuner. Thanks for help.
:
:
: "Dust Might" <alfaromeodiscovolante@hotmail.com> wrote in message
: news:vtRm8.6816$Tk.370158@newsread1.prod.itd.earthlink.net...
: > Yes, there are several variations of vertical hf antennas, multi or mono
: band, some with very short radials (do a
: > google.com search under *amateur vertical antenna*).
: >
: > Do you have a tall tree or trees? For a real unnoticed model, I use simple

: home-brew end-fed wire 1/2-wl antennas on 20
: > to 2 meters, (a wire variation of the common Jpole design) hanging from a
: string, shot over a branch high up in one of
: > my trees. I can explain in detail if you are interested in this route.
: > -Dusty
: >
: > "Lee Murrah" <lee@murrah.com> wrote in message
: news:MMFm8.33208$2q2.2560762@bin4.nnrp.aus1.giganews.com...
: > : I have been inactive for quite a few years and am thinking about firing
: up
: > : the IC-720A on HF. I need an antenna, but I do not know what is
: available
: > : these days. I would like to have a simple, easy to use vertical that I
: > : could put out of sight in my back yard. Are the radialless verticals
: worth
: > : considering? Any recommendations?
: > :
: > :
: > :
: >
: >
:
:
:

5575. Sky Loop Suspension?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 19:46:04 UTC
From: aokd5fxt@cs.com
Message-ID: <20020324144604.05620.00002996@mb-co.news.cs.com>
Source record: 146263

Ok, i am abt to hang a 160 meter (530 feet) sky loop. It will be suspended by and thru the trees on my property. What is the best string to use? I would think that, what my question might be is, "what type of string is the most weather resistant?' Pls email me with suggestions, as I sometimes forget to check this ng. Thanks, Bill, KD5FXT

5576. Sky Loop Suspension

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 19:51:20 UTC
From: aokd5fxt@cs.com
Message-ID: <20020324145120.16084.00000394@mb-co.news.cs.com>
Source record: 146264

I am abt to hang a 160 meter (530 feet) sky loop. It will be suspended by the trees on my property. What string is the best to use? Most wx resistant and strongest, yet light?

Thank you
Bill

5577. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 20:41:19 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <PRqn8.858$n82.205777@news20.bellglobal.com>
Source record: 146265
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

"Jim Weir"
> ...world-class websurfing...

<blush...> I knew that those wasted years would someday pay-off... <grin>.

> Even with the drawings and explanations, though,
> the sense antenna remains somewhat of a mystery.
> Any further leads on this?

The sense antenna appears to be 'nothing special'... It is item #41.

Extract from the text of Patent # 3,967,280:

"A Fiberglass cover 60 of streamlined configuration might enclose the assembly, with a conductive material or screen wire sense antenna element 41 carried on, or embedded in, the Fiberglass cover 60. Sense antenna 41 is connected by a single interconnection 57 to the electronic circuit card 63. <snip> Because of the reduced height configuration and capacitance requirement for the sense antenna made possible by the present invention, the comparatively small area sense antenna depicted in FIG. 5 provides the same sensitivity as heretofore-employed sense antennas..."

It seems that the sense antenna is simply a chunk of screen embedded in the cover and connected to a preamplifier by way of a single wire. 'Nobody home' so to speak (meaning nothing complicated). Sort of an 'active antenna' like the Sony AN-1 and others; it's all in the preamplifier. The antenna itself is just 'coat hanger' technology.

You thinking of building one ? Keep in mind that the actual ARN-149 product itself has internal "Quadrantal Error Correction (QEC) set by aircraft connector strapping, eliminating corrector modules and airframe-specific internal adjustments..." The patent barely mentions the topic.

5578. UHF quad antenna designs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 20:46:09 UTC
From: Jason <uPVC@btinternet.com>
Message-ID: <a7ldug$n0g$2@knossos.btinternet.com>
Source record: 146266

Can anybody help I wish to build a 6 element quad antenna for 70cm mainly
for satellite work has any body got any detailed designs or know of a
website with good designs, also where is the best place to get parts for the
antenna I live in the UK (midlands).
any help appreciated

--
Yours
Jason

uPVC@btinternet.com

5579. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 22:41:07 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u9slg24cv6nhc5@corp.supernews.com>
Source record: 146267
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

One might have thought that the patent application would have contained dimensions for a "suitable" sense antenna, but then again, that's what tinsnips are for.

> assembly, with a conductive material or screen wire sense antenna element
41
> carried on, or embedded in, the Fiberglass cover 60.
>
> It seems that the sense antenna is simply a chunk of screen embedded in
the
> cover and connected to a preamplifier by way of a single wire.

Yes, I'm going to build one, the only question is time. I've got two other projects ahead of it, but it will get done. As to the error correction, I'll build one and see what kind of errors I get. The specifications for high-end military and low-end civilian vary several orders of magnitude.

First thought is to wind two toroids and mount them at right angles to each other and glued onto a blank piece of PC board, with the sense antenna just a patch of copper at the far end of the board. The nice thing about doing stuff down at a MHz. or so is that you can actually examine the signals out of the antennas with a fairly low-tech scope to determine phase angles and the like. The shop is about three blocks from a saturation radiation source at 830 kHz. transmitting 10 kW continuously. First time I've ever intentionally USED the sucker; heretofore it has been a royal pain to keep it out of the workings.

Jim

> You thinking of building one ? Keep in mind that the actual ARN-149
product
> itself has internal "Quadrantal Error Correction (QEC) set by aircraft
> connector strapping, eliminating corrector modules and airframe-specific
> internal adjustments..." The patent barely mentions the topic.
>
>
>
>

5580. info's icom ah2-b mobile ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 22:46:38 UTC
From: IZ1DXG <iz1dxg@libero.it>
Message-ID: <EGsn8.67323$%g7.2200743@twister2.libero.it>
Source record: 146268

hi to all newsgroup , i was looking for info's about the mobile antenna Icom ah2b.
I didn't find anything on the Eham.net reviews.
I know that is a bit expansive but if it works i could spend some money on that.
Thanking in advance
73's IZ1DXG Robert

5581. Ham Radio E-Books?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 22:54:35 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <a7lnd7$m8q9o$1@ID-105647.news.dfncis.de>
Source record: 146120

Just wondered if anyone knew of any e-books on antennas (or any ham radio subject). Recently got myself an iPaq PDA and it's great for reading on, no more toting big books around.

73s

Robert / N4IXT

5582. Re: Please repeat info re vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-24 23:12:12 UTC
From: AC6V <ac6v@amsat.org>
Message-ID: <3C9E5D55.D398CE34@amsat.org>
Source record: 146119

Evan -- too many variables -- we need to know can u put in ground radials, can you put a vertical up and use elavated radials, do you have to have a 1/2 wave radialess antenna. That sed;
maybe start with "Dirty Little Vertical Antenna Secrets" by Butternut.
http://www.bencher.com/pdf_download.html

Then go to eHam.net and read what users think of their 1/2 wave end fed radialess verticals (Cushcraft R-7000, R-6000, R7, R5, R8), (Force 12 Sigma-5 vertical dipole), (Hy-Gain DX77), others.
http://www.eham.net/reviews/products/13

FYI: I have an R-7000 Cushcraft and have worked a ton of DX (Brag Brag). Only because I have HOA and CC&R's
otherwise I'd have a tower and a TH7DXX beam -- you betcha.
--
73 From AC6V, Rod In Oceanside, CA
I doubt, therefore I might be!

AC6V Mega Ham Index at http://ac6v.com
AC6V Book For DXers at http://ac6v.com/DXSAMPLE.htm
==========

FAZAMY wrote:

> Recently, there was some discussion about a vertical antenna that works well
> without radials. Can someone please repeat the recommendations?
>
> Thanks,
> Evan
> KB2AMY

5583. Building the perfect scanner antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 00:31:47 UTC
From: Max <jnk@kenobiz.com>
Message-ID: <f3ss9u8osqev8p0mutqctn9nk7n3r00k9j@4ax.com>
Source record: 146121

Can anyone offer information or point me to information for antenna
building antennas? More specifically, I am looking to build an
antenna that would be most efficient at picking up the 150.xxx to
160.xxx range.

Thanks for your time =)

5584. Re: April 2002 QST - 40 meter loop

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 01:28:14 UTC
From: hamop@repeater.net
Message-ID: <3c9e7b2a.28819489@news.ptd.net>
Source record: 146123

Evening Chris and the gang...

I built this antenna today and was very impressed with it. I also found out by accident that it makes an excellant 17 meter antenna when you forget to connect the point where they say to trim it. The SWR was 2.1:1, but it REALLY out did my dipole. I worked PJ2/DL7UFR on it, and tested both the Dipole and the loop and the loop seemed to work quite well.

On Fri, 22 Mar 2002 16:53:49 GMT, Cboone@earthlink.net wrote:

>NO IT IS NOT A JOKE!!!!!! The April Fool's Joke is in the front
>of the issue btw!
>
>A fullwave loop also resonates on harmonics...and this antenna IS
>real...I built one on 80mtrs years ago...hung it off a 250ft
>microwave tower...fed at the top with 70ohm coax...worked 80-10
>with no problem...and what a signal!
>
>Chris
>WB5ITT
>
>avatar wrote:
>>
>> I haven't seen it, but it probably is an April Fools article.
>>
>> Terrence R. Redding <terry@oltraining.com> wrote in message
>> news:B8BA760E.164D%terry@oltraining.com...
>> > Does this antenna look right to those on this list? I thought there was a
>> > discussion here a few years ago that dismissed the idea of a single mast
>> > diamond loop fed at the top of the mast by 50 ohms coax.
>> >
>> > Now I see an article in QST that says the antenna works - and works on 20,
>> > 15, and 10.
>> >
>> > Does this fall in the same category as radiating with a light bulb? Yes,
>> > you can use it as an antenna - but whether it appears to work or not, it
>> > isn't truly a good design.
>> >
>> > Terry - W6LMJ
>> >

5585. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 01:36:20 UTC
From: James Meyer <james.meyer22@verizon.net>
Message-ID: <p7vs9u0h258fvukbjvtd8gfcdlleear3lt@4ax.com>
Source record: 146122
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

On Sun, 24 Mar 2002 14:41:07 -0800, "Jim Weir" <jim@rst-engr.com> wrote:

>First thought is to wind two toroids and mount them at right angles to each
>other and glued onto a blank piece of PC board,

One of the good things about toroid inductors is the fact that their
external magnetic fields are orders of magnitude lower than solenoid wound
inductors. Their magnetic field is almost totally contained within the core.

That good point about toroids means that they make very poor antennas.
A good transmitting antenna is also a good receiving antenna. If a device
doesn't radiate much, it won't receive much either.

Jim

5586. WTB Bird 43 Wattmeter Slugs.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 01:57:33 UTC
From: Don <DON-COM@attbi.com>
Message-ID: <huvn8.107554$af7.58467@rwcrnsc53>
Source record: 146124

Wanted Used Elements for Bird 43 wattmeter, in good condition at a reasonable price.

2-30MHz 2500W Model 2500H12

100-250MHz 2500W Model 2500C12

400-1000MHz 1000W Model 1000E12

25-60MHz 1000W Model 1000A12

Contact Don W6PJJ
Sacramento, CA
don-com@attbi.com

5587. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 02:13:43 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <u9t1umeng0q2d5@corp.supernews.com>
Source record: 146125
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

The wonderful thing about the web is that you aren't confined to being a stupid ninny in front of a rather small class, you can exhibit your stupidity to the world as a whole. That was about the dumbest idea I've had this week. Thanks for repeating back to me the words I must have repeated several thousand times...reciprocity isn't just a good idea, it's the LAW.

Jim

>
> That good point about toroids means that they make very poor antennas.
> A good transmitting antenna is also a good receiving antenna. If a device
> doesn't radiate much, it won't receive much either.

5588. Re: Ham Radio E-Books?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 03:05:37 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <HZGePLFrzXelOXLAL6G=M4zjeUIt@4ax.com>
Source record: 146126

"N4IXT" <n4ixt@arrl.net> wrote:

>Just wondered if anyone knew of any e-books on antennas (or any ham radio
>subject). Recently got myself an iPaq PDA and it's great for reading on, no
>more toting big books around.
>
>73s
>
> Robert / N4IXT
>

I'm not sure what form "e-books" come in, but if your gizmo reads off of CDs,
some books are available in CD format. See the ARRL web site, and check their
"book" selections.

Bob
k5qwg

5589. Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 04:00:23 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c9ea0f4_2@news.iglou.com>
Source record: 146130

I said I was going to buy one of those cell phone antenna boosters and report the results so here goes.
My wife's Erickson 788 could never reach the cell tower from our home. I removed the battery, installed the booster and replaced the battery. It took a total of about 2 minutes.
I was immediately greeted with 2 squares on the signal meter. I made several test calls. For the first time, the phone actually works at our home. I'm impressed!

--
Steve Ellington N4LQ.

5590. Questions on Inverted L Wire Antenna, Please

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 04:25:03 UTC
From: Murray Green <mgreen@erols.com>
Message-ID: <3C9EA69F.ECA6CB81@erols.com>
Source record: 146128

A ham friend of mine recently installed a 120' 1/2 wave inverted L
antenna for 4 MHz. The antenna bends at 50'; the remainder out for 70".
Ground radials are installed.

For this type of antenna he would like to know:

(1) what is the directional pattern?
(2) what are the typical gain figures?
Thanks.
73, Murray, K3BEQ

5591. Re: Slightly OT: Tesla's patents

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 04:32:24 UTC
From: richardharrison@webtv.net
Message-ID: <11168-3C9EA858-340@storefull-2395.public.lawson.webtv.net>
Source record: 146129

J Harvey wrote:
"Fun with patents.."

I knew Tesla was responsible for our polyphase power system, induction motors and generators, wireless power transmission, advanced understanding of resonance, and artificial lightning machines. I knew he conceived and designed the Niagra Falls power system. I read a book over 50 years ago titled, "Prodigal Genius".

Recently, I bought a bargain Barnes & Noble closeout of "The Inventions, Researches and Writings of Nikola Tesla" which seems to be a reprint of an 1893 book by an admiring Thomas Commerford Martin of Tesla`s work over the previous 10 years. There are 14 chapters! I learned that the 3rd-brush d-c generator regulator that used to be on most automobiles (after the book was written) was Tesla`s invention. The book and patents are wide-ranging.

When I tried to read the list of inventions of Tesla from the URL posted, my machine choked up and replied: This page to big to display. Amazing!

Best regards, Richard Harrison, KB5WZI

5592. Re: UHF quad antenna designs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 05:01:00 UTC
From: Jeff Campbell <jcampbell@ins-msi.com>
Message-ID: <3C9EA574.666FFE2A@ins-msi.com>
Source record: 146127

Have a look at:

http://www.softcom.net/users/kd6dks/quad.html

Jeff Campbell
n8wxs@arrl.net

Jason wrote:
>
> Can anybody help I wish to build a 6 element quad antenna for 70cm mainly
> for satellite work has any body got any detailed designs or know of a
> website with good designs, also where is the best place to get parts for the
> antenna I live in the UK (midlands).
> any help appreciated
>
> --
> Yours
> Jason
>
> uPVC@btinternet.com

5593. Re: Building the perfect scanner antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 05:32:30 UTC
From: KB7M <kb7m@arrl.net>
Message-ID: <YCyn8.96$Zx1.225238@news.uswest.net>
Source record: 146131

Take a look at the ARRL antenna book.

http://www.arrl.org/catalog/?category=Antennas%2C+Transmission+Lines+%26+Propagation&words=

"Max" <jnk@kenobiz.com> wrote in message
news:f3ss9u8osqev8p0mutqctn9nk7n3r00k9j@4ax.com...
> Can anyone offer information or point me to information for antenna
> building antennas? More specifically, I am looking to build an
> antenna that would be most efficient at picking up the 150.xxx to
> 160.xxx range.
>
> Thanks for your time =)

5594. Re: Questions on Inverted L Wire Antenna, Please

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 05:53:10 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C9EBB38.3793B120@icok.net>
Source record: 146132

Murry,

1. Predominantly omnidirectional.
2. It's a 1/2 wave antenna, there is no gain.
Your welcome...
'Doc

5595. Re: info's icom ah2-b mobile ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 07:47:19 UTC
From: John Buck <kh7t@arrl.net>
Message-ID: <3C9ED614.9040401@arrl.net>
Source record: 146133

I have been using one mobile since the IC735 was new.
It has never failed and works.
It also works very well fixed mobil with an extra piece of wire clipped
to the tip of the whip and thrown up into the trees or bushes.

As a mobile in motion, it it is not as efficient on 40 as a good
screwdriver or Texas bugcatcher.

Some of the newer designs with frequency memory and latching relays
would be nicer to use.

Aloha,
John KH7T

5596. Re: What is this antenna I just bought?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 10:11:48 UTC
From: Wayne <wayneleake@wayneleake.net>
Message-ID: <u9ttv5dh6548d7@corp.supernews.com>
Source record: 146134

I have a Radio Shack Pro-89 scanner.
It has exactly 0.00 Volts at the antenna terminal when on.
Now, My Icom IC2000H may have more than that on the antenna terminal when in transmit mode, But I'm not going to try measuring it with my DVM...

What you have does sound like either a Helix antenna or simply a coil...

--
Wayne. <|:^)>
KG6KFE@charter.nospam.net
http://www.wayneleake.net

"Martin Peters" <martin.peters@ntlworld.com> wrote in message
news:nt4n8.4419$Dr3.769777@news6-win.server.ntlworld.com...
> Just got back from Pickett's Lock radio rally and beside the usual
> connectors and
> adaptors, I bought (for £9) an active antenna made by California
Amplifier -
> Part No 540001.
>
> Done various searches but come up with nowt. The seller said "It's 78MHz
to
> 2.8GHz and requires 1.8 volts - most scanners have this on their antenna
> sockets."
>
> I don't think so.....
>
> Moving swiftly on, the entire device is encapsulated in a plastic tube
> arrangement, is about 24 cm long and 3 cm in diameter. Termination is a
tiny
> SMB connector.
>
> They had broken one open for punters to look at its innards. The antenna
> element appeared to be a band of 1cm wide copper wound around a expanded
> polystyrene former, barbershop pole-fashion. The former is about 2cm in
> diameter and 15cm long. This fed the amp - all the usual SMD stuff - in a
> tin enclosure.
>
> Any ideas what this may be good for. Is it a helix antenna, designed for
use
> end-onat, say 3GHz, or, as the man said, a wideband VHF/UHF omni? Any
ideas?
>
> Emailed CalAmp but they probably have better things to do.

>
> Any thoughts appreciated - Martin
>
>
>
>
>

5597. Difference bt 1/4 & 5/8 mobile HF

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 10:24:19 UTC
From: post_to_usenet@hotmail.com
Message-ID: <b6b4e772.0203250224.79645124@posting.google.com>
Source record: 146135

Hi,

I would like to know/understand why, for a mobile antenna, 1/4 is any different from 5/8 (or even from a tuned screwdriver antenna). As I see it, and as long as neither is center nor top loaded, the radiating element is the same for both (considering that both use the same whip length, ex.: 5~7 ft. for 10m), so my reasoning is that whatever the matching network, the radiation pattern will be the same, only network looses will be different.

In fact, I don't uderstand very well how a less than 1/4 physical length whip + adaptor base may be sold as 5/8, whatever there is in the matching network.

Please explain if this is correct or not.

TIA for responses

Toni

5598. ATU for magnetic loop antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 13:40:35 UTC
From: Fabio Morsani <fabio.morsani@pi.infn.it>
Message-ID: <3C9F28D3.33EC16AD@pi.infn.it>
Source record: 146136

I developed an automatic tuner for my homebrew magnetic loop antenna.
It allows the user to directly enter the desired freq using a 4x4
keyboard, then the ATU tunes the loop at that freq for minimum SWR.
Alternatively (preferred), you can just press a key and the ATU reads
automatically the current RTX freq (for my TS130, it reads the local
oscillator freq and subtract the IF value) then performs the tuning.
More, the keyer and the mic pass through the ATU, which allows the
PTT (used for CW also) to be asserted to the RTX only if the current
SWR is below a programmed limit ... and other features.

I successfully used such a ATU for some years.
Recently I developed a serial interface to connect the ATU to
the CAT port of some commercial RTXs (ICOM, FT1000, TS850 ...).

I'd like to know if someone has built something of similar, his
experience, some ideas to improve it.

On my site http://dai5lhy.dadacasa.supereva.it/
you can find some info (for the moment in italian only).

73 Fabio - I5LHY

5599. Re: Difference bt 1/4 & 5/8 mobile HF

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 14:22:34 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C9F329A.D7913CE5@icok.net>
Source record: 146137

Toni,
An antenna's physical length isn't necessarily it's electrical length. An antenna shorter than 1/4 wave length can be made an 'electrical' 1/4 wave lenth by adding a inductance in the form of a 'loading' coil. This 'loading' coil can be at the base, the center, or the top of the antenna. By judiciously picking the value of inductance, the size of the coil, an antenna can be made to 'appear' to be almost any portion of a wave length, or multiples of a wave length, to an RF signal.
An impedance matching circuit can be either inductive (using a coil) or capacitive (using a capacitor). If it's inductive, the same coil can be combined with a loading coil on a base loaded antenna. Again, depending on the size of the loading coil, a base loaded antenna can look quite a bit shorter than it's electrical length, even if an impedance matching coil is present. Usually, the loading and matching coil is encapsulated, so you can't tell what the antenna's electrical length by the length of it's whip.
Discounting the other things that affect the radiation pattern, an antenna's electrical length determines the shape of it's radiation pattern, not the antenna's physical length.
'Doc

5600. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 14:27:42 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3C9F33DE.EE5C7113@crosslink.net>
Source record: 146138

"Monte B. Carroll" wrote:
>
> There will be two runs. One is from a 100 watt HF rig to a G5RV. The
> other is for a 6 watt 2-meter HT (may upgrade to a 50 watt unit later)
> to a J-pole.

Monte,

<http://www.therfc.com/coax.htm> lists various cables and has links to tables that show their loss per 100 ft at different frequencies. You will find that RG-8 is OK for HF but 150 feet of it will eat up half your power and more at 2 meters and is mucho worse above that. I'd go with RG-8 for the HF cable but spring for something like LMR-400 to drive the J-pole. Since loss is "per foot" short lengths of RG-58 or better yet RG-58 foam (RG-8X) are OK for short runs. My 2 cents.

73, KA3DWW

5601. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 15:11:34 UTC
From: Phil Bradway <kb2hq@nycap.rr.com>
Message-ID: <G6Hn8.24217$v%.6386497@typhoon.nyroc.rr.com>
Source record: 146139

You might consider scrounging up some CATV hardline. Generally short lengths
are free for the taking and connectors can be home brewed from plumbing
fittings. Some times two-way shops have some 50 ohm stuff around, too. I
find the 75/50 ohm mismatch is easily ignored, even up to 5 gHz.

Phil, KB2HQ

"Vito" <vito@crosslink.net> wrote in message
news:3C9F33DE.EE5C7113@crosslink.net...
> "Monte B. Carroll" wrote:
> >
> > There will be two runs. One is from a 100 watt HF rig to a G5RV. The
> > other is for a 6 watt 2-meter HT (may upgrade to a 50 watt unit later)
> > to a J-pole.
>
> Monte,
>
> <http://www.therfc.com/coax.htm> lists various cables and has links to
> tables that show their loss per 100 ft at different frequencies. You
> will find that RG-8 is OK for HF but 150 feet of it will eat up half
> your power and more at 2 meters and is mucho worse above that. I'd go
> with RG-8 for the HF cable but spring for something like LMR-400 to
> drive the J-pole. Since loss is "per foot" short lengths of RG-58 or
> better yet RG-58 foam (RG-8X) are OK for short runs. My 2 cents.
>
> 73, KA3DWW

5602. Re: Quad Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 15:22:26 UTC
From: Raymond Hansmeier <rhansmeier@attbi.com>
Message-ID: <SgHn8.108090$ZR2.42352@rwcrnsc52.ops.asp.att.net>
Source record: 146140

Thanks,
I am familier with both companies. I am looking for stuff stuck away in
someones garage that is no longer being used. I want to homebrew or repair a
damaged quad and have some fun trying it out.

Ray
"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message
news:3C9E24DB.C8CB6D32@tampabay.rr.com...
> hey ray
> here are two websites that sell that stuff
>
> www.max-gain.com
>
> www.cubex.com
>
> Raymond Hansmeier wrote:
>
> > I am looking for Quad parts for an HF antenna. Spider/Hubs/Spreaders.
Anyone
> > have any they are not using?
> >
> > Ray Hansmeier
> > K7FU
> > rhansmeier@attbi<NoSpam>.com
> >
> > remove <nospam> for email.
>

5603. Re: UHF quad antenna designs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 15:22:34 UTC
From: tim <tim_11230@mytim.net>
Message-ID: <3C9F40AD.32A0743E@mytim.net>
Source record: 146141

http://www.softcom.net/users/kd6dks/quad.html

Jason wrote:

> Can anybody help I wish to build a 6 element quad antenna for 70cm mainly
> for satellite work has any body got any detailed designs or know of a
> website with good designs, also where is the best place to get parts for the
> antenna I live in the UK (midlands).
> any help appreciated
>
> --
> Yours
> Jason
>
> uPVC@btinternet.com

5604. FA Drake RCS-4 Remote Coax Ant Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 15:55:28 UTC
From: Charles Hugg <chashugg@earthlink.net>
Message-ID: <QLHn8.4471$xa5.254609@newsread1.prod.itd.earthlink.net>
Source record: 146142

Please see my as new Drake RCS-4 Remote Antenna Coax Switch up for auction
at:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1341651654&ssPageName=ADM
E:B:LC:US:1
Thanks, Charlie Hugg, K5MBX

5605. Re: WTB Heathkit Antenna Tuner 2060A

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 17:44:45 UTC
From: Per Enocson <08.7676765@telia.com>
Message-ID: <hmJn8.27447$n4.5418310@newsc.telia.net>
Source record: 146143

There is one on Ebay right now, www.ebay.com, use the search function to find it.

73/ Per SM0WRA
"Don" <DON-COM@attbi.com> skrev i meddelandet news:z1cn8.110440$q2.11049@sccrnsc01...
>
> WTB
>
> Heathkit 2060A antenna tuner in good condition at a reasonable price.
>
> Don W6PJJ
> Sacramento, CA
> don-com@attbi.com
>
>
>

5606. opinions on GAP antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 19:45:52 UTC
From: IronHead <slipkid@kwiknet.net>
Message-ID: <P7Ln8.682$HxK2.11403455@news2.randori.com>
Source record: 146144

I am considering buy a GAP hf vertical antenna. Can any give recommendations, pro's and con's. Thanks.

5607. Re: opinions on GAP antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 20:14:38 UTC
From: Stahr <w6nyc@earthlink.net>
Message-ID: <OyLn8.5070$xa5.289470@newsread1.prod.itd.earthlink.net>
Source record: 146145

Love my Titan DX....

But, decide for yourself, check out the review section at:
www.eham.net.

Dennis - W6NYC

"IronHead" <slipkid@kwiknet.net> wrote in message
news:P7Ln8.682$HxK2.11403455@news2.randori.com...
> I am considering buy a GAP hf vertical antenna. Can any give
> recommendations, pro's and con's. Thanks.
>
>

5608. Re: Questions on Inverted L Wire Antenna, Please

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 20:45:44 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c9f89bc$1_1@corp.newsgroups.com>
Source record: 146146

"Murray Green" <mgreen@erols.com> wrote in message
news:3C9EA69F.ECA6CB81@erols.com...
>
> A ham friend of mine recently installed a 120' 1/2 wave inverted L
> antenna for 4 MHz. The antenna bends at 50'; the remainder out for 70".
> Ground radials are installed.
>
> For this type of antenna he would like to know:
>
> (1) what is the directional pattern?
> (2) what are the typical gain figures?
> Thanks.
> 73, Murray, K3BEQ

Murray Direct him to the following Information on Cebik's Web Page:
http://www.cebik.com/ltv.html

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.342 / Virus Database: 189 - Release Date: 3/14/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5609. Re: Sky Loop Suspension?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 20:47:33 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3c9f8a29$1_1@corp.newsgroups.com>
Source record: 146147

"AO KD5FXT" <aokd5fxt@cs.com> wrote in message
news:20020324144604.05620.00002996@mb-co.news.cs.com...
> Ok, i am abt to hang a 160 meter (530 feet) sky loop. It will be
suspended by
> and thru the trees on my property. What is the best string to use? I
would
> think that, what my question might be is, "what type of string is the most
> weather resistant?' Pls email me with suggestions, as I sometimes forget
to
> check this ng. Thanks, Bill, KD5FXT

Bill I wouldn't use String at all I use a 500 ft loop here works great by
the way.. Use 5/8 Dacron rope at four points.. that also works great.
73 Dave kc1di

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.342 / Virus Database: 189 - Release Date: 3/14/02

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5610. Re: Questions on Inverted L Wire Antenna, Please

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 20:55:10 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203251255.2c77f889@posting.google.com>
Source record: 146148

Murray Green <mgreen@erols.com> wrote in message news:<3C9EA69F.ECA6CB81@erols.com>...
> A ham friend of mine recently installed a 120' 1/2 wave inverted L
> antenna for 4 MHz. The antenna bends at 50'; the remainder out for 70".
> Ground radials are installed.
>
> For this type of antenna he would like to know:
>
> (1) what is the directional pattern?

It barely has one. The pattern is like a racetrack with max gain
broadside to the horizontal wire.
> (2) what are the typical gain figures?

According to Eznec about 1.7-1.8 dbi or so. So like doc said, for all
practical purposes it's fairly omnidirectional. But it does have a tad
bit of gain broadside using DBI as the reference. You might notice
this a little bit on fairly close in stations as that gain comes from
the horizontal wire. Fairly high angle ...And you have to consider the
wavelength above ground for the horizontal wire. If the wire were
high, some of that radiation will be at low angles. If low , probably
not. DX at low angles? I doubt much difference at all in any direction
as most of that radiation will be produced by the vertical section.
Not as much as a 1/4 wave L though. The half wave L does have a good
bit of high angle radiation from the horizontal wire. There is no
overhead null. The maximum gain is nearly overhead. About 100 degrees.
OK for close in, but a compromise for dx. For average close in work on
75m, a dipole would be much better. I'm not sure what he's using it
for.. MK

5611. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 20:58:57 UTC
From: Owen Duffy <owen@oda.com.au>
Message-ID: <3C9F8F91.66502131@oda.com.au>
Source record: 146149

"Monte B. Carroll" wrote:
>
> I just discovered various lengths of RG-8 in the basement. What is
> your opinin of running some smallish coax like RG-58/u out of the rigs
> for 100 feet then connecting to the RG-8 for the rest of the run to
> the antenna?

Your 100ft of RG58 and 50ft of RG8 at 146 and some assumptions: VSWR 1.2 at antenna, 2W out from the HT yeilds 350mW at the antenna (only 17% of the available RF was delivered to the antenna).

VSWR will look pretty good at the HT (1.03), so that would please some.

Your feedlines is losing most of the the likely improvement of the otherwise pretty serious antenna installation.

Even if you use RG8 or like for the whole run, you won't like the answers at 2m (40% of the available power delivered to the antenna).

>
> I would prefer to have small cable in the shack for ease of
> manipulation.

Yes, it is convenient... but if you use a low loss cable for the bulk of the run (eg LDF4-50A for 150ft on 2m), then a 10ft tail of RG58 would contribute one third of your system loss.

>
> Monte B. Carroll
> WC4MBC
> Nashville, Tennessee, USA

5612. AautoCAd libraries for RF and Marine electronics installations.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 21:46:55 UTC
From: Z <post@imaZZZZris.demon.co.uk>
Message-ID: <FUm2FwGPr5n8EwAX@imaris.demon.co.uk>
Source record: 146150

Could anyone oblige with a URL of AutoCAD libraries of Aerials, Aerial mountings e.t.c. or know of any shareware of. Libraries of marineMarine electronics

Perhaps aerial manufacturers like Andrew(s?) can supply these libraries.

These might be used in workpacks (construction, general arrangement, schematic, as built type drawings) for prospective future Comms package installation projects. Also would be useful for when I apply for planning permission for a couple of aerials at home.

I'm hopefully moving back into RF systems (from Multiservice and datacomms) so I'm tooling up with new PMS system, knowledge, methods and drawing libraries.

Are there standard representations for radio diagrams in the vain of BS3939 for instance?

--
Z
Remove Zeds in e-mail address to reply.

5613. Re: Questions on Inverted L Wire Antenna, Please

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 22:26:54 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020325172654.28545.00000115@mb-mt.aol.com>
Source record: 146151

Tell your friend to cut it in the middle and feed it at the top. It will be a whole lot easier to match, the radials won't be needed or an issue and with ladder line and a tuner it makes a decent antenna from 160-10.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

5614. Re: opinions on GAP antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 22:33:14 UTC
From: k4ia@aol.comnojunk
Message-ID: <20020325173314.28545.00000116@mb-mt.aol.com>
Source record: 146152

As for the Titan: not bad, deaf on 80 just OK on 40 and above, tall - needs to be guyed. It will get you on all the bands for some decent contacts. Never does better than my top center fed inverted L. If you have any tall trees around that can support a wire L fed with ladder line through a tuner I think it is a better choice.
Radio K4IA
Craig Buck
Fredericksburg, Virginia USA

REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free, Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

5615. Re: Sky Loop Suspension?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 22:50:31 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <XQNn8.12718$n8.9162@nwrddc02.gnilink.net>
Source record: 146153

DAVE - is your 160 loop in a sloping configuration - if so, how high at the feedpoint? Do you use it
only on 160, or on higher bands as well? What feedline/matching system? I'd sure like to get more
details - I have a 70 ft tower, with 5 acres sloping away in an easterly direction that make a
sloping loop look REAL attractive...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

"Pastor-KC1DI" <elbc@pivot.net> wrote in message news:3c9f8a29$1_1@corp.newsgroups.com...
>
> "AO KD5FXT" <aokd5fxt@cs.com> wrote in message
> news:20020324144604.05620.00002996@mb-co.news.cs.com...
> > Ok, i am abt to hang a 160 meter (530 feet) sky loop. It will be
> suspended by
> > and thru the trees on my property. What is the best string to use? I
> would
> > think that, what my question might be is, "what type of string is the most
> > weather resistant?' Pls email me with suggestions, as I sometimes forget
> to
> > check this ng. Thanks, Bill, KD5FXT
>
> Bill I wouldn't use String at all I use a 500 ft loop here works great by
> the way.. Use 5/8 Dacron rope at four points.. that also works great.
> 73 Dave kc1di
>
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.342 / Virus Database: 189 - Release Date: 3/14/02
>
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!

> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5616. Re: Slightly OT: Tesla's patents

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 23:14:59 UTC
From: Otis Cribblecoblis <alaininvc@netscape.net>
Message-ID: <3C9FAF73.8C6CD157@netscape.net>
Source record: 146154

Hello Richard,

If you are really interested in reading a good book on Nikola Tesla, try Margaret Cheney's book, "Tesla...Man out of Time". She also co-authors another book with Robert Uth called, "Tesla...Mater of Lightening". By the way, PBS had a one hour program based on this book also. "My Inventions", his autobiography is available through B&N also, as are all these books.

Ken Burns, the documentary film maker, made a 2 hour film entitled , "Men who Discovered Radio". I have nothing but praise for all of the Burns' brothers films, but I was incensed that throughout the two hours of this show, not once was Tesla's name mentioned! Despite the fact that eight months after Tesla's death, the United States Supreme Court concluded that he, Nikola Tesla, and not Marconi, was the inventor of the radio. Other than this grave omission, the Burns video is quite an earful(!) and very well done.

Alain

Richard Harrison wrote:

> J Harvey wrote:
> "Fun with patents.."
>
> I knew Tesla was responsible for our polyphase power system, induction
> motors and generators, wireless power transmission, advanced
> understanding of resonance, and artificial lightning machines. I knew he
> conceived and designed the Niagra Falls power system. I read a book over
> 50 years ago titled, "Prodigal Genius".
>
> Recently, I bought a bargain Barnes & Noble closeout of "The Inventions,
> Researches and Writings of Nikola Tesla" which seems to be a reprint of
> an 1893 book by an admiring Thomas Commerford Martin of Tesla`s work
> over the previous 10 years. There are 14 chapters! I learned that the
> 3rd-brush d-c generator regulator that used to be on most automobiles
> (after the book was written) was Tesla`s invention. The book and patents
> are wide-ranging.
>
> When I tried to read the list of inventions of Tesla from the URL
> posted, my machine choked up and replied: This page to big to display.
> Amazing!
>
> Best regards, Richard Harrison, KB5WZI

5617. Re: opinions on GAP antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-25 23:43:41 UTC
From: Michael Melland <w9wis@charter.net>
Message-ID: <u9vdbu8nojvq2f@corp.supernews.com>
Source record: 146155

Had a Titan up since 1997, guyed. Survived wind storms, one tornado and
Wisconsin winters. Poor on 75/80 but works fine for me on the other bands.

Check a good deal of info. available on the NJ QRP Club site....

http://www.njqrp.org link on left side of page...

73 de Mike, W9WIS

5618. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 00:19:51 UTC
From: Speaker Repair <topdog@woofer.com>
Message-ID: <3C9FBEA7.7A8@woofer.com>
Source record: 146156

Ravi R wrote:
>
> This might sound silly.. but i was just curious to know if my existing
> Satellite Dish (You know the huge one that rotates..).. can in any way
> modified to be used as a Shortwave Antenna ?

HAHAHA, Good one, man!

Can you tell me how to make my piccolo sound like a tuba????

5619. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 00:22:25 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c9fbf5c$1_1@news.iglou.com>
Source record: 146157

I would believe your battery theory except for the fact that this phone has
not been able to link to the tower since the day I got it out of the box.
Also I know of another guy who had a big improvement on his phone.

--
Steve Ellington N4LQ.
"Ed Cregger" <ecregger@earthlink.net> wrote in message
news:eltu9u4gk5ke86hl42vkbvniekplqhitrs@4ax.com...
> So, removing the battery scraped the corrosion off of the battery
> contacts, resulting in the unit receiving full battery pack voltage,
> which resulted in a better signal. How does that sound? 'Cause we know
> that piece of tape with foil in it did not make a difference! <G>
>
> Did you see the piece on the Fox News Channel where the FTC is going
> after the outfits selling those things? They are being charged with
> fraud.
>
> Ed Cregger, NM2K
> over@yonder.com
>
>
>
>
> On Sun, 24 Mar 2002 23:00:23 -0500, "N4LQ" <N4LQ@igLou.com> wrote:
>
> >I said I was going to buy one of those cell phone antenna boosters and
> >report the results so here goes.
> >My wife's Erickson 788 could never reach the cell tower from our home. I
> >removed the battery, installed the booster and replaced the battery. It
took
> >a total of about 2 minutes.
> >I was immediately greeted with 2 squares on the signal meter. I made
several
> >test calls. For the first time, the phone actually works at our home. I'm
> >impressed!
>

5620. Re: Difference bt 1/4 & 5/8 mobile HF

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 00:30:24 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3C9FC002.1F8C0502@gte.net>
Source record: 146158

Toni wrote:

> Hi,
>
> I would like to know/understand why, for a mobile antenna, 1/4 is any
> different from 5/8 (or even from a tuned screwdriver antenna). As I
> see it, and as long as neither is center nor top loaded, the radiating
> element is the same for both (considering that both use the same whip
> length, ex.: 5~7 ft. for 10m), so my reasoning is that whatever the
> matching network, the radiation pattern will be the same, only network
> looses will be different.
>
> In fact, I don't uderstand very well how a less than 1/4 physical
> length whip + adaptor base may be sold as 5/8, whatever there is in
> the matching network.
>
> Please explain if this is correct or not.
>
> TIA for responses
>
> Toni

The idea that these CB knockoff antennas perform as a 5/8 is pure
marketing.
If they were full length there is a difference as the out of phase portion
of the 5/8 antenna flattens the main lobe resulting in a bit more gain.
Dale W4OP

5621. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 00:41:13 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3C9FC396.597F4F96@shaw.ca>
Source record: 146159

Speaker Repair wrote:
>
> Ravi R wrote:
> >
> > This might sound silly.. but i was just curious to know if my existing
> > Satellite Dish (You know the huge one that rotates..).. can in any way
> > modified to be used as a Shortwave Antenna ?
>
> HAHAHA, Good one, man!
>
> Can you tell me how to make my piccolo sound like a tuba????

I had a good laugh on this one too, but I also remember that
when I was just a kid and didn't know much about any of this
stuff I was asking similar questions. Even at age 60 I am
still
trying to figure antennas out!! The terrible thing is that
if
I hooked it up to a short wave receiver I would likely hear
something better -- just as if I had put a hunk of wire on
the
end. My first real experiences with antennas were hooking
my
homebrewed crystal sets to various metallic things and
discovering
that they worked!! I'm still smiling thinking about this
dish
one though!
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5622. Re: opinions on GAP antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 00:41:33 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <3C9FC3B9.76A72C7E@tampabay.rr.com>
Source record: 146160

i dont know how you mounted your GAP titan but mine didnt need guyed at all
it was fine sucked as an antenna but soild once up

K4IA wrote:

> As for the Titan: not bad, deaf on 80 just OK on 40 and above, tall - needs to
> be guyed. It will get you on all the bands for some decent contacts. Never
> does better than my top center fed inverted L. If you have any tall trees
> around that can support a wire L fed with ladder line through a tuner I think
> it is a better choice.
> Radio K4IA
> Craig Buck
> Fredericksburg, Virginia USA
> ----------------------
> REAL CHEAP Long Distance 4.9 cents/min and REAL CHEAP International, Toll Free,
> Callback, Calling Cards, Pagers and more Tune to http://www.ld.net/?bucksavers

5623. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 01:01:02 UTC
From: dnb <dnb@comcastt.com>
Message-ID: <iLPn8.416203$pN4.28147670@bin8.nnrp.aus1.giganews.com>
Source record: 146161

Would you slip a square of aluminum foil in there and report the findings?
It would be interesting to compare against the "$20 wonder".

"N4LQ" <N4LQ@igLou.com> wrote in message news:3c9fbf5c$1_1@news.iglou.com...
> I would believe your battery theory except for the fact that this phone
has
> not been able to link to the tower since the day I got it out of the box.
> Also I know of another guy who had a big improvement on his phone.
>
> --
> Steve Ellington N4LQ.
> "Ed Cregger" <ecregger@earthlink.net> wrote in message
> news:eltu9u4gk5ke86hl42vkbvniekplqhitrs@4ax.com...
> > So, removing the battery scraped the corrosion off of the battery
> > contacts, resulting in the unit receiving full battery pack voltage,
> > which resulted in a better signal. How does that sound? 'Cause we know
> > that piece of tape with foil in it did not make a difference! <G>
> >
> > Did you see the piece on the Fox News Channel where the FTC is going
> > after the outfits selling those things? They are being charged with
> > fraud.
> >
> > Ed Cregger, NM2K
> > over@yonder.com
> >
> >
> >
> >
> > On Sun, 24 Mar 2002 23:00:23 -0500, "N4LQ" <N4LQ@igLou.com> wrote:
> >
> > >I said I was going to buy one of those cell phone antenna boosters and
> > >report the results so here goes.
> > >My wife's Erickson 788 could never reach the cell tower from our home.
I
> > >removed the battery, installed the booster and replaced the battery. It
> took
> > >a total of about 2 minutes.
> > >I was immediately greeted with 2 squares on the signal meter. I made
> several
> > >test calls. For the first time, the phone actually works at our home.
I'm
> > >impressed!
> >
>

>
>

5624. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 01:03:53 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2503021703530001@142.179.118.0>
Source record: 146162

In article <3c9ea0f4_2@news.iglou.com>, "N4LQ" <N4LQ@igLou.com> wrote:

> I said I was going to buy one of those cell phone antenna boosters and
> report the results so here goes.
> My wife's Erickson 788 could never reach the cell tower from our home. I
> removed the battery, installed the booster and replaced the battery. It took
> a total of about 2 minutes.
> I was immediately greeted with 2 squares on the signal meter. I made several
> test calls. For the first time, the phone actually works at our home. I'm
> impressed!

In article <eltu9u4gk5ke86hl42vkbvniekplqhitrs@4ax.com>, Ed Cregger
<ecregger@earthlink.net> replied:

> So, removing the battery scraped the corrosion off of the battery
> contacts, resulting in the unit receiving full battery pack voltage,
> which resulted in a better signal. How does that sound? 'Cause we know
> that piece of tape with foil in it did not make a difference! <G>

In article <3c9fbf5c$1_1@news.iglou.com>, "N4LQ" <N4LQ@igLou.com> replied:

> I would believe your battery theory except for the fact that this phone
> has not been able to link to the tower since the day I got it out of the
> box. Also I know of another guy who had a big improvement on his phone.

What happens if you remove the battery, remove the booster, and replace
the battery?

David, ex-W8EZE

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

5625. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 01:11:59 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <yVPn8.2481$oz6.640599@news20.bellglobal.com>
Source record: 146163

> I would believe your battery theory except for the
> fact that this phone has not been able to link to
> the tower since the day I got it out of the box.
> Also I know of another guy who had a big
> improvement on his phone.

Maybe the lunatics that design the cell phones have an interest in the 'stick-on booster' companies.

Therefore, the cell phones don't have an antenna at all, they just have one-half of a coupling circuit. You have to buy the internal antenna separately and stick it in between the phone and battery. If you don't buy the aftermarket internal antenna, then you have to make do with just the leakage from the coupling circuit (poor match to free space).

Cell Phone: $nil, sign here.
Antenna (sold separately): $20 plus shipping and handling.

Think about the manufacturing costs and profit levels. A dozen cell phones wouldn't have the profit of one stick-on antenna.

It would explain a lot. ;-)

5626. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 01:15:59 UTC
From: AstroMan <dont@spam.me>
Message-ID: <u9vj42kualuc3@corp.supernews.com>
Source record: 146164

You're putting up a tower with a G5RV!?!?!?!?!?!
Bwaa ha ha ha
What a maroon!

--

"Monte B. Carroll" <monte.carroll@nashville.com> wrote in message
news:3c9dd933.260709152@news.nashville.com...
>
> Good morning ladies and gentlemen. The tower is about ready to tilt
> up and mount, and I need some coax to run from the shack to the
> antennas - probably around 150 feet.
>
> There will be two runs. One is from a 100 watt HF rig to a G5RV. The
> other is for a 6 watt 2-meter HT (may upgrade to a 50 watt unit later)
> to a J-pole. They will travel out of my 3rd story shack, down to the
> first level, across to the garage, over the garage roof to the tower.
>
> What is your suggestion for coax? I would like the best deal - not
> necessarily the cheapest or most expensive - for my situation. And
> where do you recommend I purchase it? Thank you for your efforts.
>
> Monte B. Carroll
> WC4MBC
> Nashville, Tennessee, USA

5627. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 01:21:05 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3C9FCCEE.8DFCB375@icok.net>
Source record: 146165

Monte,
The quick and dirty answer is to look at a coax
'spec' table. Decide how much loss you find acceptible,
then choose a cable that falls in that 'loss' range.
Most places that sell radio 'stuff' sell coax, pick
the one with the 'best' prices. If you find a place
that has prices that are too good to be true, it's
probably too good to be 'true'.
'Doc

5628. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 01:51:03 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3c9fd423$1_3@news.iglou.com>
Source record: 146166

The thing is really sticky. I think it would be damaged if I try to pull it
off otherwise I would be glad to do so.
I doubt if the aluminum foil would have any effect. After all, the battery
itself is metal.

--
Steve Ellington N4LQ.
"dnb" <dnb@comcastt.com> wrote in message
news:iLPn8.416203$pN4.28147670@bin8.nnrp.aus1.giganews.com...
> Would you slip a square of aluminum foil in there and report the findings?
> It would be interesting to compare against the "$20 wonder".
>
>
> "N4LQ" <N4LQ@igLou.com> wrote in message
news:3c9fbf5c$1_1@news.iglou.com...
> > I would believe your battery theory except for the fact that this phone
> has
> > not been able to link to the tower since the day I got it out of the
box.
> > Also I know of another guy who had a big improvement on his phone.
> >
> > --
> > Steve Ellington N4LQ.
> > "Ed Cregger" <ecregger@earthlink.net> wrote in message
> > news:eltu9u4gk5ke86hl42vkbvniekplqhitrs@4ax.com...
> > > So, removing the battery scraped the corrosion off of the battery
> > > contacts, resulting in the unit receiving full battery pack voltage,
> > > which resulted in a better signal. How does that sound? 'Cause we know
> > > that piece of tape with foil in it did not make a difference! <G>
> > >
> > > Did you see the piece on the Fox News Channel where the FTC is going
> > > after the outfits selling those things? They are being charged with
> > > fraud.
> > >
> > > Ed Cregger, NM2K
> > > over@yonder.com
> > >
> > >
> > >
> > >
> > > On Sun, 24 Mar 2002 23:00:23 -0500, "N4LQ" <N4LQ@igLou.com> wrote:
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> > > >I said I was going to buy one of those cell phone antenna boosters
and

> > > >report the results so here goes.
> > > >My wife's Erickson 788 could never reach the cell tower from our
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> I
> > > >removed the battery, installed the booster and replaced the battery.
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> > took
> > > >a total of about 2 minutes.
> > > >I was immediately greeted with 2 squares on the signal meter. I made
> > several
> > > >test calls. For the first time, the phone actually works at our home.
> I'm
> > > >impressed!
> > >
> >
> >
> >
>
>

5629. Re: Slightly OT: Tesla's patents

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 01:53:53 UTC
From: Jim Besselman <jbesselm@bellsouth.net>
Message-ID: <3oQn8.2982$Q7.348229@e3500-atl1.usenetserver.com>
Source record: 146167

A couple of years ago I was visiting the Museum of Science and Technology in Washington, DC. I found it interesting that in the section on electrical engineering there was a large area devoted to Thomas Edison and no mention of Nikola Tesla.

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:11168-3C9EA858-340@storefull-2395.public.lawson.webtv.net...
> J Harvey wrote:
> "Fun with patents.."
>
> I knew Tesla was responsible for our polyphase power system, induction
> motors and generators, wireless power transmission, advanced
> understanding of resonance, and artificial lightning machines. I knew he
> conceived and designed the Niagra Falls power system. I read a book over
> 50 years ago titled, "Prodigal Genius".
>
> Recently, I bought a bargain Barnes & Noble closeout of "The Inventions,
> Researches and Writings of Nikola Tesla" which seems to be a reprint of
> an 1893 book by an admiring Thomas Commerford Martin of Tesla`s work
> over the previous 10 years. There are 14 chapters! I learned that the
> 3rd-brush d-c generator regulator that used to be on most automobiles
> (after the book was written) was Tesla`s invention. The book and patents
> are wide-ranging.
>
> When I tried to read the list of inventions of Tesla from the URL
> posted, my machine choked up and replied: This page to big to display.
> Amazing!
>
> Best regards, Richard Harrison, KB5WZI
>

5630. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 02:15:11 UTC
From: Scott Haney <heloderma@no.mchsi.spam.com>
Message-ID: <Xns91DCCE01584BFhelodermahomecom@63.240.76.16>
Source record: 146168

Speaker Repair <topdog@woofer.com> wrote in news:3C9FBEA7.7A8@woofer.com:

> HAHAHA, Good one, man!
>
> Can you tell me how to make my piccolo sound like a tuba????
>

Well, I've played both (piccolo not at all well, though), and I'd have to say that they sound identical when they're cut with a hacksaw. :)

Scott N0GUD (really)

5631. Loop or Extended Zepp

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 02:39:35 UTC
From: Ken Johnson <kckmjohn@comcast.net>
Message-ID: <MPG.1709a96d6f9575cc989681@news.mi.comcast.giganews.com>
Source record: 146169

I have one of those narrow lakefront lots (50'x850'). I was considering putting up a 1000' or so loop as I have trees in the right places. (35' average height) But in reading I discovered loops work best in the form of a loop. duh What I would be putting up would be more like a folded dipole being only 50' in width. Would it be better to put up a Double Extended Zepp instead? Is there any way to model this? Thanks WB8VTW

5632. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 03:34:13 UTC
From: monte.carroll@nashville.com
Message-ID: <3c9fe7fd.395588215@news.nashville.com>
Source record: 146170

Thank you for the reply and for the link. Looks like a purchase of a lot of new coax is in order.

OK, here's another question. How much loss is there in connecting two, maybe three sections of RG-8 for the 2-meter? In other words, maybe one length of 75 feet connected to 35 feet connected to 35 feet for a total length of 145 feet.

Monte B. Carroll
WC4MBC
Nashville, Tennessee, USA

5633. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 03:54:38 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3c9ff085$0$1598$1dc6e903@news.corecomm.net>
Source record: 146171

If the metal battery does not have any effect then how is a copper trace
on a piece of plastic going to have any effect especially when it is
sandwiched between said metal battery and the metal insides of the cell
phone?

Dave WD9BDZ

N4LQ wrote:
>
> The thing is really sticky. I think it would be damaged if I try to pull it
> off otherwise I would be glad to do so.
> I doubt if the aluminum foil would have any effect. After all, the battery
> itself is metal.
>
> --
> Steve Ellington N4LQ.
> "dnb" <dnb@comcastt.com> wrote in message
> news:iLPn8.416203$pN4.28147670@bin8.nnrp.aus1.giganews.com...
> > Would you slip a square of aluminum foil in there and report the findings?
> > It would be interesting to compare against the "$20 wonder".
> >
> >
> > "N4LQ" <N4LQ@igLou.com> wrote in message
> news:3c9fbf5c$1_1@news.iglou.com...
> > > I would believe your battery theory except for the fact that this phone
> > has
> > > not been able to link to the tower since the day I got it out of the
> box.
> > > Also I know of another guy who had a big improvement on his phone.
> > >
> > > --
> > > Steve Ellington N4LQ.
> > > "Ed Cregger" <ecregger@earthlink.net> wrote in message
> > > news:eltu9u4gk5ke86hl42vkbvniekplqhitrs@4ax.com...
> > > > So, removing the battery scraped the corrosion off of the battery
> > > > contacts, resulting in the unit receiving full battery pack voltage,
> > > > which resulted in a better signal. How does that sound? 'Cause we know
> > > > that piece of tape with foil in it did not make a difference! <G>
> > > >
> > > > Did you see the piece on the Fox News Channel where the FTC is going
> > > > after the outfits selling those things? They are being charged with
> > > > fraud.
> > > >
> > > > Ed Cregger, NM2K
> > > > over@yonder.com

> > > >
> > > >
> > > >
> > > >
> > > > On Sun, 24 Mar 2002 23:00:23 -0500, "N4LQ" <N4LQ@igLou.com> wrote:
> > > >
> > > > >I said I was going to buy one of those cell phone antenna boosters
> and
> > > > >report the results so here goes.
> > > > >My wife's Erickson 788 could never reach the cell tower from our
> home.
> > I
> > > > >removed the battery, installed the booster and replaced the battery.
> It
> > > took
> > > > >a total of about 2 minutes.
> > > > >I was immediately greeted with 2 squares on the signal meter. I made
> > > several
> > > > >test calls. For the first time, the phone actually works at our home.
> > I'm
> > > > >impressed!
> > > > >
> > > >
> > > >
> > > >
> > >
> >

5634. Re: Slightly OT: Tesla's patents

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 03:56:46 UTC
From: richardharrison@webtv.net
Message-ID: <15049-3C9FF17E-93@storefull-2394.public.lawson.webtv.net>
Source record: 146173

Jim Besselman wrote:
"I found it interesting that in the section on electrical engineering there was a large area devoted to Thomas Edison and no mention of Nikola Tesla."

The phonograph and movies have more sex appeal than polyphase power, induction motors, and alternators. The conspiracy theorists say Edison and GE used gifts and threats to focus attention on their man, Thomas Edison, and exclude Tesla, who sold his patents to Westinghouse.

Best regards, Richard Harrison, KB5WZI

5635. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 04:05:29 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <dsSn8.5709$ov6.5559@nwrddc04.gnilink.net>
Source record: 146172

You're pretty determined to waste power on feedline losses, aren't you... 8^)

Stringing the lengths/types of coax you specify thru several added connectors and adaptors will cost
you about half your power at 144 mhz...

C'mon fella - dust off the ol' wallet, and get yourself the RIGHT stuff to finish yer install - the
satisfaction of a job done properly will last MUCH longer than the few dollars you might otherwise
"save"...

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"
"Monte B. Carroll" <monte.carroll@nashville.com> wrote in message
news:3c9fe7fd.395588215@news.nashville.com...
>
> Thank you for the reply and for the link. Looks like a purchase of a
> lot of new coax is in order.
>
> OK, here's another question. How much loss is there in connecting
> two, maybe three sections of RG-8 for the 2-meter? In other words,
> maybe one length of 75 feet connected to 35 feet connected to 35 feet
> for a total length of 145 feet.
>
> Monte B. Carroll
> WC4MBC
> Nashville, Tennessee, USA

5636. Par Omniangle

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 04:15:56 UTC
From: JEEPMON <JEEPMON@HOTMAIL.COM>
Message-ID: <0CSn8.129894$uA5.112895@rwcrnsc51.ops.asp.att.net>
Source record: 146174

I like all that I have heard about these antennas but I have no idea how they work. Are there any antenna books that have these type of antennas listed? With only 2 apparent elements how is this omni directional? How is it fed? Is there any matching network? What is the gain and why? What wavelength are the elements? What if you point this antenna straight up will it work as well and be then vertically polarized? With the two elements so close do they couple with each other? Also I was told that most 6 meter halo's are 'shorter' than 1/2 wavelength is this why the Par is better than a halo. Has anyone compared a 'full-sized halo to the Par? Also how does the Par compare to 'Bigwheel' omni antennas like those made by wimo at www.wimo.com ?

HELP the Par Omni-Ignorant

5637. Bigwheel antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 04:23:58 UTC
From: JEEPMON <JEEPMON@HOTMAIL.COM>
Message-ID: <yJSn8.125937$q2.14071@sccrnsc01>
Source record: 146175

I am looking for a commercially made bigwheel antenna for the 6 meter band. Wimo at www.wimo.com makes them only for 2m and 440. Are there any antenna books that have these antennas in them? Where can I find the specs to make one for 6 meters? How long is each of the three spokes? Does it need any kind of matching network? How would a 6 meter bigwheel antenna compare to the Par omniangle 6 meter antenna as far as gain and radiation resistance? Has anyone ever compared any of these two types of antennas side by side (bigwheel vs. omniangle). I have narrowed it down to these types of horizontally polarized 'true' omni directional antennas for my 6 meter work but before I build or purchase one I would like to find out all I can about them. Please lead me to any books or articles that might help.

73's and thank the computer gods for spellcheckers!?

5638. WTB Thunder 8 XB Vertical Antenna (Signal Engineering)

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 05:16:17 UTC
From: WP4IDK <wp4idk@qsl.net>
Message-ID: <WpTn8.16207$To6.5388443@e420r-atl1.usenetserver.com>
Source record: 146176

Hello..
I am antenna space limited ..

Want to buy a Thunder 8 XB Vertical Beam Antenna by Signal Engineering at a reasonable cost.

Thanks..

Alvin
wp4idk@qsl.net

5639. Re: Loop or Extended Zepp

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 06:12:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA01133.B3CF87E1@eznec.com>
Source record: 146177

Either of these would be easy to model with the free EZNEC demo program, available from http://eznec.com. The feedpoint impedance accuracy of the loop wouldn't be too good, especially at higher frequencies, due to the limitations of the demo version, but the pattern and gain would be reasonably accurate, at least at the lower frequencies. The standard version of EZNEC would easily handle the loop.

Roy Lewallen, W7EL

Ken Johnson wrote:
>
> I have one of those narrow lakefront lots (50'x850'). I was considering
> putting up a 1000' or so loop as I have trees in the right places. (35'
> average height) But in reading I discovered loops work best in the form
> of a loop. duh What I would be putting up would be more like a folded
> dipole being only 50' in width. Would it be better to put up a Double
> Extended Zepp instead? Is there any way to model this? Thanks WB8VTW

5640. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 06:14:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA011B4.CAF026C0@eznec.com>
Source record: 146178

If you use properly installed connectors and seal the connections extremely well to keep water out, there'll be negligible loss from using multiple sections. Do a search of this newsgroup on https://www.groups.google.com and you'll find a lot of information about sealing connectors.

Roy Lewallen, W7EL

"Monte B. Carroll" wrote:
>
> Thank you for the reply and for the link. Looks like a purchase of a
> lot of new coax is in order.
>
> OK, here's another question. How much loss is there in connecting
> two, maybe three sections of RG-8 for the 2-meter? In other words,
> maybe one length of 75 feet connected to 35 feet connected to 35 feet
> for a total length of 145 feet.
>
> Monte B. Carroll
> WC4MBC
> Nashville, Tennessee, USA

5641. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 06:19:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA0130C.E26E3E0A@eznec.com>
Source record: 146179

This is the question we'd all like the answer to. Another poster said he had put the gadget in and taken it out several times and seen the signal improve each time it went in and decrease each time it was removed. So far, no one has reported the results of a test using a piece of aluminum foil. Two postings reporting substantial signal improvement have seemed credible, but I'd still really like to see this with my own eyes before taking the gadget out of the scam category. If it really does improve the signal, I don't have a clue why, and I'd really like to know.

Roy Lewallen, W7EL

"David G. Nagel" wrote:
>
> If the metal battery does not have any effect then how is a copper trace
> on a piece of plastic going to have any effect especially when it is
> sandwiched between said metal battery and the metal insides of the cell
> phone?
>
> Dave WD9BDZ

5642. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 08:13:49 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a7pajt$e6h$3@quark.scn.rain.com>
Source record: 146180

Monte B. Carroll <monte.carroll@nashville.com> wrote:

> OK, here's another question. How much loss is there in connecting
> two, maybe three sections of RG-8 for the 2-meter? In other words,
> maybe one length of 75 feet connected to 35 feet connected to 35 feet
> for a total length of 145 feet.

Forget the RG-8 for 2 meters. Use better transmission line.

Also be aware that sometimes the losses in the connectors is as great
or greater than the loss in the coax. It is best to minimize connectors.

--
Bill Nelson (billn@peak.org)

5643. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 08:15:07 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a7pamb$e6h$4@quark.scn.rain.com>
Source record: 146181

Roy Lewallen <w7el@eznec.com> wrote:
> If you use properly installed connectors and seal the connections
> extremely well to keep water out, there'll be negligible loss from using
> multiple sections. Do a search of this newsgroup on
> https://www.groups.google.com and you'll find a lot of information about
> sealing connectors.

That might be somewhat true on 2 meters if using N connectors. But UHF
connectors seem to be rather lossy.

--
Bill Nelson (billn@peak.org)

5644. Tuner on Screwdriver Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 09:54:37 UTC
From: n4mbi@earthlink.net
Message-ID: <3ca0447a.2021690@news.earthlink.net>
Source record: 146182

Is an antenna tuner necessary when using a screwdriver antenna for
mobile operation ??

Thanks in advance for any advise.

Rick

5645. traps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 11:27:15 UTC
From: Jan Van Hoof <vanhoofj@pioneer.be>
Message-ID: <3ca05b16$0$7116$4d4efb8e@news.be.uu.net>
Source record: 146183

Hi, anyone an idea how to tune traps for a wire dipole, using an SWR analyzer and receiver?

thanks for quick response
Jan

5646. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 12:20:15 UTC
From: fractenna@aol.com
Message-ID: <20020326072015.00700.00000181@mb-cq.aol.com>
Source record: 146184

Cell phones, with few exceptions, use the chassis as a radiating counterpoise.

When held to the face, some of that radiation is suppressed in the far field, and the detuning is not trivial. Hence there is some loss of gain when compared to free space.

The idea of using the battery pack actively as part of this tuned counterpoise led to these alleged coupling devices. I have tested the two advertised on television and have not been able to replicate the claims. They are not fractal antennas/couplers, as some have publicly stated here on this NG.

Incidentally, in the last two years there have been numerous and repeated allegations that I and/or affiliates have been involved with these devices. This is not correct.

73,
Chip N1IR

5647. Re: 6 meter antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 12:22:10 UTC
From: g3zxx@twxrg.info
Message-ID: <7d9cd384.0203260422.372b0669@posting.google.com>
Source record: 146185
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hi Mark,

I'm a 6m repeater keeper, GB3WX, in the UK.

We have tried various "White-stick" antennas, as we call them, and although quoting significant gains, the polar diagrams left much to be desired, in terms of lobes and angle to the horizontal. Gain is not everything.

What about the Cushcraft AR6 or ARX6

The AR6 is just a halfwave base fed, and the ARX6 is 2 x halfwave, although I'm a bit concerned about the quoted gain. My perceptions is that it's just a pair of "close-spaced" halfwaves in phase, and therefore the max gain will be about 1.9 dBD at best.

We have been using an AR6, for over a year now, it has withstood gales with gusts to 80+ mph and everyone in the group indicated that they were getting a stronger signal from the repeater, when we replaced the original "white-stick" with the simple half wave.

Hopefully, this will be of some use to you.

Cheers
Dave, G3ZXX.

5648. Re: Slightly OT: Tesla's patents

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 12:23:54 UTC
From: fractenna@aol.com
Message-ID: <20020326072354.00700.00000182@mb-cq.aol.com>
Source record: 146186

>
>Jim Besselman wrote:
>"I found it interesting that in the section on electrical engineering
>there was a large area devoted to Thomas Edison and no mention of Nikola
>Tesla."
>
>The phonograph and movies have more sex appeal than polyphase power,
>induction motors, and alternators. The conspiracy theorists say Edison
>and GE used gifts and threats to focus attention on their man, Thomas
>Edison, and exclude Tesla, who sold his patents to Westinghouse.
>
>Best regards, Richard Harrison, KB5WZI
>

Hmmm...this may be a matter of revolving displays. They certainly had a nice Tesla display a while back, and the USPTO in Crystal City showcased Tesla for some time.

Very nice video last Summer on PBS called TESLA MASTER OF LIGHTNING. Excellent companion book too.

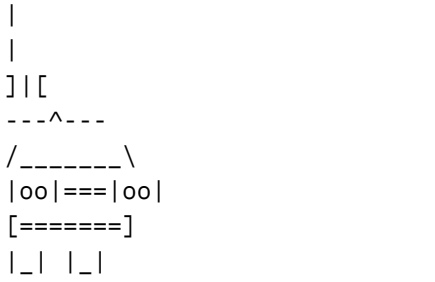
73,
Chip N1IR

5649. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 12:53:06 UTC
From: radiobufff@aol.comrfi.tvi
Message-ID: <20020326075306.07451.00000186@mb-cc.aol.com>
Source record: 146187

I found them at Ocean State Job Lot here in MA and they were $2.99. I asked the store manager if I could return it if it did not work, he said "no problem". Bought one and put it on, no difference. On the way home I drive through an area where my call will drop EVERY time,about a half mile stretch, no question, been this way for two years, called my wife and was able to hold the call for the first time ever. I actually turned around and drove through the same dead spot again, no dropped call, no channge in bar graph, still no bars but the call held, went back to the store and bought one for my wife's phone, who would have thought? go figure......

Radio in the Bufff
Running barefoot
Co-Ed Naked Radio
Support your local Oscillator



5650. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 13:08:33 UTC
From: Shutup_cartman@remove.hotmail.this.com.now
Message-ID: <3ca071af.1238999@news.aei.net>
Source record: 146188

On Mon, 25 Mar 2002 22:19:56 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>This is the question we'd all like the answer to. Another poster said he
>had put the gadget in and taken it out several times and seen the signal
>improve each time it went in and decrease each time it was removed.

This is only a wild stab:

Remember that the bars on the phone display indicate signal strenght,
not quality. Could putting that little foil trace thiggnie near the
units RF amp or antenna simply be reflecting signals from inside the
phones and they interpret it as an extra bar or two?

Just a wild guess...

Allen

5651. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 13:18:29 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203260518.1dce1a8f@posting.google.com>
Source record: 146189

My opinion, Roy, is that the thing ___could___ work.

But it would only work on certain phones. The ads also do not differentiate between PCS (1800 to 1900 MHz), and 800 MHz cellular.

The typical cell phone antenna can be thought of as a dipole consisting of the 'antenna' part and the rest of the phone, or as a ground plane antenna for PCS. It is believable that for certain phones at certain frequencies placing a 'fractal' element at the proper place in the phone could create a directional pattern that would improve coverage. However, you would have to have the right phone on the right frequency and be facing in the proper direction.

As to if it __always__ works, I seriously doubt it.

Jim
N8EE

5652. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 13:23:53 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203260523.31b7525d@posting.google.com>
Source record: 146190

"AstroMan" <dont@spam.me> wrote in message news:<u9vj42kualuc3@corp.supernews.com>...
> You're putting up a tower with a G5RV!?!?!?!?!?!
> Bwaa ha ha ha
> What a maroon!

You mean he is a shade of red?

Does that mean he is a kind of communist?

5653. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 13:30:15 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3CA076C7.4DDB5D97@gte.net>
Source record: 146191

Bill Nelson wrote:

> Monte B. Carroll <monte.carroll@nashville.com> wrote:
>
> > OK, here's another question. How much loss is there in connecting
> > two, maybe three sections of RG-8 for the 2-meter? In other words,
> > maybe one length of 75 feet connected to 35 feet connected to 35 feet
> > for a total length of 145 feet.
>
> Forget the RG-8 for 2 meters. Use better transmission line.
>
> Also be aware that sometimes the losses in the connectors is as great
> or greater than the loss in the coax. It is best to minimize connectors.
>
> --
> Bill Nelson (billn@peak.org)

According to my HP8713 network analyzer, the UHF connector loss (from a pair+ barrell) runs in the 0.2 dB range. Not great for EME but not noticable for terrestrial work.

Dale W4OP

5654. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 13:37:47 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3CA079AB.128F282C@crosslink.net>
Source record: 146193

Once upon a time some crooks began marketing little pinwheels that mounted between your carburettor and engine to "better atomize the fuel" and give huge increases in gas mileage and horsepower. A major motorcycle magazine had them installed at their equivalent of a hamfest and reported a significant gain in both power and economy on the 3-400 mile trip home. Then another magazine bought the devices to do a before & after comparison on a dynamometer. They found gas consumption up and power down about 10% when these "marvels" were installed. This prompted the first rag to duplicate the second's dyno test; but when they tried to remove the devices they found none had ever been installed!! The crooks had taken their $$$ and then their credibility.

73, KA3DWW

5655. Re: Par Omniangle

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 13:38:19 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3CA078A9.22B093F5@gte.net>
Source record: 146192

JEEPMON wrote:

> I like all that I have heard about these antennas but I have no idea how
> they work. Are there any antenna books that have these type of antennas
> listed? With only 2 apparent elements how is this omni directional? How is
> it fed? Is there any matching network? What is the gain and why? What
> wavelength are the elements? What if you point this antenna straight up will
> it work as well and be then vertically polarized? With the two elements so
> close do they couple with each other? Also I was told that most 6 meter
> halo's are 'shorter' than 1/2 wavelength is this why the Par is better than
> a halo. Has anyone compared a 'full-sized halo to the Par? Also how does the
> Par compare to 'Bigwheel' omni antennas like those made by wimo at
> www.wimo.com ?
>
> HELP the Par Omni-Ignorant

The PAR Omni is somewhat longer than a half wave. It is this electrical length combined with the isosceles triangle shape that yields a near perfect omni (within +/- 0.4dB). By elongating either the 2 sides OR the base, one could make its pattern elliptical either front back or side-side like other omnis. But, with the chosen dimensions, it is a near perfect omni.
To the best of my knowledge, this antenna 1st appeared in an RCA Technical note from the 50's. Later, the shape was included in the AO softare modeling package.

Because the antenna is non- resonant a matchbox is required to convert its 11+J90 Z to 50 Ohms. Finally, a current mode balun is built in to ensure that both sides of the antenna are equally illuminated and that the feed does not radiate.
Gain, when integrated over the full 360 degree azimuth circle is about 0.4dB more than traditional shortened 1/2 wave omnis.
Hope this helps.

Dale W4OP
for PAR Electronics, Inc.

5656. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 13:57:15 UTC
From: Bill Ogden <ogden@us.ibm.com>
Message-ID: <3CA07E3B.470C8DB0@us.ibm.com>
Source record: 146194

I think the key words here are "properly installed" connectors. I suggest that properly installing connectors (so as to minimize any impedance bumps and keep the shield coverage uniform) is easier said than done. I admire the nice, uniform connections on coax I buy and I have never been able to as neat a job at home. I either melt the center insulation or end up with erratic soldering of the shield around the connector.

Bill Ogden
W2WO

> Roy Lewallen <w7el@eznec.com> wrote:
> > If you use properly installed connectors and seal the connections
> > extremely well to keep water out, there'll be negligible loss from using
> > multiple sections. Do a search of this newsgroup on
> > https://www.groups.google.com and you'll find a lot of information about
> > sealing connectors.
>

5657. Re: Tuner on Screwdriver Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 14:08:18 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3CA080BF.78C75CAD@icok.net>
Source record: 146195

Rick,
No, a tuner isn't (or shouldn't) be necessary with
a screw driver antenna. You will need some methode of
impedance matching, but that's usually provided with
the commercially made screw drivers.
'Doc

5658. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 14:30:26 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <UYSgPGqGfFCxTsVfEdkZ8mF8XM7x@4ax.com>
Source record: 146196

Roy Lewallen <w7el@eznec.com> wrote:

>This is the question we'd all like the answer to. Another poster said he
>had put the gadget in and taken it out several times and seen the signal
>improve each time it went in and decrease each time it was removed. So
>far, no one has reported the results of a test using a piece of aluminum
>foil. Two postings reporting substantial signal improvement have seemed
>credible, but I'd still really like to see this with my own eyes before
>taking the gadget out of the scam category. If it really does improve
>the signal, I don't have a clue why, and I'd really like to know.

??????

Supposedly, it captures stray radiation in the phone and re-radiates it. See
http://www.wirelesscertified.com/

??????

Bob
k5qwg
>
>Roy Lewallen, W7EL
>
>"David G. Nagel" wrote:
>>
>> If the metal battery does not have any effect then how is a copper trace
>> on a piece of plastic going to have any effect especially when it is
>> sandwiched between said metal battery and the metal insides of the cell
>> phone?
>>
>> Dave WD9BDZ

5659. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 15:14:08 UTC
From: AB2HR <ab2hr@arrl.net>
Message-ID: <pu31au014cqobupkahk3p4rfcef46gt8pe@4ax.com>
Source record: 146197

On 26 Mar 2002 05:18:29 -0800, jim.bolinger@lintek.aeroflex.com (JLB)
wrote:

>My opinion, Roy, is that the thing ___could___ work.
>
>But it would only work on certain phones. The ads also do not
>differentiate between PCS (1800 to 1900 MHz), and 800 MHz cellular.
>
>The typical cell phone antenna can be thought of as a dipole
>consisting of the 'antenna' part and the rest of the phone, or as a
>ground plane antenna for PCS. It is believable that for certain
>phones at certain frequencies placing a 'fractal' element at the
>proper place in the phone could create a directional pattern that
>would improve coverage. However, you would have to have the right
>phone on the right frequency and be facing in the proper direction.
>
>As to if it __always__ works, I seriously doubt it.
>
>Jim
>N8EE

It's also possible that the foil trace is acting as a counterpoise
against which the radiating element of the antenna can act. Radio
Shack's HTX-202's had a problem of resulting in ERR-2 errors when
operating with 12 volt batteries... A possible explanation that was
given for this was that at 12 volts, the radio operates at 5 watts
output instead of 1. The inefficient antenna design inherent in
handhelds resulted in RF overload on the radio when operating at 5
watts. There is a mod for this radio that recommends a procedure when
rebuilding the battery packs one add a coiled piece of wire inside the
battery pack, attached to the negative lead of the battery. The
purpose of this is supposed to provide a better counterpoise against
which the antenna can operate...

Sound like this might be a feasible explanation for the cell-phone
antenna booster phenomenon?

Raymond Sirois AB2HR
SysOp: The Lost Chord BBS
607-733-5745
telnet://thelostchord.dns2go.com:6000

5660. Re: opinions on GAP antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 15:39:56 UTC
From: NummEr_5_LeBt <NummEr_5_LeBt@gmx.ch>
Message-ID: <a7q4lf$b9c$06$1@news.t-online.com>
Source record: 146198

Very satisfied with my Titan
Working lots of dx
i.e.: TI9M from 10m to 80m SSB/CW
XR0X 10m - 20m CW/SSB
VP6DI 15m CW
so what ... ?
... but not so good on 80m DXing
here guyed and no probs in stormy winterdays

greetings DL5VZ
Alex

"IronHead" <slipkid@kwiknet.net> schrieb im Newsbeitrag
news:P7Ln8.682$HxK2.11403455@news2.randori.com...
> I am considering buy a GAP hf vertical antenna. Can any give
> recommendations, pro's and con's. Thanks.
>
>

5661. Re: Please repeat info re vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 16:03:18 UTC
From: VK4-ICE David Tavener <vk4ice@dodo.com.au>
Message-ID: <3ca09b5a@news.comindico.com.au>
Source record: 146199

Send me a copy too...

David VK4-ICE

"FAZAMY" <fazamy@aol.com> wrote in message
news:20020324122158.19974.00000449@mb-ck.aol.com...
> Recently, there was some discussion about a vertical antenna that works
well
> without radials. Can someone please repeat the recommendations?
>
> Thanks,
> Evan
> KB2AMY

5662. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 16:55:06 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <KJ1o8.6309$n%1.221@nwrddc03.gnilink.net>
Source record: 146200

Ya gotta read up on yer Bugs Bunny... <grin>

--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

"JLB" <jim.bolinger@lintek.aeroflex.com> wrote in message
news:8d5ec8a2.0203260523.31b7525d@posting.google.com...
> "AstroMan" <dont@spam.me> wrote in message news:<u9vj42kualuc3@corp.supernews.com>...
> > You're putting up a tower with a G5RV!?!?!?!?!?!
> > Bwaa ha ha ha
> > What a maroon!
>
>
> You mean he is a shade of red?
>
> Does that mean he is a kind of communist?

5663. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 17:25:34 UTC
From: n7ws@yahoo.com
Message-ID: <3ca0ad70.1399158@news.triconet.org>
Source record: 146201

On Tue, 26 Mar 2002 08:13:49 +0000 (UTC), Bill Nelson <billn@spock.peak.org>
wrote:

[snip]
|
|Also be aware that sometimes the losses in the connectors is as great
|or greater than the loss in the coax. It is best to minimize connectors.

This is patently untrue. It is better to minimize connectors simply because
they are a source of water ingress and are obviously less reliable than a
similar length of cable, however, this old wive's tale about loss should be
stopped.

Wes Stewart, N7WS

5664. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 17:28:37 UTC
From: n7ws@yahoo.com
Message-ID: <3ca0af48.1871179@news.triconet.org>
Source record: 146202

On Tue, 26 Mar 2002 13:30:15 GMT, Dale Parfitt <parinc@gte.net> wrote:

[snip]
|
|According to my HP8713 network analyzer, the UHF connector loss (from a
|pair+ barrell) runs in the 0.2 dB range. Not great for EME but not
|noticable for terrestrial work.

And since you have to use adapters to interface to the network analyzer the real loss is less than that.

Wes Stewart, N7WS

5665. Re: 6 meter antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 17:41:52 UTC
From: Mark Walsh <mark@km6xu.die.spam.die.com>
Message-ID: <a7qbmtikp1@bob.news.rcn.net>
Source record: 146203
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

"Dave Boniface" <g3zxx@twxrg.info> wrote:

> We have been using an AR6, for over a year now,
> it has withstood gales with gusts to 80+ mph and
> everyone in the group indicated that they were
> getting a stronger signal from the repeater, when
> we replaced the original "white-stick" with the
> simple half wave.

The AR-6 is a well-built, sturdy antenna. The problem
in using it for a repeater is that it has uptilt rather than
downtilt.

5666. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 17:57:27 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <bE2o8.6997$Eb5.655008@bgtnsc05-news.ops.worldnet.att.net>
Source record: 146204

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3CA0130C.E26E3E0A@eznec.com...
> This is the question we'd all like the answer to. Another poster said he
> had put the gadget in and taken it out several times and seen the signal
> improve each time it went in and decrease each time it was removed. So
> far, no one has reported the results of a test using a piece of aluminum
> foil. Two postings reporting substantial signal improvement have seemed
> credible, but I'd still really like to see this with my own eyes before
> taking the gadget out of the scam category. If it really does improve
> the signal, I don't have a clue why, and I'd really like to know.
>
> Roy Lewallen, W7EL
>

Hi Roy,

Remember that this magic "device" is from the same people who bring you the Electronic Cell Phone Shield aka the Wave Scrambler (TM). Works on any phone, will not affect the quality of reception, can also be used on cordless phones, prevents harmful electronic waves entering through the ear. Regularly valued at $39.99, order 2 right now for 12.99 + S&H. [I was unaware that the "harmful" radiation from the phone only emanates through the phone speaker.]

The cell phone booster is even better - works better than a four foot antenna - wow, better than a four foot antenna! Not that there is anything special about a four foot antenna at AMPS or PCS frequencies. They could have said that it works better than a 3,000 foot antenna but no one would have believed them - I guess "better than a four feet antenna" sounds more credible.

WHAT A CROC!

Although, I must shamefully admit that I did buy two of them (for research and demonstration purposes only of course), so add me to the list of suckers who merrily handed over $12.99 + S&H (twice). BTW, the Wave Scrambler was free with the cell phone booster (a time limited offer that was only available right then on the phone - what luck!)

Steve VE9SRB

5667. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 18:49:12 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203261049.79afffe4@posting.google.com>
Source record: 146205

Call the cell phone company and find out if they installed a new cell site in the area.

If not, repeat the test daily for a month and see what the results are.

Jim
N8EE
(former cellular RF engineer)

5668. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 18:57:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA0C48C.D5769A6@eznec.com>
Source record: 146206

Thanks for the distinction between "sky wave" and "space wave", one I wasn't aware of. Richard Harrison has a Terman reference that speaks of the "ground wave" having two parts, a "surface wave" and a "space wave". I've always seen "ground wave" used just as you've said (including in Terman's _Radio Engineering_), and never like in Richard's reference. So that reference remains puzzling.

Roy Lewallen, W7EL

Gary Coffman wrote:
>
> On Thu, 21 Mar 2002 00:18:49 -0800, Roy Lewallen <w7el@eznec.com> wrote:
> >In my third edition of Terman's _Radio Engineering_, he uses "ground
> >wave" the same as I did in my explanation, and "space wave" in place of
> >what I've called "sky wave". I don't find any mention of "surface wave"
> >in the book, although some writers use this in place of "ground wave".
> >In the source you quote, where a "ground wave" has two components, does
> >Terman speak of any radiation other than the "ground wave"? It seems
> >rather odd to speak of a "ground wave" having a "space wave" component.
>
> Roy, my references limit the use of the term "sky wave" to signals refracted
> by the ionosphere, ie what we commonly call "skip".
>
> The space wave is any signal taking the direct line of sight path, or variations
> such as signals reflected off of terrestrial obstacles, or directed by various
> tropospheric bending and ducting phenomena.
>
> The ground wave is the signal coupled into the air/ground interface. It follows
> terrain contours much the same way as a signal propagates along a G-line.
>
> At most points inside groundwave range, the signal at the receiver is a
> mixture of the space wave and the groundwave signals. At the edge of
> the first skip zone, the skywave is added to the mix. This results in a
> number of multipath fading situations, not easily modeled in detail.
>
> Gary

5669. Re: 6 meter antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 19:08:12 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203261108.712877a9@posting.google.com>
Source record: 146207
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

g3zxx@twxrg.info (Dave Boniface) wrote in message
>
> The AR6 is just a halfwave base fed, and the ARX6 is 2 x halfwave,
> although I'm a bit concerned about the quoted gain. My perceptions is
> that it's just a pair of "close-spaced" halfwaves in phase, and
> therefore the max gain will be about 1.9 dBD at best.

I haven't tried one of those, but is probably a decent antenna.
>
> We have been using an AR6, for over a year now, it has withstood gales
> with gusts to 80+ mph and everyone in the group indicated that they
> were getting a stronger signal from the repeater, when we replaced the
> original "white-stick" with the simple half wave.

Another good thing about the AR-6 is it's quite adjustable for the
freq used.
They also make a 10m version. "AR-10". These are easily homebrewed
also. I've made a few of them for 10m. I use a single turn loop at the
base the same way cushcraft does. The cap made from coax. You can also
improve the low angle performance a bit by adding a decoupling section
below the antenna to reduce the feedline radiation. I used a 1/4 wave
section of coax below the feed to a set of 1/4 wave radials mounted
and grounded to the mast a 1/4 wave below the feedpoint. I tried this
on a 10m version and it did seem to clean it up a tad. But they work
fairly well out of the box with no decoupling. MK

5670. Re: What is this antenna I just bought?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 19:22:30 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203261122.26877f4@posting.google.com>
Source record: 146208

[snipped]

"Martin Peters" <martin.peters@ntlworld.com> wrote in message
news:<nt4n8.4419$Dr3.769777@news6-win.server.ntlworld.com>...
> Moving swiftly on, the entire device is encapsulated in a plastic tube
> arrangement, is about 24 cm long and 3 cm in diameter. Termination is a tiny
> SMB connector.
>

For the metrically underpriveleged, thats about 10x1 inches.

> They had broken one open for punters to look at its innards. The antenna
> element appeared to be a band of 1cm wide copper wound around a expanded
> polystyrene former, barbershop pole-fashion. The former is about 2cm in
> diameter and 15cm long. This fed the amp - all the usual SMD stuff - in a
> tin enclosure.
>
> Any ideas what this may be good for. Is it a helix antenna, designed for use
> end-onat, say 3GHz, or, as the man said, a wideband VHF/UHF omni? Any ideas?
>

Sounds kinda small at those frequencies to be an end-fire helix. My
guess is that it is some kind of spirally wound vertical antenna. Does
it have any kind of ground plane or counterpoise?

Jim
N8EE

5671. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 19:45:17 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA0CFCD.DBD7E202@IEEE.org>
Source record: 146209

Roy Lewallen wrote:
> If it really does improve
> the signal, I don't have a clue why, and I'd really like to know.

C.C.Crane had something called a Selectenna (or something like that)
that, when placed close to an AM radio, will improve reception.
Perhaps it works something like that.
--
cheers, CAM http://www.qsl.net/w5dxp

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5672. Re: Tuner on Screwdriver Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 19:47:18 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA0D046.32623BCA@IEEE.org>
Source record: 146210

Rick Batte' wrote:
> Is an antenna tuner necessary when using a screwdriver antenna for
> mobile operation ??

Nope, that's the beauty of a screwdriver. However, one needs a coil,
cap, or transformer at the base of the screwdriver on 75m and 40m.
The feedpoint impedance of a well-designed screwdriver antenna
system is about 12.5 ohms on 75m.
--
cheers, CAM http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5673. $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 19:48:52 UTC
From: jder8745@aol.com
Message-ID: <20020326144852.09549.00000239@mb-cs.aol.com>
Source record: 146211

B&W makes a folded dipole which they sell for $200. That seems like a lot.
They say it's a patented design. Must be a very old patent.

Does this seem strange?

73 de Jack, K9CUN

5674. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 20:45:14 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3CA0DDC6.5FD50097@icok.net>
Source record: 146212

Jack,
Even stranger, people still buy them!
'Doc

5675. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 21:12:11 UTC
From: jder8745@aol.com
Message-ID: <20020326161211.19014.00000275@mb-fm.aol.com>
Source record: 146213

Don't used RG58 or so-called Mini8.

Too much loss. Maybe you could find some free 1/2-in 75-Ohm hardline from the local cable company. That would be good for 144 MHz if cost is a big factor if IF it was free.

Connectors may prove to be a problem but many hams have fashioned their own versions. See ARRL puiblications.

9913 is good too. Sometimes referred to as "poor man's hardline".

Sound like fun.

73 de Jack, K9CUN

5676. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 21:23:07 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA0E6BB.F4900E1D@IEEE.org>
Source record: 146214

JDer8745 wrote:
>
> B&W makes a folded dipole which they sell for $200. That seems like a lot.
> They say it's a patented design. Must be a very old patent.
>
> Does this seem strange?

Assume you own B&W. Does it seem strange?
--
cheers, CAM http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5677. EH Antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 21:25:52 UTC
From: N0SA <n0sa@earthlink.net>
Message-ID: <AH5o8.3225$Ya2.137212@newsread1.prod.itd.earthlink.net>
Source record: 146215

I've been reading up on the EH antenna sites. It has peaked my interest, as I am always looking for new ideas and antennas to try. Does anyone in the group know anything about these antennas or have any opinions on these antennas? Just interested.
Larry N0SA

5678. W2AU 40/80 Meter 5 Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 21:49:42 UTC
From: NI4L <ni4l@charter.net>
Message-ID: <3CA0ECF6.EBF74DB3@charter.net>
Source record: 146216

FS W2AU/W2VSï¿½
40/80 Meter 5 Band Antenna - Complete (2-40 meter traps,
2-END-Sulators ,W2AU 1:1 Balun and 125' wire)

Works fine. 35.00+5.00shipping.
thanks

--

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5679. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 22:05:08 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203261405.28ba9054@posting.google.com>
Source record: 146217

jder8745@aol.com (JDer8745) wrote in message
news:<20020326144852.09549.00000239@mb-cs.aol.com>...
> B&W makes a folded dipole which they sell for $200. That seems like a lot.
> They say it's a patented design. Must be a very old patent.
>
> Does this seem strange?
>
> 73 de Jack, K9CUN

Paying 200$ for a dipole will always seem a bit strange to me.
Besides, it's a patented air cooled dummy load for the most part
compared to just a coax or even a tuner/ladder line fed dipole. I'll
never use an antenna with intentional resistance. I've got enough
problems with the resistances I don't invite to the party. MK

5680. Re: EH Antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 22:05:37 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7qre7$nhcke$1@ID-124126.news.dfncis.de>
Source record: 146218

> I've been reading up on the EH antenna sites. It has peaked my interest,
==========

You've been brainwashed. Change your newspapers and TV programs. Just let
it gently die away and return to normal.

5681. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 23:07:31 UTC
From: dnb <dnb@comcastt.com>
Message-ID: <Ta7o8.269990$uv5.23567946@bin6.nnrp.aus1.giganews.com>
Source record: 146071

My guess is that the sticky stuff "grabs" more signal. (Hey, makes as much sense as "acts like a 4 foot antenna").

"Allen the Magic Goose" <Shutup_cartman@remove.hotmail.this.com.now> wrote in message news:3ca071af.1238999@news.aei.net...
> On Mon, 25 Mar 2002 22:19:56 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >This is the question we'd all like the answer to. Another poster said he
> >had put the gadget in and taken it out several times and seen the signal
> >improve each time it went in and decrease each time it was removed.
>
> This is only a wild stab:
>
> Remember that the bars on the phone display indicate signal strenght,
> not quality. Could putting that little foil trace thiggnie near the
> units RF amp or antenna simply be reflecting signals from inside the
> phones and they interpret it as an extra bar or two?
>
> Just a wild guess...
>
> Allen
>

5682. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 23:25:22 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a7r011esp1@quark.scn.rain.com>
Source record: 146072

Dale Parfitt <parinc@gte.net> wrote:

>> Forget the RG-8 for 2 meters. Use better transmission line.
>>
>> Also be aware that sometimes the losses in the connectors is as great
>> or greater than the loss in the coax. It is best to minimize connectors.
>> --
>> Bill Nelson (billn@peak.org)

> According to my HP8713 network analyzer, the UHF connector loss (from a
> pair+ barrell) runs in the 0.2 dB range. Not great for EME but not
> noticable for terrestrial work.

I don't have any experience at 2 meters, which is why I said "sometimes".
My experience in UHF starts at 400+ MHz and goes up from there.

There are several factors that can affect the connector loss. One major
one is how good a job was done on the cable/connector. I have seen, with
N connectors at 800 MHz, everything from a bit over 0.25 dB per connector
pair to in excess of 1 dB per pair.

For UHF connectors, I think the greatest problem is that they are not
constant impedance - and it is hard to avoid an impedance bump, even
with a well made up connector.

As you state, this may be irrelevant at 2 meters - it is a problem at
800 MHz.

--
Bill Nelson (billn@peak.org)

5683. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 23:26:39 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a7r03fesp2@quark.scn.rain.com>
Source record: 146073

Wes Stewart <n7ws@yahoo.com> wrote:
> |
> |Also be aware that sometimes the losses in the connectors is as great
> |or greater than the loss in the coax. It is best to minimize connectors.

> This is patently untrue. It is better to minimize connectors simply because
> they are a source of water ingress and are obviously less reliable than a
> similar length of cable, however, this old wive's tale about loss should be
> stopped.

The loss is there, whether it is an "old wive's tale" or not.

--
Bill Nelson (billn@peak.org)

5684. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 23:28:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA10432.C107FCD6@eznec.com>
Source record: 146074

I fully believe this report, as I do the others which have been posted. However, there are too many variables involved to draw any conclusion from the "dead spot" report. But when a person can put the gadget in, see a substantial difference, take it out and see the reverse happen, and repeat several times, all from the same location, it's apparent that it's having some effect. Several theories have been put forth, any of which might provide an explanation. I'd put money on something to do with the gadget acting as a ground plane to provide better coupling to the hand, although I don't see how it could improve significantly on the ground plane already provided by the metal battery cell cases. It's apparent that if it does anything at all, it works only for some models of phones, which is consistent with this sort of phenomenon. And if so, a piece of aluminum foil should work as well. What's certain in my mind is that the explanation in the advertisements is totally bogus. I'm equally certain there's no new or magical principle at work here. But there might be some slight deficiency in the design of some phones that the addition of a ground plane might help. Until I saw the couple of postings giving credible evidence of a noticeable difference, I regarded the gadget as a pure scam. Now I think that in some cases it might possibly be doing something, although absolutely not what the sellers claim, and nothing that can't be done with a piece of aluminum foil. And if it is, I'm curious about what mechanism is involved.

I'll remain very skeptical until I see this for myself, though. In a fringe area or location where multipath is present, moving the phone an inch or two can make a large difference in signal strength. So a person running a test might unwittingly fall prey to the placebo effect and conclude that "on the average" it works better with the gadget in, or might coincidentally position the phone to favor the signal when the gadget is in place. If you're sitting in a null, a tiny change in the environment or antenna pattern can make a large difference in signal strength.

Roy Lewallen, W7EL

"remove r f i . t v i to reply" wrote:
>
> I found them at Ocean State Job Lot here in MA and they were $2.99. I asked the
> store manager if I could return it if it did not work, he said "no problem".
> Bought one and put it on, no difference. On the way home I drive through an
> area where my call will drop EVERY time,about a half mile stretch, no question,
> been this way for two years, called my wife and was able to hold the call for
> the first time ever. I actually turned around and drove through the same dead
> spot again, no dropped call, no channge in bar graph, still no bars but the
> call held, went back to the store and bought one for my wife's phone, who would

> have thought? go figure......
>
>
> Radio in the Bufff
> Running barefoot
> Co-Ed Naked Radio
> Support your local Oscillator
> |
> |
> |
>]|[
> ---^---
> /_______\
> |oo|===|oo|
> [=======]
> |_| |_|

5685. Re: EH Antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 23:31:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA104C5.3D356E97@eznec.com>
Source record: 146075

Go to http://www.groups.google.com and do a seach for "EH antenna" on
this newsgroup. You'll find plenty.

Roy Lewallen, W7EL

N0SA wrote:
>
> I've been reading up on the EH antenna sites. It has peaked my interest, as
> I am always looking for new ideas and antennas to try. Does anyone in the
> group know anything about these antennas or have any opinions on these
> antennas? Just interested.
> Larry N0SA

5686. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-26 23:46:45 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <EL7o8.6451$n82.1278543@news20.bellglobal.com>
Source record: 146076

The Chipster N1IR 'tested' two:
> I have tested the two advertised on
> television and have not been able to
> replicate the claims.

Steve VE9SRB bought two:
> Although, I must shamefully admit that
> I did buy two of them (for research
> and demonstration purposes only
> of course), so add me to the list of suckers
> who merrily handed over $12.99 + S&H (twice).

Oh my gawd... you guys !!!

5687. Re: EH Antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 00:02:22 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <a7r1u8$cd2@nntpa.cb.lucent.com>
Source record: 146077

You taka two pizza pie then putta pepperoni anda vino anda you hava nicea
Extra Heavy manga manga EH?

Tony

P.S. Sorry Grandpa.

"N0SA" <n0sa@earthlink.net> wrote in message
news:AH5o8.3225$Ya2.137212@newsread1.prod.itd.earthlink.net...
> I've been reading up on the EH antenna sites. It has peaked my interest,
as
> I am always looking for new ideas and antennas to try. Does anyone in the
> group know anything about these antennas or have any opinions on these
> antennas? Just interested.
> Larry N0SA
>
>

5688. Re: EH Antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 01:31:47 UTC
From: VA3ATD <a.duffy@sympatico.ca>
Message-ID: <3CA12103.5090206@sympatico.ca>
Source record: 146078

Oh god, be careful what you ask for ....

N0SA wrote:

> I've been reading up on the EH antenna sites. It has peaked my interest, as
> I am always looking for new ideas and antennas to try. Does anyone in the
> group know anything about these antennas or have any opinions on these
> antennas? Just interested.
> Larry N0SA
>
>
>

--
73, Tony
VA3ATD
London, Ontario
"Imagination and Ingenuity are the only limits" AD

5689. Wtd: Texas BugCatcher #480 Coil

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 01:34:23 UTC
From: Barry <luminosity@madriver.com>
Message-ID: <3CA121A0.E3769C7E@madriver.com>
Source record: 146069

I am looking for a used but not abused GLA / Texas Bugcatcher #480
10-80 meter
4 " coil, and accessories if you have them to part with. Please email me

direct with a shipped price to Vermont.
Tnx / Barry -N1QWA

5690. Re: EH Antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 01:37:17 UTC
From: Barry <luminosity@madriver.com>
Message-ID: <3CA1224E.AA6A00DA@madriver.com>
Source record: 146070

EH?
Must be made in Canada, EH?

N0SA wrote:

> I've been reading up on the EH antenna sites. It has peaked my interest, as
> I am always looking for new ideas and antennas to try. Does anyone in the
> group know anything about these antennas or have any opinions on these
> antennas? Just interested.
> Larry N0SA

--

Luminosity Studios est.1975
Fine Architectual Stained Glass & Custom Lighting
Arroyo Craftsman / Mica Lamp Co / Quoizel
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(802) 496-2231

Portfolio: http://photos.yahoo.com/luminositystudios

Slide Show:
http://y42.photos.yahoo.com/bc/luminositystudios/slideshow?.dir=/Luminosity+Studios&.view=l

5691. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 02:36:28 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <Jeao8.5359$oz6.1271012@news20.bellglobal.com>
Source record: 146079

"JDer8745" wrote:
> B&W makes a folded dipole which they
> sell for $200. That seems like a lot.
> They say it's a patented design.
> Must be a very old patent.
> Does this seem strange?

Shall we play 'Let's find the patent' ? I took a quick peek but didn't see
any patent numbers. Any quick leads before I dig deeper ?

5692. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 02:38:38 UTC
From: Dan Richardson <k6mhe@arrl.net>
Message-ID: <25c2augutr7sip4i0329t7s3erpt5feggh@4ax.com>
Source record: 146081

On Tue, 26 Mar 2002 23:26:39 +0000 (UTC), Bill Nelson
<billn@spock.peak.org> wrote:

>Wes Stewart <n7ws@yahoo.com> wrote:
>> |
>> |Also be aware that sometimes the losses in the connectors is as great
>> |or greater than the loss in the coax. It is best to minimize connectors.
>
>> This is patently untrue. It is better to minimize connectors simply because
>> they are a source of water ingress and are obviously less reliable than a
>> similar length of cable, however, this old wive's tale about loss should be
>> stopped.
>
>The loss is there, whether it is an "old wive's tale" or not.

And, just how much?

5693. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 02:40:26 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <siao8.5377$oz6.1274192@news20.bellglobal.com>
Source record: 146080

"Mark Keith"
> Paying 200$ for a dipole will always seem a bit strange to me.
> Besides, it's a patented air cooled dummy load for the most part
> compared to just a coax or even a tuner/ladder line fed dipole. I'll
> never use an antenna with intentional resistance. I've got enough
> problems with the resistances I don't invite to the party. MK

I wonder if 'the military' (a hopeless generalization....) sometimes assumes that their dipole is +2.1dBi (not realizing that it is a dummy dipole), and then they keep finding miracle antennas that provide better gain and efficiency in comparison, but over a narrower frequency range.

Maybe I could interest them in my newly developed antenna - I call it the "dipole".

5694. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 03:10:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA13834.93DF78C7@eznec.com>
Source record: 146082

U.S. Patent 4,423,423

Roy Lewallen, W7EL

"J. Harvey" wrote:
>
> "JDer8745" wrote:
> > B&W makes a folded dipole which they
> > sell for $200. That seems like a lot.
> > They say it's a patented design.
> > Must be a very old patent.
> > Does this seem strange?
>
> Shall we play 'Let's find the patent' ? I took a quick peek but didn't see
> any patent numbers. Any quick leads before I dig deeper ?

5695. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 03:17:08 UTC
From: monte.carroll@nashville.com
Message-ID: <3ca135a1.481012713@news.nashville.com>
Source record: 146083

OK. OK.

The decision has been made to bite the bullet and pay the bucks. I'm researching local shops here in Nashville and those on the web for one continuous low-loss feed line for each radio/antenna.

Thank you all (except astroman) for your thoughtful, informative replies. I continually learn from this newsgroup and appreciate the help you have offered me and others that pose questions. Perhaps I will have the opportunity to return the favor to you or other fellow hams.

Monte B. Carroll
WC4MBC
Nashville, Tennessee, USA

5696. The 3-electrode Tube.is still with us.

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 03:57:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7rg27$nut50$1@ID-124126.news.dfncis.de>
Source record: 146084

NOW AVAILABLE:

New Program, albeit belated, "TRIODE1.exe"

Program TRIODE1 assists with the design of triode, grounded-cathode, RF power amplifiers from 1 watt to any arbitrary large RF output power. For "anode" Americans can read "plate". For "tube" much of the English-speaking world can read "valve". (For grounded grids another program is needed.)

Tube operating conditions can be selected at 1 degree intervals from Class-A, via Class-AB1 and Class-AB2, to Class-C. In other words from anode current operating angles from 360 degrees down to very high conversion efficiency at 45 degrees.

The program first accepts a manufacturer's basic tube data: Mu = Amplification factor, Perveance which is related to cathode electron emission and equivalent conductance, and alpha, a value which defines the curvature in a tube's current-vs-voltage characteristics. The fraction of cathode current intercepted by the grid, sometimes neglected, is also taken into account. But if one or two parameters are unavailable all is not lost.

The program user can then enter his own operating conditions such as DC anode supply volts, amplitude of grid and anode RF voltages, intrinsic Q of the tank coil, output circuit operating Q and, of course, anode current operating angle and operating frequency. Operating angle is a little known but vital factor which a circuit designer must not neglect. It profoundly effects circuit operation by controlling a tube's internal resistance.

It may not go unnoticed there is no reference in the program as to what the internal resistance of a tube might be. Or to matching an amplifier's internal resistance to its load for the purpose of maximising power delivered to that load.

Computed output data includes DC anode current, DC power input, anode dissipation, conversion efficiency, DC grid current, DC grid bias, grid bias resistor value, grid operating angle, grid dissipation, and grid RF drive power required to satisfy the assumed operating conditions. (A common design feature not covered by the program is deliberate dissipation of RF drive power in a damping resistor to improve operating stability. However this does not effect basic circuit design.)

The output circuit may be either a simple tuned tank circuit with a link coupling to a 50-ohm load, or a Pi-matching circuit. All coil and capacitor component values are computed. It is left to the designer to take parasitic tube and circuit capacitance and inductance into account. For coil dimensions, number of turns etc., refer to program SOLNOID2.

If a user should be unfamiliar with the characteristics of triode electron tubes this program will be found to be of educational value. By hitting one or another key the essential data for two types of tube can be entered ready for experimenting. But a set of anode/grid currents versus anode/grid voltage characteristics of any triode tube is essential.

There is a brief introductory note on each parameter used in the program. It may be of passing interest the basic mathematics are equally applicable to that much later 3-terminal amplifying device - the transistor.

On the other hand, for people who prefer the simple life, program TRIODE1.exe can be used just to calculate L and C values of a Pi-matching network to be used with a 3-500Z or any other power amplifier.

If Terman, Everitt, et-al had had this program available in the 1930's they would have got along much faster. ;o)

Download TRIODE1 from website below in a few seconds. One self-contained binary file only. Not zipped up. No unzipping inconvenience. Run immediately. All in plain English. Old timers can find out where they went wrong.

****

Regards, Reg G4FGQ

Free Radio Design Software

Http://www.g4fgq.com

****

5697. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 04:29:06 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3ca14c5d$0$35573$1dc6e903@news.corecomm.net>
Source record: 146085

Here we go again. For those who post things like those below, this is what amateur radio is about. I own and operate a B&W antenna configured as NVIA for 60-75 meters. I also use it for all the other amateur bands up to 6 meters. This antenna does the job I want it to do. Yes it works by burning swr in a 600 ohm resistor but the signal is only down ONE s unit for all that.
Those who want to get every miliwatt into the ether a cut and tuned dipole antenna is the way to go. Remember all other antenna's are a compromise between efficiency and size. The closer an antenna is to a match between the output impedance and the wavelength of the frequency and the space/time to install/cost to obtain.
Anything else is personal choice. I don't look down on you for yours, give me the same.

Dave WD9BDZ

Mark Keith wrote:
>
> jder8745@aol.com (JDer8745) wrote in message news:<20020326144852.09549.00000239@mb-cs.aol.com>...
> > > B&W makes a folded dipole which they sell for $200. That seems like a lot.
> > > They say it's a patented design. Must be a very old patent.
> > >
> > > Does this seem strange?
> > >
> > > 73 de Jack, K9CUN
>
> Paying 200$ for a dipole will always seem a bit strange to me.
> Besides, it's a patented air cooled dummy load for the most part
> compared to just a coax or even a tuner/ladder line fed dipole. I'll
> never use an antenna with intentional resistance. I've got enough
> problems with the resistances I don't invite to the party. MK

5698. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 04:29:13 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <qUbo8.5579$oz6.1353273@news20.bellglobal.com>
Source record: 146086

"JDer8745" wrote:
> B&W makes a folded dipole which they
> sell for $200. That seems like a lot.
> They say it's a patented design.
> Must be a very old patent.
> Does this seem strange?

"J. Harvey" wrote:
> Shall we play 'Let's find the patent' ? I took
> a quick peek but didn't see any patent numbers.
> Any quick leads before I dig deeper ?

"Roy Lewallen"
> U.S. Patent 4,423,423

Thanks...

Uh oh... the www.USPTO.gov 'patent server' is down - probably due to millions of people trying to access all those Tesla patents over the last few days (...sorry...).

Maybe we can try later...

http://patft.uspto.gov/netahtml/srchnum.htm
(Enter the patent number: 4,423,423 in this case)

5699. Re: goniometer [power line noise cancel] device

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 04:34:17 UTC
From: Speaker Repair <topdog@woofer.com>
Message-ID: <3CA14BC9.678D@woofer.com>
Source record: 146087

Richard Harrison wrote:
>
> Gary wrote:
> "Math is not my forte`, but this is a very simple concept."
>
> I was told a goniometer is a very sensitive electronic medical
> instrument. When applied to the patient, the doctor can hear a
> distinctive clap, clap, clapping sound in the earphones if the patient
> is infected with gonorrhea.
>
> Best regards, Richard Harrison, KB5WZI

Cheers on that one, Richard!!!!

5700. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 04:48:09 UTC
From: Speaker Repair <topdog@woofer.com>
Message-ID: <3CA14F09.5CB2@woofer.com>
Source record: 146088

Irv Finkleman wrote:
>
> Speaker Repair wrote:
> >
> > Ravi R wrote:
> > >
> > > This might sound silly.. but i was just curious to know if my existing
> > > Satellite Dish (You know the huge one that rotates..).. can in any way
> > > modified to be used as a Shortwave Antenna ?
> >
> > HAHAHA, Good one, man!
> >
> > Can you tell me how to make my piccolo sound like a tuba????
>
> I had a good laugh on this one too, but I also remember that
> when I was just a kid and didn't know much about any of this
> stuff I was asking similar questions. Even at age 60 I am
> still
> trying to figure antennas out!! The terrible thing is that
> if
> I hooked it up to a short wave receiver I would likely hear
> something better -- just as if I had put a hunk of wire on
> the
> end. My first real experiences with antennas were hooking
> my
> homebrewed crystal sets to various metallic things and
> discovering
> that they worked!! I'm still smiling thinking about this
> dish
> one though!
> --
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> --------------------
> Visit my FINALLY UPDATED website at
> http://members.shaw.ca/finkirv/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

Yeah, I shouldn't laugh because I was probably doing the same thing when I was 10 years old, too. I remember a little one tube AM radio (legal) transmitter that I took to show and tell in the fourth grade because my 200 foot radius AM radio station was my hobby. We hooked it up to some kid's braces to test it. No, he didn't get a shock or anything (good thing he wasn't grounded anywhere) but everyone thought that it was cool because we were transmitting out of Joe's mouth!

My dad was an EE and had built a few radio stations but he never laughed at any of my hairbrained ideas - and by doing that, the hobby stuck and 28 years later, I am still doing hairbrained things and (thanks to the net) am asking silly questions on the newsgroups myself.

I thought about the question more. If he grounded the dish and attached 50+ feet of wire to the center element he might have a nice longwire antenna! Of course, the dish would be moot at that point. That's why the whole thing struck me as funny.

5701. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 05:02:30 UTC
From: Bill Nelson <billn@spock.peak.org>
Message-ID: <a7rjp6$i6i$1@quark.scn.rain.com>
Source record: 146089

Dan Richardson <k6mhe@arrl.net> wrote:
>>
>>> This is patently untrue. It is better to minimize connectors simply because
>>> they are a source of water ingress and are obviously less reliable than a
>>> similar length of cable, however, this old wive's tale about loss should be
>>> stopped.
>>
>>The loss is there, whether it is an "old wive's tale" or not.

> And, just how much?

Frequently, so little that it may be ignored. At very high frequencies, it
can be significant.

--
Bill Nelson (billn@peak.org)

5702. Antennas for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 05:03:52 UTC
From: wdizney@yahoo.com
Message-ID: <c44869b7.0203262103.425c6615@posting.google.com>
Source record: 146090
Cross-posted to: sci.electronics.equipment,misc.industry.electronics.marketplace,rec.radio.amateur.antenna

The following antennas are for sale. All are fully tested and in very good to great cosmetic shape.

1) Sylvania ridged horn (no model number) 2-18GHz = $650.00
2) Polorad model CA-L 1-2.34Ghz =$300.00 2 each
3) Watkins Johnson model WJ8326-1A Quad ridge .75-4.8Ghz =$650.00
4) Empire device LP-105 12 inch loop antenna 150kHz-30Mhz =$100.00
5) Empire device LG-105 30 inch loop antenna 14khz-150khz =$200.00
6) Empire device AT-112/LPA112 Log Periodic w/ reflector 1-10GHz =$450.00
7) Electro-Metrics BDA-25 Broad Band dipole 20-200MHz =$275.00 1 each
8) Electro-Metrics ARL-25 Remote Switchable Loop 10kkhz-30MHz =$150.00 2 each
9) Tecom 802527-3 Directional Helical antenna 1775-2300Mhz =$150.00
10) Eaton 96002/Emco 3109 20-300MHz 2kw power rating =$600.00
11) HP 346B noise source up to 18Ghz type N connector =$500.00
12) Eaton Horn antenna 18-26Ghz w/waveguide =$400.00
13) Eaton Horn antenna 26-40Ghz w/waveguide =$600.00

Please e-mail for more complete specs and pictures. Buyer pays actual shipping charges. email address is wdizney@yahoo.com

Thanks for looking
Mike

5703. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 05:05:06 UTC
From: Speaker Repair <topdog@woofer.com>
Message-ID: <3CA15302.5334@woofer.com>
Source record: 146091

Scott Haney wrote:
>
> Speaker Repair <topdog@woofer.com> wrote in news:3C9FBEA7.7A8@woofer.com:
>
> > HAHAHA, Good one, man!
> >
> > Can you tell me how to make my piccolo sound like a tuba????
> >
>
> Well, I've played both (piccolo not at all well, though), and I'd have to
> say that they sound identical when they're cut with a hacksaw. :)
>
> Scott N0GUD (really)

I thought more about my analogy. I should have said "Can you tell me how to make my dog whistle into a tuba?" I think that would better illustrate the difference in the two wavelengths. A dog whistle at 25,000 hertz and a tuba at 100 hertz is a difference of 250 times. A 10 Mhz shortwave signal times 250 is 2.5 Ghz - YUP, microwave frequencies!!! As they say, hindsight is 20/20.

5704. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 08:30:01 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <VZOTPQCJMYo8EA7D@ifwtech.co.uk>
Source record: 146092

Bill Nelson wrote:
>Wes Stewart <n7ws@yahoo.com> wrote:
>> |
>> |Also be aware that sometimes the losses in the connectors is as great
>> |or greater than the loss in the coax. It is best to minimize connectors.
>
>> This is patently untrue. It is better to minimize connectors simply because
>> they are a source of water ingress and are obviously less reliable than a
>> similar length of cable, however, this old wive's tale about loss should be
>> stopped.
>
>The loss is there, whether it is an "old wive's tale" or not.
>

There are at least two different kinds of "loss" in this discussion...

What connectors such as the 259/239 series mostly have is reflection loss - due to failure of the connection to match the system impedance. Each connector pair inserts a very short section of lower impedance than 50 ohms (due to the oversize inner conductor) but there is no power dissipation in this kind of mismatch, so nothing burns up.

The reflection loss from a single 239/259 pair is probably trivial at 144MHz, but if you use too many of these connectors then problems build up along the line. Each connector reflection can either add or cancel with another one, depending on the electrical length of line between them - but Murphy is there to make sure they will add. The result can be a surprisingly high apparent SWR, from an antenna you believed was well matched. This can lead you into the next kind of loss...

Dissipative loss is the one that makes cables warm and can burn up connectors - but it *must* involve resistance somewhere.

Resistance inside the connector itself means either a bad contact (series resistance) or water (shunt resistance). This is unimportant for connectors that are in good condition and correctly assembled. 259/239 connectors can handle many kW up through 144MHz. Likewise N connectors are good for 1.5kW at 432MHz... but they do have to be perfect. If they aren't, you soon find out!

Transmission lines have dissipative losses of their own. Generally what makes coax get arm with high power is, in order of importance: skin effect resistance of the inner conductor (series resistance causing I^2*R dissipation), skin effect on the outer conductor, and least of all dielectric loss in the insulator (shunt resistance causing V^2/R dissipation). These losses are present even when the SWR is 1. An SWR of

1 means there are no periodic variations of voltage and current along the line, just a very gentle decrease along the line due to the losses. This is the least-bad situation.

Extra dissipative loss is caused in cables when the SWR is not 1. This is because there are current maxima every half-wave along the line where I^2*R losses are magnified, and voltage maxima where the V^2/R dissipation is magnified. There are various graphs and programs (and an Excel spreadsheet on the 'In Practice' web pages) to calculate these losses for typical cables.

So non-constant-impedance connectors such as the 259/239 generally don't *have* serious dissipative losses themselves, but they do cause minor reflections which in turn can *cause* dissipative losses in the line.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
New e-mail: g3sek@ifwtech.co.uk
New website: http://www.ifwtech.co.uk/g3sek

5705. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 12:06:21 UTC
From: k1bqt@aol.com
Message-ID: <20020327070621.27696.00000349@mb-fs.aol.com>
Source record: 146093

A friend of ours on 75 meters just took his B&W down and replaced it with a dipole because he was consistantly 10 dB or more down from everyone else. I realize anecdotal reports don't mean much, but now his signal is on par with the others. BTW (and I hate to admit this Cecil), the strongest signal in the group comes from a dipole at 90 feet fed with open wire and matched with a tuner.

Rick K1BQT

5706. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 12:42:08 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203270442.43c78170@posting.google.com>
Source record: 146094

"David G. Nagel" <nagel@core.com> wrote in message
news:<3ca14c5d$0$35573$1dc6e903@news.corecomm.net>...
> Here we go again. For those who post things like those below, this is
> what amateur radio is about. I own and operate a B&W antenna configured
> as NVIA for 60-75 meters. I also use it for all the other amateur bands
> up to 6 meters. This antenna does the job I want it to do. Yes it works
> by burning swr in a 600 ohm resistor but the signal is only down ONE s
> unit for all that.

It turns rf into heat. Most of the ones I've heard were more than one
S unit down from a coax fed dipole. I guess yours feels lucky...

> Those who want to get every miliwatt into the ether a cut and tuned
> dipole antenna is the way to go.

Thats me! :)

Remember all other antenna's are a
> compromise between efficiency and size.

Hummm, not really...Mine are all full size.

The closer an antenna is to a
> match between the output impedance and the wavelength of the frequency
> and the space/time to install/cost to obtain.

That paragraph hurts my head...Can I pass on that one?

> Anything else is personal choice. I don't look down on you for yours,
> give me the same.

Well, I don't look down on yours either, but I'm not going to
misdescribe it either. It's an 200$ air cooled dummy load with wires
attached. Thats the plain truth about it. Maybe the wires radiate a
larger portion of the RF applied than the dummy load turns to heat,
maybe not, but it is what it is. There are plenty of antennas I've
used here that I don't like either. It doesn't bother me if I badmouth
them. It shouldn't bother you. I once ran a hustler vertical ground
mounted. It was a overpriced dummy load on a stick. I'm sure that bugs
the heck out of hustler when they read that, but I just don't care.
I'm a redneck. MK

5707. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 13:51:54 UTC
From: Gerald Schmitt <KK5YY@arrl.net>
Message-ID: <80j3auckjfbg6m6h6nksjo2jrghrge427i@4ax.com>
Source record: 146095

On Tue, 26 Mar 2002 21:40:26 -0500, "J. Harvey"
<JM001.Harvey_TRIMTHIS_@Sympatico.ca> wrote:

>"Mark Keith"
>> Paying 200$ for a dipole will always seem a bit strange to me.
>> Besides, it's a patented air cooled dummy load for the most part
>> compared to just a coax or even a tuner/ladder line fed dipole. I'll
>> never use an antenna with intentional resistance. I've got enough
>> problems with the resistances I don't invite to the party. MK
>
>I wonder if 'the military' (a hopeless generalization....) sometimes assumes
>that their dipole is +2.1dBi (not realizing that it is a dummy dipole), and
>then they keep finding miracle antennas that provide better gain and
>efficiency in comparison, but over a narrower frequency range.
>
>Maybe I could interest them in my newly developed antenna - I call it the
>"dipole".
>
>
>

I don't think you understand what the military wants or needs from an
antenna system. Military applications involve a lot of frequency
hopping with very short stays on a particular frequency often just
seconds. Rest assured that they don't assume gain they just run
what ever power they need. The military had been using TFDs since
at least the Second World War. We Hams sometimes suffer under
the delusion that they are smarter than non Hams when in reality
we just have a different hobby.

5708. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 13:55:38 UTC
From: VE9SRB <srbest@att.net>
Message-ID: <ubko8.8457$Eb5.782585@bgtnsc05-news.ops.worldnet.att.net>
Source record: 146096

"J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca> wrote in message
news:EL7o8.6451$n82.1278543@news20.bellglobal.com...
>
> Steve VE9SRB bought two:
> > Although, I must shamefully admit that
> > I did buy two of them (for research
> > and demonstration purposes only
> > of course), so add me to the list of suckers
> > who merrily handed over $12.99 + S&H (twice).
>
> Oh my gawd... you guys !!!
>

I was actually asked by a third party to determine if there was any validity
to the claims made regarding these devices.

Steve

5709. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 14:06:38 UTC
From: fractenna@aol.com
Message-ID: <20020327090638.01821.00000454@mb-cg.aol.com>
Source record: 146097

>
>"J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca> wrote in message
>news:EL7o8.6451$n82.1278543@news20.bellglobal.com...
>>
>> Steve VE9SRB bought two:
>> > Although, I must shamefully admit that
>> > I did buy two of them (for research
>> > and demonstration purposes only
>> > of course), so add me to the list of suckers
>> > who merrily handed over $12.99 + S&H (twice).
>>
>> Oh my gawd... you guys !!!
>>
>
>I was actually asked by a third party to determine if there was any validity
>to the claims made regarding these devices.
>
>Steve

Hi Steve,

The one from Rhino International is on sale (at many of those gas
station/convenience store hybrids) at only $8.99.

Mine cost $19.99 last Summer...and that was in taxless NH.

73,
Chip N1IR

5710. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 14:25:12 UTC
From: Mike Rofon <TheRealExray@netscape.net>
Message-ID: <3CA1D648.4DB212ED@netscape.net>
Source record: 146098

Fractenna wrote:
>
> >
> >"J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca> wrote in message
> >news:EL7o8.6451$n82.1278543@news20.bellglobal.com...
> >>
> >> Steve VE9SRB bought two:
> >> > Although, I must shamefully admit that
> >> > I did buy two of them (for research
> >> > and demonstration purposes only
> >> > of course), so add me to the list of suckers
> >> > who merrily handed over $12.99 + S&H (twice).
> >>
> >> Oh my gawd... you guys !!!
> >>
> >>
> >I was actually asked by a third party to determine if there was any validity
> >to the claims made regarding these devices.
> >
> >Steve
>
> Hi Steve,
>
> The one from Rhino International is on sale (at many of those gas
> station/convenience store hybrids) at only $8.99.
>
> Mine cost $19.99 last Summer...and that was in taxless NH.
>
> 73,
> Chip N1IR

I'm totally unfamiliar with these things. Are these $10-20 ones
different in any way than the ones on ebay that sell for less than a
buck + a couple bucks shipping?

5711. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 15:04:16 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3ca1defb$0$1415$1dc6e903@news.corecomm.net>
Source record: 146099

Gentlemen;

Why are some of you making fun of the question posed by the original writer? Remember that the only stupid question is the one not asked. The original writer wanted to know the answer to his question. Just because the rest of us know that this in a very impractical device to use as a HF antenna doesn't mean that he knew it to. Obviously he didn't now he knows not to ask question on the net.

Dave WD9BDZ

Speaker Repair wrote:
>
> Irv Finkleman wrote:
> >
> > Speaker Repair wrote:
> > >
> > > Ravi R wrote:
> > > >
> > > > This might sound silly.. but i was just curious to know if my existing
> > > > Satellite Dish (You know the huge one that rotates..).. can in any way
> > > > modified to be used as a Shortwave Antenna ?
> > >
> > > HAHAHA, Good one, man!
> > >
> > > Can you tell me how to make my piccolo sound like a tuba????
> >
> > I had a good laugh on this one too, but I also remember that
> > when I was just a kid and didn't know much about any of this
> > stuff I was asking similar questions. Even at age 60 I am
> > still
> > trying to figure antennas out!! The terrible thing is that
> > if
> > I hooked it up to a short wave receiver I would likely hear
> > something better -- just as if I had put a hunk of wire on
> > the
> > end. My first real experiences with antennas were hooking
> > my
> > homebrewed crystal sets to various metallic things and
> > discovering
> > that they worked!! I'm still smiling thinking about this
> > dish
> > one though!
> > --
> > Diagnosed Type II Diabetes March 5 2001

> > Beating it with diet and exercise!
> > 297/215/210 (to be revised lower)
> > 58"/43"(!)/44" (already lower too!)
> > --------------------
> > Visit my FINALLY UPDATED website at
> > http://members.shaw.ca/finkirv/
> > --------------------
> > Irv Finkleman,
> > Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> > Calgary, Alberta, Canada
>
> Yeah, I shouldn't laugh because I was probably doing the same thing when
> I was 10 years old, too. I remember a little one tube AM radio (legal)
> transmitter that I took to show and tell in the fourth grade because my
> 200 foot radius AM radio station was my hobby. We hooked it up to some
> kid's braces to test it. No, he didn't get a shock or anything (good
> thing he wasn't grounded anywhere) but everyone thought that it was cool
> because we were transmitting out of Joe's mouth!
>
> My dad was an EE and had built a few radio stations but he never laughed
> at any of my hairbrained ideas - and by doing that, the hobby stuck and
> 28 years later, I am still doing hairbrained things and (thanks to the
> net) am asking silly questions on the newsgroups myself.
>
> I thought about the question more. If he grounded the dish and attached
> 50+ feet of wire to the center element he might have a nice longwire
> antenna! Of course, the dish would be moot at that point. That's why
> the whole thing struck me as funny.

5712. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 15:06:10 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3ca1df6d$0$1415$1dc6e903@news.corecomm.net>
Source record: 146100

Once again. Yes a dedicated dipole cut to frequency will out perform a
B&W. But a B&W will outperform a dipole off frequency.
Besides 10dbm is only 1 s-unit.

Dave WD9BDZ

Rick Littlefield wrote:
>
> A friend of ours on 75 meters just took his B&W down and replaced it with a
> dipole because he was consistantly 10 dB or more down from everyone else. I
> realize anecdotal reports don't mean much, but now his signal is on par with
> the others. BTW (and I hate to admit this Cecil), the strongest signal in the
> group comes from a dipole at 90 feet fed with open wire and matched with a
> tuner.
>
> Rick K1BQT

5713. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 15:10:31 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3ca1e073$0$1415$1dc6e903@news.corecomm.net>
Source record: 146101

Mark

We agree. You are doing your thing, very well I hope, and I am doing my thing.
BTW I have said all along that nothing will beat a tuned dipole for a given band or sub band. But the B&W is intended to provide the user with a matched antenna on all frequencies. It is just not as efficient as a tuned dipole on any given frequency. To each his own.

Dave WD9BDZ

Mark Keith wrote:
>
> "David G. Nagel" <nagel@core.com> wrote in message news:<3ca14c5d$0$35573$1dc6e903@news.corecomm.net>...
> > Here we go again. For those who post things like those below, this is
> > what amateur radio is about. I own and operate a B&W antenna configured
> > as NVIA for 60-75 meters. I also use it for all the other amateur bands
> > up to 6 meters. This antenna does the job I want it to do. Yes it works
> > by burning swr in a 600 ohm resistor but the signal is only down ONE s
> > unit for all that.
>
> It turns rf into heat. Most of the ones I've heard were more than one
> S unit down from a coax fed dipole. I guess yours feels lucky...
>
> > Those who want to get every miliwatt into the ether a cut and tuned
> > dipole antenna is the way to go.
>
> Thats me! :)
>
> Remember all other antenna's are a
> > compromise between efficiency and size.
>
> Hummm, not really...Mine are all full size.
>
> The closer an antenna is to a
> > match between the output impedance and the wavelength of the frequency
> > and the space/time to install/cost to obtain.
>
> That paragraph hurts my head...Can I pass on that one?
>
> > Anything else is personal choice. I don't look down on you for yours,
> > give me the same.
>
> Well, I don't look down on yours either, but I'm not going to

> misdescribe it either. It's an 200$ air cooled dummy load with wires
> attached. Thats the plain truth about it. Maybe the wires radiate a
> larger portion of the RF applied than the dummy load turns to heat,
> maybe not, but it is what it is. There are plenty of antennas I've
> used here that I don't like either. It doesn't bother me if I badmouth
> them. It shouldn't bother you. I once ran a hustler vertical ground
> mounted. It was a overpriced dummy load on a stick. I'm sure that bugs
> the heck out of hustler when they read that, but I just don't care.
> I'm a redneck. MK

5714. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 15:27:30 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3ca1e92e_2@news1.prserv.net>
Source record: 146102

> I don't think you understand what the military wants or needs from an
> antenna system. Military applications involve a lot of frequency
> hopping with very short stays on a particular frequency often just
> seconds. Rest assured that they don't assume gain they just run
> what ever power they need. The military had been using TFDs since
> at least the Second World War. We Hams sometimes suffer under
> the delusion that they are smarter than non Hams when in reality
> we just have a different hobby.

Actually, you are comparing apples and oranges. The T2FD is used in field applications where portability is the most important consideration. A kilowatt amplifier is easier to move quickly than a big antenna array. Go to any fixed site, particularly overseas, and look at what the military (gov't) uses on the stationary end of the circuit. Huge LPAs which operate down to 3 MHz, inverted cones, funny spirals for NVIS, still a few Rhombics, 1000 ft. dia. CDAAs for DF and receiving, and so on. I'm watching some of the bigger fixed and rotating LPAs, hoping I can catch one when it is surplused. There's a big Grainger fixed LPA at the CG receive site in VA which always makes me drool when I pass it, and an AS-3195 (rotatable 3-30 MHz LPA) that's been off the tower for a couple of weeks in Texas which I'm curious about the disposition of.

--
Crazy George

5715. Re: Antennas for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 15:30:07 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3ca1e950_2@news1.prserv.net>
Source record: 146103
Cross-posted to: sci.electronics.equipment,misc.industry.electronics.marketplace,rec.radio.amateur.antenna

Mmmm. Closed down an EMC measurement facility, did we?

--
Crazy George
Remove NO and SPAM from return address
Michael Bender <wdizney@yahoo.com> wrote in message
news:c44869b7.0203262103.425c6615@posting.google.com...
> The following antennas are for sale. All are fully tested and in very
> good to great cosmetic shape.
>
> 1) Sylvania ridged horn (no model number) 2-18GHz = $650.00
> 2) Polorad model CA-L 1-2.34Ghz =$300.00 2 each
> 3) Watkins Johnson model WJ8326-1A Quad ridge .75-4.8Ghz =$650.00
> 4) Empire device LP-105 12 inch loop antenna 150kHz-30Mhz =$100.00
> 5) Empire device LG-105 30 inch loop antenna 14khz-150khz =$200.00
> 6) Empire device AT-112/LPA112 Log Periodic w/ reflector 1-10GHz
> =$450.00
> 7) Electro-Metrics BDA-25 Broad Band dipole 20-200MHz =$275.00 1 each
> 8) Electro-Metrics ARL-25 Remote Switchable Loop 10kkhz-30MHz
> =$150.00 2 each
> 9) Tecom 802527-3 Directional Helical antenna 1775-2300Mhz =$150.00
> 10) Eaton 96002/Emco 3109 20-300MHz 2kw power rating =$600.00
> 11) HP 346B noise source up to 18Ghz type N connector =$500.00
> 12) Eaton Horn antenna 18-26Ghz w/waveguide =$400.00
> 13) Eaton Horn antenna 26-40Ghz w/waveguide =$600.00
>
> Please e-mail for more complete specs and pictures. Buyer pays actual
> shipping charges. email address is wdizney@yahoo.com
>
> Thanks for looking
> Mike

5716. Re: Need cutting chart for Larsen Whip for 28 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 16:07:36 UTC
From: r <rong5@mindspring.com>
Message-ID: <a7sqnjvcp1@nntp9.atl.mindspring.net>
Source record: 146109

I called Larsen and they provided me the info. Thanks to the guys who
replied directly with help...Ron KB6GK
"*" <rong5@mindspring.com> wrote in message
news:a7inn6$nu7$1@slb6.atl.mindspring.net...
> I need a cutting chart for a 49" whip on a Larsen NMO 27 antenna. I got
this
> from a friend, and it is a full length whip which I would like to cut for
> about 28.6 MHz.
> Could anyone provide the cutting chart for this whip? Email to
> rong5@mindspring.com
> Thanks.....
>
>

5717. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 16:17:17 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <Q+6hPOlr=w0VEJNtbWd7=O3hQgQV@4ax.com>
Source record: 146104

Mike Rofon <TheRealExray@netscape.net> wrote:

>Fractenna wrote:
>>
>> >
>> >"J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca> wrote in message
>> >news:EL7o8.6451$n82.1278543@news20.bellglobal.com...
>> >>
>> >> Steve VE9SRB bought two:
>> >> > Although, I must shamefully admit that
>> >> > I did buy two of them (for research
>> >> > and demonstration purposes only
>> >> > of course), so add me to the list of suckers
>> >> > who merrily handed over $12.99 + S&H (twice).
>> >>
>> >> Oh my gawd... you guys !!!
>> >>
>> >
>> >I was actually asked by a third party to determine if there was any validity
>> >to the claims made regarding these devices.
>> >
>> >Steve
>>
>> Hi Steve,
>>
>> The one from Rhino International is on sale (at many of those gas
>> station/convenience store hybrids) at only $8.99.
>>
>> Mine cost $19.99 last Summer...and that was in taxless NH.
>>
>> 73,
>> Chip N1IR
>
>I'm totally unfamiliar with these things. Are these $10-20 ones
>different in any way than the ones on ebay that sell for less than a
>buck + a couple bucks shipping?

Well, the $29.95 device I saw at http://www.wirelesscertified.com/ works better
than the cheap ones because it is made from "99% higher quality film!"

!!!!!!!!!!!!!!!!!

Bob
k5qwg

5718. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 16:21:05 UTC
From: sbjknox@tah-usa.net
Message-ID: <13b150c7.0203270821.49d2d97f@posting.google.com>
Source record: 146105
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

Hi Jim,
A dual J-K flip-flop (CMOS 4027) will easily operate at these freqs
and can produce frequency-insensitive 90 deg shift.

Regards,

Sid Knox

> Think of separate receivers for each antenna but
> > each receiver is a direct conversion quadrature receiver. A quadrature
> receiver
> > uses two mixers with the LOs having a 90 degree phase shift
>
> That's fine for spot frequency. However, as you tune across the band, the
> LO phase shifter cannot track a constant 90ï¿½ shift.

5719. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 16:33:51 UTC
From: joe <joe_uncle@uncle.com>
Message-ID: <3CA1F462.33D03DBA@uncle.com>
Source record: 146106

please check www.cablexperts.com also in arrl ads

lots of good info, fair pricing and monthly specials.

You may not like to spend a little more then you original budget
allowed but you will be pleased after the install is done,
every time you key up the rigs, you will be very pleased !

73 joe

"Monte " wrote:

> OK. OK.
>
> The decision has been made to bite the bullet and pay the bucks. I'm
> researching local shops here in Nashville and those on the web for one
> continuous low-loss feed line for each radio/antenna.
>
> Thank you all (except astroman) for your thoughtful, informative
> replies. I continually learn from this newsgroup and appreciate the
> help you have offered me and others that pose questions. Perhaps I
> will have the opportunity to return the favor to you or other fellow
> hams.
>
> Monte B. Carroll
> WC4MBC
> Nashville, Tennessee, USA

5720. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 16:37:21 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA1F541.BA7DD81E@IEEE.org>
Source record: 146107

Rick Littlefield wrote:
> A friend of ours on 75 meters just took his B&W down and replaced it with a
> dipole because he was consistantly 10 dB or more down from everyone else. I
> realize anecdotal reports don't mean much, but now his signal is on par with
> the others. BTW (and I hate to admit this Cecil), the strongest signal in the
> group comes from a dipole at 90 feet fed with open wire and matched with a
> tuner.

It could be even stronger without the tuner. :-)
--
cheers, CAM http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5721. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 16:42:41 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA1F681.98DF023B@IEEE.org>
Source record: 146108

"David G. Nagel" wrote:
> Once again. Yes a dedicated dipole cut to frequency will out perform a
> B&W. But a B&W will outperform a dipole off frequency.

Absolutely untrue, David. An "off frequency" dipole radiates just as
well as a resonant dipole. My 130 ft. dipole, which uses no antenna
tuner, is more efficient than the B&W on *all* HF bands.
--
cheers, CAM http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5722. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 17:17:15 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3CA1FE9B.4D2AE34A@iquest.net>
Source record: 146110

B&W's patent on this is expired (era 2000). The patent was issued for
the purpose of providing the asignee (actually an employee B&W) some
protection while supplying the US military this item which they desired
for ALE operations. It was at the gov't request.

"J. Harvey" wrote:
>
> "JDer8745" wrote:
> > B&W makes a folded dipole which they
> > sell for $200. That seems like a lot.
> > They say it's a patented design.
> > Must be a very old patent.
> > Does this seem strange?
>
> "J. Harvey" wrote:
> > Shall we play 'Let's find the patent' ? I took
> > a quick peek but didn't see any patent numbers.
> > Any quick leads before I dig deeper ?
>
> "Roy Lewallen"
> > U.S. Patent 4,423,423
>
> Thanks...
>
> Uh oh... the www.USPTO.gov 'patent server' is down - probably due to
> millions of people trying to access all those Tesla patents over the last
> few days (...sorry...).
>
> Maybe we can try later...
>
> http://patft.uspto.gov/netahtml/srchnum.htm
> (Enter the patent number: 4,423,423 in this case)

5723. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 18:13:38 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3CA20BB1.4AE462E9@shaw.ca>
Source record: 146111

"David G. Nagel" wrote:
>
> Gentlemen;
>
> Why are some of you making fun of the question posed by the original
> writer? Remember that the only stupid question is the one not asked. The
> original writer wanted to know the answer to his question. Just because
> the rest of us know that this in a very impractical device to use as a
> HF antenna doesn't mean that he knew it to. Obviously he didn't now he
> knows not to ask question on the net.
>
> Dave WD9BDZ
>

Not making fun, Dave -- remembering fondly when we went
through
the same knowledge phase ourselves! One reply 'HAHAHA' was
uncalled
for, but sometimes thats what you find on newsgroups.
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5724. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 18:59:36 UTC
From: n7ws@yahoo.com
Message-ID: <3ca1ef84.938628@news.triconet.org>
Source record: 146112

On Wed, 27 Mar 2002 08:30:01 +0000, "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
wrote:

[snip]

|The reflection loss from a single 239/259 pair is probably trivial at
|144MHz, but if you use too many of these connectors then problems build
|up along the line. Each connector reflection can either add or cancel
|with another one, depending on the electrical length of line between
|them - but Murphy is there to make sure they will add. The result can
|be a surprisingly high apparent SWR, from an antenna you believed was
|well matched. This can lead you into the next kind of loss...

To be sure. This is why in wideband systems there is much concern about keeping
individual device VSWRs low. Multiple mismatches, even little ones, can cause
significant VSWR ripple as the frequency is changed. The relative phase of the
mismatches changes with frequency allowing constructive and destructive
interaction.
|
|Dissipative loss is the one that makes cables warm and can burn up
|connectors - but it *must* involve resistance somewhere.
|
|Resistance inside the connector itself means either a bad contact
|(series resistance) or water (shunt resistance). This is unimportant for
|connectors that are in good condition and correctly assembled. 259/239
|connectors can handle many kW up through 144MHz. Likewise N connectors
|are good for 1.5kW at 432MHz... but they do have to be perfect. If they
|aren't, you soon find out!
|
|Transmission lines have dissipative losses of their own. Generally what
|makes coax get arm with high power is, in order of importance: skin
|effect resistance of the inner conductor (series resistance causing
|I^2*R dissipation), skin effect on the outer conductor, and least of all
|dielectric loss in the insulator (shunt resistance causing V^2/R
|dissipation). These losses are present even when the SWR is 1. An SWR of
|1 means there are no periodic variations of voltage and current along
|the line, just a very gentle decrease along the line due to the losses.
|This is the least-bad situation.
|
|Extra dissipative loss is caused in cables when the SWR is not 1. This
|is because there are current maxima every half-wave along the line where
|I^2*R losses are magnified, and voltage maxima where the V^2/R
|dissipation is magnified. There are various graphs and programs (and an
|Excel spreadsheet on the 'In Practice' web pages) to calculate these
|losses for typical cables.

|
|So non-constant-impedance connectors such as the 259/239 generally don't
|*have* serious dissipative losses themselves, but they do cause minor
|reflections which in turn can *cause* dissipative losses in the line.

My point is that old wives are constantly stating that UHF connectors have X db loss (insert your favorite number) when in fact they don't have a clue.

It is extremely difficult to measure said loss with any precision because there are no standards with which to even calibrate a measurement system in this connector series.

So let's pretend I'm still employed and someone walks into my lab and says, "I'd like to know the loss in this 'UHF' connector (the DUT)."

We'll make it "easy" and say that it is a female barrel connector. For my HP-8510C Vector Network Analyzer I have two sets of calibration standards: 3.5mm sexed connectors and 7mm sexless connectors. (There are type N standards, but at $5,000 a set for reference standards and cables, I opted not to buy them)

I pick the 7mm set and perform a full two-port, 12-term error corrected calibration. Now what the hell do I do? There aren't any 7mm to UHF adapters that I'm aware of so the best that I can do is install a pair of 7mm to type N adapters followed by a pair of type N to UHF adapters.

Now we've already agreed above that mismatch loss can mimic dissipative loss so we need to be able to characterize the mismatch loss. It's not enough to connect the two test cables together and "normalize" and then insert the DUT and say, "Eureka, 1 dB."

Back to the adapters. My basic error-corrected calibration will have an equivalent directivity of 60 dB or so with commensurate source match. Really good 7mm to N adapters might have 40 dB return loss (and close to zero dissipative insertion loss) so installing these has already degraded my directivity and source match to 40 dB. Still pretty good considering what comes next.

I add two N to UHF adapters. A ballpark guess is that these have 20 dB RL (1.22:1 VSWR). This reflection is so much greater than the 7mm to N adapters that it swamps their contribution. Result, my $200K analyzer with 60 dB directivity just became the equivalent of a $200 MFJ analyzer with 20 dB directivity.

But, there's more. The DUT is what is called a "non-insertable device." The input and output are the same sex. So, I can't even do the expedient thing of connecting the two test cables together directly and normalizing to 0 dB because I would need one male and one female test connector. With precision sexed connectors (3.5mm for instance) matched length adapters are used in this situation. It the DUT is female-female (our case), then a "through" connection using a male-female adapter is used to normalize the through calibration. But I don't know of any precision UHF male-to-female adapters to use for this operation.

So the best that can be done is to back up and perform a through calibration using one N female and one N male adapter and then installing the N to UHF adapters, which means that their mismatch and insertion losses are part of the measurement. Which part? Who knows? And that is the crux of the problem.

Now I would seem to be arguing with myself because earlier I stated that high loss in these connectors is an old wives' tale and now I'm saying it can't be measured accurately.

But I really can have it both ways. By inspection it can be inferred that real dissipative loss is low. These connectors have, after all, relatively big conductive surfaces and fairly minimal dielectric. Unless they're full of water or suffering the effects of having been full of water, the ohmic losses are inconsequential.

So what's the problem? Well, it is as stated by Ian in the last quoted paragraph above and in my remarks on VSWR ripple.

But pragmatically speaking, at 2 meters and below and extra connector in the system somewhere is probably immaterial.

Wes Stewart, N7WS

5725. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 19:28:35 UTC
From: Ravi R <krravi@yahoo.com>
Message-ID: <D3po8.89829$7b.8074616@bin7.nnrp.aus1.giganews.com>
Source record: 146113

Maybe go underwater and blow the pipe ? oh wait, a snorkel could do that !

Just kiddin !

"Speaker Repair" <topdog@woofer.com> wrote in message
news:3C9FBEA7.7A8@woofer.com...
> Ravi R wrote:
> >
> > This might sound silly.. but i was just curious to know if my existing
> > Satellite Dish (You know the huge one that rotates..).. can in any way
> > modified to be used as a Shortwave Antenna ?
>
>
> HAHAHA, Good one, man!
>
> Can you tell me how to make my piccolo sound like a tuba????
>
>

5726. Re: Help with Antenna !!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 19:30:03 UTC
From: Ravi R <krravi@yahoo.com>
Message-ID: <%4po8.281640$uv5.24642064@bin6.nnrp.aus1.giganews.com>
Source record: 146114

Well david, i am not offended by the replies... but i appreciate your
courtesy.

After much study, i finally decided that, at one point i will get a JRC NRD
545 or something like that and meddle around with UHF/VHF, using my dish
antenna :)

"David G. Nagel" <nagel@core.com> wrote in message
news:3ca1defb$0$1415$1dc6e903@news.corecomm.net...
> Gentlemen;
>
> Why are some of you making fun of the question posed by the original
> writer? Remember that the only stupid question is the one not asked. The
> original writer wanted to know the answer to his question. Just because
> the rest of us know that this in a very impractical device to use as a
> HF antenna doesn't mean that he knew it to. Obviously he didn't now he
> knows not to ask question on the net.
>
> Dave WD9BDZ
>
> Speaker Repair wrote:
> >
> > Irv Finkleman wrote:
> > >
> > > Speaker Repair wrote:
> > > >
> > > > Ravi R wrote:
> > > > >
> > > > > This might sound silly.. but i was just curious to know if my
existing
> > > > > Satellite Dish (You know the huge one that rotates..).. can in
any way
> > > > > modified to be used as a Shortwave Antenna ?
> > > > >
> > > > HAHAHA, Good one, man!
> > > > >
> > > > Can you tell me how to make my piccolo sound like a tuba????
> > > >
> > > I had a good laugh on this one too, but I also remember that
> > > when I was just a kid and didn't know much about any of this
> > > stuff I was asking similar questions. Even at age 60 I am
> > > still
> > > trying to figure antennas out!! The terrible thing is that
> > > if
> > > I hooked it up to a short wave receiver I would likely hear

> > > something better -- just as if I had put a hunk of wire on
> > > the
> > > end. My first real experiences with antennas were hooking
> > > my
> > > homebrewed crystal sets to various metallic things and
> > > discovering
> > > that they worked!! I'm still smiling thinking about this
> > > dish
> > > one though!
> > > --
> > > Diagnosed Type II Diabetes March 5 2001
> > > Beating it with diet and exercise!
> > > 297/215/210 (to be revised lower)
> > > 58"/43"(!)/44" (already lower too!)
> > > --------------------
> > > Visit my FINALLY UPDATED website at
> > > http://members.shaw.ca/finkirv/
> > > --------------------
> > > Irv Finkleman,
> > > Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> > > Calgary, Alberta, Canada
> >
> > Yeah, I shouldn't laugh because I was probably doing the same thing when
> > I was 10 years old, too. I remember a little one tube AM radio (legal)
> > transmitter that I took to show and tell in the fourth grade because my
> > 200 foot radius AM radio station was my hobby. We hooked it up to some
> > kid's braces to test it. No, he didn't get a shock or anything (good
> > thing he wasn't grounded anywhere) but everyone thought that it was cool
> > because we were transmitting out of Joe's mouth!
> >
> > My dad was an EE and had built a few radio stations but he never laughed
> > at any of my hairbrained ideas - and by doing that, the hobby stuck and
> > 28 years later, I am still doing hairbrained things and (thanks to the
> > net) am asking silly questions on the newsgroups myself.
> >
> > I thought about the question more. If he grounded the dish and attached
> > 50+ feet of wire to the center element he might have a nice longwire
> > antenna! Of course, the dish would be moot at that point. That's why
> > the whole thing struck me as funny.

5727. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 19:37:33 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <1cpo8.10169$n%1.1918@nwrddc03.gnilink.net>
Source record: 146115

WES goes WAYYYYY out in left field with a lengthy description of connector analysis - ignoring that
the ORIGINAL post was on the adviseability of series-connecting 3 separate pieces of RG-8 coax into
a single longer run - remember?

> OK, here's another question. How much loss is there in connecting
> two, maybe three sections of RG-8 for the 2-meter? In other words,
> maybe one length of 75 feet connected to 35 feet connected to 35 feet
> for a total length of 145 feet.

NOW, visualize the (assumed) *SIX* additional male PL type plugs, and *three* matching barrel
connectors - as well as the additional liability of degradation due to potential moisture intrusion
over relatively short time period, added to the fact that the coax being used is undoubtedly ALREADY
well into its lifespan from prior use - and THEN tell us all that this is INDEED a fully reasonable
and acceptable proposal for a new 144 mhz installation - as compared to spending the money for the
RIGHT full-length of better stuff...

Not for MY VHF installation it ain't!
--
Gary - KJ6Q
****
Two things we'll never see:
1. Perpetual motion...
2. A liberal Democrat complaining
about "Too much government"

"Wes Stewart" <n7ws@yahoo.com> wrote in message news:3ca1ef84.938628@news.triconet.org...
> On Wed, 27 Mar 2002 08:30:01 +0000, "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
> wrote:
>
> [snip]
>
> |The reflection loss from a single 239/259 pair is probably trivial at
> |144MHz, but if you use too many of these connectors then problems build
> |up along the line. Each connector reflection can either add or cancel
> |with another one, depending on the electrical length of line between
> |them - but Murphy is there to make sure they will add. The result can
> |be a surprisingly high apparent SWR, from an antenna you believed was
> |well matched. This can lead you into the next kind of loss...

>
> To be sure. This is why in wideband systems there is much concern about keeping
> individual device VSWRs low. Multiple mismatches, even little ones, can cause
> significant VSWR ripple as the frequency is changed. The relative phase of the
> mismatches changes with frequency allowing constructive and destructive
> interaction.
> |
> |Dissipative loss is the one that makes cables warm and can burn up
> |connectors - but it *must* involve resistance somewhere.
> |
> |Resistance inside the connector itself means either a bad contact
> |(series resistance) or water (shunt resistance). This is unimportant for
> |connectors that are in good condition and correctly assembled. 259/239
> |connectors can handle many kW up through 144MHz. Likewise N connectors
> |are good for 1.5kW at 432MHz... but they do have to be perfect. If they
> |aren't, you soon find out!
> |
> |Transmission lines have dissipative losses of their own. Generally what
> |makes coax get arm with high power is, in order of importance: skin
> |effect resistance of the inner conductor (series resistance causing
> |I^2*R dissipation), skin effect on the outer conductor, and least of all
> |dielectric loss in the insulator (shunt resistance causing V^2/R
> |dissipation). These losses are present even when the SWR is 1. An SWR of
> |1 means there are no periodic variations of voltage and current along
> |the line, just a very gentle decrease along the line due to the losses.
> |This is the least-bad situation.
> |
> |Extra dissipative loss is caused in cables when the SWR is not 1. This
> |is because there are current maxima every half-wave along the line where
> |I^2*R losses are magnified, and voltage maxima where the V^2/R
> |dissipation is magnified. There are various graphs and programs (and an
> |Excel spreadsheet on the 'In Practice' web pages) to calculate these
> |losses for typical cables.
> |
> |So non-constant-impedance connectors such as the 259/239 generally don't
> |*have* serious dissipative losses themselves, but they do cause minor
> |reflections which in turn can *cause* dissipative losses in the line.
>
>
> My point is that old wives are constantly stating that UHF connectors have X db
> loss (insert your favorite number) when in fact they don't have a clue.
>
> It is extremely difficult to measure said loss with any precision because there
> are no standards with which to even calibrate a measurement system in this
> connector series.
>
> So let's pretend I'm still employed and someone walks into my lab and says, "I'd
> like to know the loss in this 'UHF' connector (the DUT)."
>
> We'll make it "easy" and say that it is a female barrel connector. For my

> HP-8510C Vector Network Analyzer I have two sets of calibration standards: 3.5mm
> sexed connectors and 7mm sexless connectors. (There are type N standards, but at
> $5,000 a set for reference standards and cables, I opted not to buy them)
>
> I pick the 7mm set and perform a full two-port, 12-term error corrected
> calibration. Now what the hell do I do? There aren't any 7mm to UHF adapters
> that I'm aware of so the best that I can do is install a pair of 7mm to type N
> adapters followed by a pair of type N to UHF adapters.
>
> Now we've already agreed above that mismatch loss can mimic dissipative loss so
> we need to be able to characterize the mismatch loss. It's not enough to
> connect the two test cables together and "normalize" and then insert the DUT and
> say, "Eureka, 1 dB."
>
> Back to the adapters. My basic error-corrected calibration will have an
> equivalent directivity of 60 dB or so with commensurate source match. Really
> good 7mm to N adapters might have 40 dB return loss (and close to zero
> dissipative insertion loss) so installing these has already degraded my
> directivity and source match to 40 dB. Still pretty good considering what comes
> next.
>
> I add two N to UHF adapters. A ballpark guess is that these have 20 dB RL
> (1.22:1 VSWR). This reflection is so much greater than the 7mm to N adapters
> that it swamps their contribution. Result, my $200K analyzer with 60 dB
> directivity just became the equivalent of a $200 MFJ analyzer with 20 dB
> directivity.
>
> But, there's more. The DUT is what is called a "non-insertable device." The
> input and output are the same sex. So, I can't even do the expedient thing of
> connecting the two test cables together directly and normalizing to 0 dB because
> I would need one male and one female test connector. With precision sexed
> connectors (3.5mm for instance) matched length adapters are used in this
> situation. It the DUT is female-female (our case), then a "through" connection
> using a male-female adapter is used to normalize the through calibration. But I
> don't know of any precision UHF male-to-female adapters to use for this
> operation.
>
> So the best that can be done is to back up and perform a through calibration
> using one N female and one N male adapter and then installing the N to UHF
> adapters, which means that their mismatch and insertion losses are part of the
> measurement. Which part? Who knows? And that is the crux of the problem.
>
> Now I would seem to be arguing with myself because earlier I stated that high
> loss in these connectors is an old wives' tale and now I'm saying it can't be
> measured accurately.
>
> But I really can have it both ways. By inspection it can be inferred that real
> dissipative loss is low. These connectors have, after all, relatively big
> conductive surfaces and fairly minimal dielectric. Unless they're full of water
> or suffering the effects of having been full of water, the ohmic losses are

> inconsequential.
>
> So what's the problem? Well, it is as stated by Ian in the last quoted
> paragraph above and in my remarks on VSWR ripple.
>
> But pragmatically speaking, at 2 meters and below and extra connector in the
> system somewhere is probably immaterial.
>
> Wes Stewart, N7WS
>

5728. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 19:42:45 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <Vgpo8.10172$n%1.6988@nwrddc03.gnilink.net>
Source record: 146116

OK - my math was off - *4* extra PL connectors, *2* barrel connectors - but the basic logic STILL
applies...

>
> NOW, visualize the (assumed) *SIX* additional male PL type plugs, and *three* matching barrel
> connectors -
> --
> Gary - KJ6Q
> **********
> Two things we'll never see:
> 1. Perpetual motion...
> 2. A liberal Democrat complaining
> about "Too much government"
>

5729. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 19:59:06 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <1084auogsf06hesimb17khs5vf7bj0kqic@4ax.com>
Source record: 146117

On Wed, 27 Mar 2002 18:59:36 GMT, n7ws@yahoo.com (Wes Stewart) wrote:

>
>Now I would seem to be arguing with myself because earlier I stated that high
>loss in these connectors is an old wives' tale and now I'm saying it can't be
>measured accurately.
>
>But I really can have it both ways. By inspection it can be inferred that real
>dissipative loss is low. These connectors have, after all, relatively big
>conductive surfaces and fairly minimal dielectric. Unless they're full of water
>or suffering the effects of having been full of water, the ohmic losses are
>inconsequential.
>
>So what's the problem? Well, it is as stated by Ian in the last quoted
>paragraph above and in my remarks on VSWR ripple.
>
>But pragmatically speaking, at 2 meters and below and extra connector in the
>system somewhere is probably immaterial.
>
>Wes Stewart, N7WS

Hi Wes, and all,

This seems to be a problem of the forest and the trees.

It would be presumed that the loss of "one connector" is immaterial in
that it must be connected to another connector. Rather, the problem
is the loss of the "connection."

That is relatively easy to measure through substitution (as long as
the substitution does not add significant error, a not unlikely event
here). Or: simply measure the power delivered through a cable, then
break it, connector the broken ends, connect them, measure the power
delivered through the connectored/connected cable. The difference is
surely the insertion loss.

So much for the forest. The trees present another angle to the
mismatch problem, and one more to the matter of failure. Any
connection that presents a mismatch must have its voltage and current
specification linearly derated by the value of the SWR (from any
source of mismatch for that matter). I would offer, it is the voltage
breakdown that will get you every time with the consequent ohmic
failure through a carbonized path and avalanche conditions following.
This is a dielectric issue at the connection.

73's
Richard Clark, KB7QHC

5730. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 20:25:54 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203271225.4bd86411@posting.google.com>
Source record: 146118

"David G. Nagel" <nagel@core.com> wrote in message
news:<3ca1df6d$0$1415$1dc6e903@news.corecomm.net>...
> Once again. Yes a dedicated dipole cut to frequency will out perform a
> B&W. But a B&W will outperform a dipole off frequency.
> Besides 10dbm is only 1 s-unit.
>
> Dave WD9BDZ

Why would it perform any better off it's design freq? The resister is
still there sapping rf. If the normal dipole is fed with ladder line
and a tuner, or tuned ladder line sections with no tuner, I'd bet
either one would beat the B/W on nearly any freq. As far as 10 db,
thats hard to describe in S units as all the radios's vary, but in my
overall experience, 10 db is usually about 2 s units on the average
radio appx mid scale on the meter. This will also be about the same
increase seen going from a barefoot rig at 100w to one with an amp at
appx 800-1000w.
>
> Rick Littlefield wrote:
> >
> > A friend of ours on 75 meters just took his B&W down and replaced it with a
> > dipole because he was consistantly 10 dB or more down from everyone else. I
> > realize anecdotal reports don't mean much, but now his signal is on par with
> > the others. BTW (and I hate to admit this Cecil), the strongest signal in the
> > group comes from a dipole at 90 feet fed with open wire and matched with a
> > tuner.

I bet thats more due to the height than the method of feeding. Coax
fed should do just as well, if not slightly better. He's kickin tail
cuz he's at 90 ft I bet. I bet his edge gets larger the farther out he
talks also, compared to the others. I've seen similar results from
guys around this state with the same appx antennas. "high dipoles
compared to lower dipoles or loops" . MK

5731. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 20:46:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA22FB2.E62C536B@eznec.com>
Source record: 146019

I want to raise a caution about the use and interpretation of "reflection loss", which I've seen in a couple of recent postings.

If you have a fixed 50 ohm resistive source and a fixed 50 ohm resistive load, then insert between them a connector or other component that causes a reflection, the power in the 50 ohm load is reduced. The amount of this reduction is called "reflection loss" or "mismatch loss". Likewise, if the 50 ohm load impedance changes, the reduction in power it gets can be calculated from its reflection coefficient and attributed to "reflection loss" or "mismatch loss". It comes about simply because the source can't deliver as much power to any load that doesn't match its output impedance as it can to one that does. It's a valid and convenient concept that's widely used in laboratory environments.

But let's say you have an impedance matching device (e.g., antenna tuner) at the output of the source. You change the load impedance, or insert a reflective connector. This changes the impedance seen by the source. But by readjusting the impedance matching device, you can restore exactly the same amount of power to the load with exactly the same amount of power from the source as you had with no reflections. So where's the loss? The answer is, there isn't any. Reflections, by themselves, aren't a cause of loss (except for increasing the transmission line loss somewhat, usually much less than the "reflection loss" -- more below). "Reflection loss" refers to a reduction of power being dissipated in the load as a result of an impedance mismatch between the source and load. If this mismatch can be corrected anywhere in the system, the "loss" goes away. If the mismatch is corrected at the source, all the reflections are still present except the one at the very source, yet they no longer cause "reflection loss".

So be very careful not to misinterpret "reflection loss" and think that reflections are actually a source of this amount of loss. Only when the source has a fixed, resistive output impedance (like a laboratory signal generator) and no matching device is present is the concept of "reflection loss" valid.

When a transmission line operates at an SWR above 1, its loss increases. The amount of this added loss depends on the loss of the line when matched, and in general is negligible for reasonably low SWR or when the matched line loss is reasonably low. This increased loss is usually much less than the "reflection loss", and shouldn't be confused with it.

Roy Lewallen, W7EL

5732. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 21:50:11 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <ua4fmso8797146@corp.supernews.com>
Source record: 146020

Taking this at all seriously shows a severe lack of elementary physics
educatiuon.
At least he took the data and responded to it.
Stuff like this should set off your BS Detector.
H.
WA5IGW

"J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca> wrote in message
news:EL7o8.6451$n82.1278543@news20.bellglobal.com...
> The Chipster N1IR 'tested' two:
> > I have tested the two advertised on
> > television and have not been able to
> > replicate the claims.
>
> Steve VE9SRB bought two:
> > Although, I must shamefully admit that
> > I did buy two of them (for research
> > and demonstration purposes only
> > of course), so add me to the list of suckers
> > who merrily handed over $12.99 + S&H (twice).
>
> Oh my gawd... you guys !!!
>
>
>

5733. JoGunn Skip Jack antenna dimensions needed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 22:16:53 UTC
From: Scott McClements <yetbbwa@grove.iup.edu>
Message-ID: <3CA244D5.524FFD50@grove.iup.edu>
Source record: 146021

Hi,

Does anybody have the element lengths of the Jogunn 2 element Skip Jack
antenna they could post up here?

Scott.

5734. Re: Direction finding

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-27 22:37:11 UTC
From: Jerome Liebler <lieblerj@earthlink.net>
Message-ID: <3CA24CDB.F9749D28@earthlink.net>
Source record: 146022
Cross-posted to: rec.aviation.homebuilt,sci.electronics.design,rec.radio.amateur.antenna

Jim,

Check out www.Iwca.org/library/articles/pa0se/active/ for a wide band e
field pre amp with wide dynamic range and overload protection. It probably can
be simplified. The reference might also be useful.

regards
Jerry

Jim Weir wrote:

> One might have thought that the patent application would have contained
> dimensions for a "suitable" sense antenna, but then again, that's what
> tinsnips are for.
>
> > assembly, with a conductive material or screen wire sense antenna element
> 41
> > carried on, or embedded in, the Fiberglass cover 60.
> >
> > It seems that the sense antenna is simply a chunk of screen embedded in
> the
> > cover and connected to a preamplifier by way of a single wire.
>
> Yes, I'm going to build one, the only question is time. I've got two other
> projects ahead of it, but it will get done. As to the error correction,
> I'll build one and see what kind of errors I get. The specifications for
> high-end military and low-end civilian vary several orders of magnitude.
>
> First thought is to wind two toroids and mount them at right angles to each
> other and glued onto a blank piece of PC board, with the sense antenna just
> a patch of copper at the far end of the board. The nice thing about doing
> stuff down at a MHz. or so is that you can actually examine the signals out
> of the antennas with a fairly low-tech scope to determine phase angles and
> the like. The shop is about three blocks from a saturation radiation source
> at 830 kHz. transmitting 10 kW continuously. First time I've ever
> intentionally USED the sucker; heretofore it has been a royal pain to keep
> it out of the workings.
>
> Jim
>
> > You thinking of building one ? Keep in mind that the actual ARN-149
> product
> > itself has internal "Quadrantal Error Correction (QEC) set by aircraft
> > connector strapping, eliminating corrector modules and airframe-specific

> > internal adjustments..." The patent barely mentions the topic.
> >
> >
> >
> >

5735. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 00:00:34 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <i2to8.11346$1f1.830805@e3500-atl2.usenetserver.com>
Source record: 146023

Mark Keith <nm5k@wt.net> wrote in message
news:25eb70d7.0203270442.43c78170@posting.google.com...
> "David G. Nagel" <nagel@core.com> wrote in message
news:<3ca14c5d$0$35573$1dc6e903@news.corecomm.net>...
<<<huge snip>>
.....dummy load on a stick.

. MK

Mark,

That's like the arguments I keep having with a certain organization I belong to that uses a ra-
ther extensive HF system. They like to promote the B&W FD to its members, but I wasn't
having any of that. They also like those hamstick thingies (YECH!!) on organizational vehicles or high-priced couplers and whips. ALL of which equate to the "dummy-load-on-a-stick" you mentioned. I am afraid I am one of those "every 'nth of RF I can pump out guys. Oddly enough, it was that emergency services organization that taught me that to start
with back when I was a kid. One of their arguments is they are afraid that, since *some* of their members are merely appliance ops who only use radio to facilitate their other duties, they might not be able to "operate" antennas or radios that require tuning, etc. OK, I can
understand that, but what good is it if your emergency message doesn't get thru because the
antenna system is so user friendly, it doesn't WORK?

For us hams, it isn't so critical to get every last ounce of RF out, and the choices of antennas
are, indeed, our own to make. My habit of trying to have as efficient a system I can is just
the way I was elmered in my early days in radio.

73

Jerry
K4KWH

5736. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 00:09:32 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <_ato8.18345$mA1.1501454@news20.bellglobal.com>
Source record: 146024

Apparently ALE (automatic link establishment) brings such tremendous advantages in establishing reliable HF communications that it would be worth losing perhaps 6dB or so in the dummy dipole. ALE doesn't play well with antenna tuners.

ALE URLs:
www.google.com/search?q=automatic+link+establishment+ALE
http://www.rockwellcollins.com/ecat/gs/ALE.html?smenu=101

5737. Re: EH Antennas????

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 00:18:47 UTC
From: N0SA <n0sa@earthlink.net>
Message-ID: <Hjto8.1282$7j.97731@newsread2.prod.itd.earthlink.net>
Source record: 146025

Thanks Roy
OH MY GOD!! I did not realize this thread was going on. Very interesting
reading.
Larry N0SA
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:3CA104C5.3D356E97@eznec.com...
> Go to http://www.groups.google.com and do a seach for "EH antenna" on
> this newsgroup. You'll find plenty.
>
> Roy Lewallen, W7EL
>
> N0SA wrote:
> >
> > I've been reading up on the EH antenna sites. It has peaked my interest,
as
> > I am always looking for new ideas and antennas to try. Does anyone in
the
> > group know anything about these antennas or have any opinions on these
> > antennas? Just interested.
> > Larry N0SA

5738. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 00:19:12 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3ca2619c_1@news.iglou.com>
Source record: 146026

This friend of mine has a Motorola Startac, flip phone. The batter is on the flip-up part so he put the booster behind the battery. When in use, the booster is actually up next to the top of the antenna. He was skeptical at first but upon traveling his daily route through a dead zone he became a believer. No more dead zone. Furthermore, it would never work in the basement of our building, now he gets 2 bars even with the antenna fully collapsed. Go figure that!
--
Steve Ellington N4LQ.
"dnb" <dnb@comcastt.com> wrote in message
news:Ta7o8.269990$uv5.23567946@bin6.nnrp.aus1.giganews.com...
> My guess is that the sticky stuff "grabs" more signal. (Hey, makes as
much
> sense as "acts like a 4 foot antenna").
>
>
> "Allen the Magic Goose" <Shutup_cartman@remove.hotmail.this.com.now> wrote
> in message news:3ca071af.1238999@news.aei.net...
> > On Mon, 25 Mar 2002 22:19:56 -0800, Roy Lewallen <w7el@eznec.com>
> > wrote:
> >
> > >This is the question we'd all like the answer to. Another poster said
he
> > >had put the gadget in and taken it out several times and seen the
signal
> > >improve each time it went in and decrease each time it was removed.
> >
> > This is only a wild stab:
> >
> > Remember that the bars on the phone display indicate signal strenght,
> > not quality. Could putting that little foil trace thiggnie near the
> > units RF amp or antenna simply be reflecting signals from inside the
> > phones and they interpret it as an extra bar or two?
> >
> > Just a wild guess...
> >
> > Allen
> >
>
>

5739. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 00:46:59 UTC
From: n7ws@yahoo.com
Message-ID: <3ca266b6.11577877@news.triconet.org>
Source record: 146027

On Wed, 27 Mar 2002 12:46:42 -0800, Roy Lewallen <w7el@eznec.com> wrote:

|I want to raise a caution about the use and interpretation of
|"reflection loss", which I've seen in a couple of recent postings.
|
|If you have a fixed 50 ohm resistive source and a fixed 50 ohm resistive
|load, then insert between them a connector or other component that
|causes a reflection, the power in the 50 ohm load is reduced. The amount
|of this reduction is called "reflection loss" or "mismatch loss".
|Likewise, if the 50 ohm load impedance changes, the reduction in power
|it gets can be calculated from its reflection coefficient and attributed
|to "reflection loss" or "mismatch loss". It comes about simply because
|the source can't deliver as much power to any load that doesn't match
|its output impedance as it can to one that does. It's a valid and
|convenient concept that's widely used in laboratory environments.
|
|But let's say you have an impedance matching device (e.g., antenna
|tuner) at the output of the source. You change the load impedance, or
|insert a reflective connector. This changes the impedance seen by the
|source. But by readjusting the impedance matching device, you can
|restore exactly the same amount of power to the load with exactly the
|same amount of power from the source as you had with no reflections. So
|where's the loss? The answer is, there isn't any. Reflections, by
|themselves, aren't a cause of loss (except for increasing the
|transmission line loss somewhat, usually much less than the "reflection
|loss" -- more below). "Reflection loss" refers to a reduction of power
|being dissipated in the load as a result of an impedance mismatch
|between the source and load. If this mismatch can be corrected anywhere
|in the system, the "loss" goes away. If the mismatch is corrected at the
|source, all the reflections are still present except the one at the very
|source, yet they no longer cause "reflection loss".
|
|So be very careful not to misinterpret "reflection loss" and think that
|reflections are actually a source of this amount of loss. Only when the
|source has a fixed, resistive output impedance (like a laboratory signal
|generator) and no matching device is present is the concept of
|"reflection loss" valid.
|
|When a transmission line operates at an SWR above 1, its loss increases.
|The amount of this added loss depends on the loss of the line when
|matched, and in general is negligible for reasonably low SWR or when the
|matched line loss is reasonably low. This increased loss is usually much
|less than the "reflection loss", and shouldn't be confused with it.

Roy makes good points, of which I am aware and should (almost did) have addressed earlier. The laboratory measurements that I described earlier are of course done with matched terminations.

When I closed by saying: "But pragmatically speaking, at 2 meters and below and extra connector in the system somewhere is probably immaterial", I had in mine the fact that in normal ham operation, the system is usually 'tuned' (dare I suggest "conjugately matched"). There will be no "mismatch" or "reflection" loss.

In the case of multiple mismatches, and giving the benefit of the doubt to Ian that Murphy will always prevail and the mismatches will add worst-case, then the addition loss in the line due to the higher operating SWR must be looked at in each section of transmission line separately.

For example (Using AC6LA's "XLZIZL" spreadsheet): 100 feet of RG-213 at 144 MHz has a little under 2.6 dB attenuation in the matched condition. If a 100' line is terminated at the antenna end with a 1.2 VSWR, at the input end the VSWR will be ~1.11 and the total line attenuation will be about 2.62 dB.

If we cut this line in half and install a connector pair let's see what happens. I contend, and therefore assume, that the dissipative loss in the pair will be no more than 0.1 dB and that a well-constructed connector, properly assembled will have 20 dB RL (1.2:1). The RL is likely to be overly optimistic but who can measure it, so I go forward...

The load end line is still operating with VSWR = 1.2 but is half as long. The attenuation is therefore: 1.31 dB and the input VSWR is ~1.15.

This then is the termination for the second 50' plus connector. Assuming once again a 1.2 VSWR for the connector, the worst case VSWR (Murphy doncha know) is 2.35:1. This mismatch causes the attenuation in the second 50' of line to be ~1.65 with an input VSWR of ~1.85:1.

Thus an approximation for the total line attenuation is 1.31 + 0.1 + 1.65 ~ 3.06 dB or about 0.4 dB more than without the added connector.

Now in this case, all of the respondents are correct (sorta). Bill says, "sometimes the losses in the connectors is (are) as great or greater than the loss in the coax". Well, the 0.1 dB (assumed) loss in the connector increased the system loss by 0.4 dB, so he looks like he knows what he's talking about even if the mechanism isn't really dissipative loss in the connector.

Ian is right on, if Murphy has his way, about mismatches increasing dissipative loss, but as Roy states, reflection loss is only a laboratory problem.

Richard correctly worries about increased loss in the connector itself from increased stress but incorrectly, IMHO, believes that substitution measurements can ascertain the loss contribution of the connector. Not in this case. In a matched system, the measured difference between the two cases would be considerably different from 0.1 dB.

Gary says, once he gets his math straight, "Not in my system", with which I agree.

I believe as stated above, it doesn't make much of a difference. In an EME system, yes, but then you would be using a line with over 2.5 dB loss in the first place, connector or no connector.

Throw in some more connectors then you should be RSSing the effects unless Murphy is really in a foul mood.

Wes N7WS

5740. Cape Cod ARES looking for 2m beam designs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 01:09:16 UTC
From: wq1o@gis.net
Message-ID: <52c69878.0203271709.6c967659@posting.google.com>
Source record: 146028

Hello to all. The Cape Cod ARES is loking to experiment with some beams for long range 2 meter VHF. We are looking for any designs of 3,4, and 5 element antennas for testing. We wanted to actually build the antennas as part of the project. We have several peices of 1" aluminum tubing for booms and 1/4" aluminum rods for the elements. If anyone has any designs or can convert using these conductor sizes(Have not played with antenna software much), we would appreciate it. We are experimenting to see which beams will work best for us. We will likely need several designs since some will have to be rugged, while otthers may need to be expedient to assemble and disassemble. If anyone has designs, spacing and length parameters, or suggestions, We would be grateful. These designs will go into provinding emergency communications in time of disaster for the community here. Thanks in advance. Nice bunch of folks on this group.
73s Frank WQ1O
Cape Cod Area ARES DEC

5741. Re: Cutting a 28MHz Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 01:43:23 UTC
From: ik7565@erols.com
Message-ID: <3CA2753B.26E791C6@erols.com>
Source record: 146029

NMO on the roof: at 28.0mhz 45 1/2", at 28.5mhz 43 7/8", at 29.0mhz 42
1/4"
TMB on trunk for same freqs: 43 3/4", 42 5/8", 41 1/8"

73 de Ian N8IK

* wrote:
>
> I have a Larsen NMO 27 whip antenna with base coil. The whip is 49". Does
> anyone have a cutting chart they could provide which will tell me where to
> cut the whip for various 10 meter freqs? Email is rong5@mindspring.com

5742. 30 MHz AntennaTuners

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 03:22:36 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a7u29r$e7t$1@helle.btinternet.com>
Source record: 146030

The following is an extract from a reply to a private enquiry about failure of HF multiband antenna tuners around 30 MHz. It seems a pity just to consign it to the junk heap.

==========

There's not very much written about impedance matching/transforming networks simply because there's very little to be said about them. They are the most simple of circuits. At most there are only 3 components and only two of them need be variable. There is usually a chapter on the subject in books on network theory, communication enginering, etc. If you can't understand its only because you are unfamiliar with the language which many academics delight in unnecessarily overcomplicating.

My several impedance matching and similar programs are adapted from the simple formulae all sorted out in the Victorian era.

Incidentally the rec.amateur.radio.antenna newsgroup is the best to use. I have a regular argument on there myself. There's a knowledgeable set of contributers. As usual they are mixed up with ill-informed do-gooders and old wives. It is difficult to distinguish between the sheep and goats. And they are all inclined to overcomplicate matters in order to display their great knowledge. It's only human nature.

The best book I have ever come across is a chapter on "Impedance transformation" in W.L.Everitt's "Communication Engineering", McGraw-Hill Book, Inc., 1937. I've had it for 54 years. It's never been improved upon. Although ancient I would expect this classic to be available in technical and university libraries. But I must stress the basics are very simple once they have been grasped. There is no real need to go as deeply into the subject as Everitt might take you. Its only a bit of algebra.

Terman, as is his wont, just gives you a set of numbers and graphs he has plagiarised from somebody else, without providing much idea about what's really going on. His graphs are not of much use unless you already know what you are doing.

The basic calculating formulae for T, Pi and L networks are very simple. Only a pocket calculator is needed. I used to find a slide rule quite adequate.

As I have said before, the problems at 30 MHz are due to the physically large components needed to handle several 100 watts which inevitably introduce stray capacitance and stray inductive reactances. The networks in reality are more complicated than simple T's and Pi's. But any complicated network can be treated as several in tandem with an impedance match at each of its junctions.

Across every component is a stray capacitance. In series with every component is stray inductive reactance. From each component is a capacitance to ground. But at 30 MHz this can be controlled. It means only that component settings will be somewhat more or less than the values predicted by assuming a simple L, T or Pi circuit.

THE TROUBLE ARISES WHEN THE COMPONENT VALUES NEEDED ARE OUTSIDE THE RANGE OF THE ACTUAL VARIABLE COMPONENTS USED. It is a matter of practical experience in choosing physical size and values of L and C components, in conjunction with theoretical computed values which neglect the strays.

Come back to square one. You will appreciate that to provide a match between two impedances YOU WILL GET ABSOLUTELY NOWHERE UNTIL THE VALUES, R+jX, OF THE TWO IMPEDANCES ARE APPROXIMATELY KNOWN. Otherwise you are floundering about in the dark.

IF YOU WANT TO KNOW THE INPUT IMPEDANCE OF THE TRANSMISSION LINE TO THE ANTENNA THERE IS NO ALTERNATIVE BUT TO MEASURE IT. Any SWR measurements at the transmitter end will tell you next to nothing. Otherwise the best you can do is copy what somebody else has already done. A photgraph of the inside of the tuner box is all that's needed.

There's a matching network. The input impedance on the transmitter side of the box is hopefully 50 ohms + j0. On the antenna side there is another impedance which can vary over a wide range. It will be a complex impedance. Before you can do anything at all it is essential to know what the antenna or line input impedance actually is. The best way of finding out is to MEASURE IT. THEN DO THE CALCULATIONS.

But I repeat again - it will probably be quicker to wind a few turns of wire on a coil, obtain one or two 50pF or 75pF variable capacitors, and see what happens with one eye on the SWR meter. That's what the professionals do. Following that, if they have the time to spare, they write a learned treatise, with imaginary numbers in it, about how clever they are. ;o)

Programs T_TUNER and L_TUNER are relevant. Pi_TUNER to follow.

****
Regards, Reg G4FGQ
Free Radio Design Software
Http://www.g4fgq.com
****

--
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

5743. Re: Suggest coax for long run

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 04:24:59 UTC
From: n7ws@yahoo.com
Message-ID: <3ca29946.734544@news.triconet.org>
Source record: 146031

On Thu, 28 Mar 2002 00:46:59 GMT, n7ws@yahoo.com (Wes Stewart) wrote:

[snip]

>This then is the termination for the second 50' plus connector. Assuming once
>again a 1.2 VSWR for the connector, the worst case VSWR (Murphy doncha know) is
>2.35:1. This mismatch causes the attenuation in the second 50' of line to be
>~1.65 with an input VSWR of ~1.85:1.

Ooops. Speaking of Murphy... I totally misread the reflectometer
slide rule. The composite VSWR is more like 1.35 (more accurately
1.38) which makes much of the following bogus. But I don't have time
at the moment to correct the numbers but I can say the effect is even
less than stated.
>
>Thus an approximation for the total line attenuation is 1.31 + 0.1 + 1.65 ~ 3.06
>dB or about 0.4 dB more than without the added connector.
>
>Now in this case, all of the respondents are correct (sorta). Bill says,
>"sometimes the losses in the connectors is (are) as great or greater than the
>loss in the coax". Well, the 0.1 dB (assumed) loss in the connector increased
>the system loss by 0.4 dB, so he looks like he knows what he's talking about
>even if the mechanism isn't really dissipative loss in the connector.
>
>Ian is right on, if Murphy has his way, about mismatches increasing dissipative
>loss, but as Roy states, reflection loss is only a laboratory problem.
>
>Richard correctly worries about increased loss in the connector itself from
>increased stress but incorrectly, IMHO, believes that substitution measurements
>can ascertain the loss contribution of the connector. Not in this case. In a
>matched system, the measured difference between the two cases would be
>considerably different from 0.1 dB.
>
>Gary says, once he gets his math straight, "Not in my system", with which I
>agree.
>
>I believe as stated above, it doesn't make much of a difference. In an EME
>system, yes, but then you would be using a line with over 2.5 dB loss in the
>first place, connector or no connector.
>
>Throw in some more connectors then you should be RSSing the effects unless
>Murphy is really in a foul mood.
>
>Wes N7WS
>

5744. help rebuilding a DK3

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 04:37:43 UTC
From: Peter Shintani <shintani@cts.com>
Message-ID: <3CA29E16.E721C0B@cts.com>
Source record: 146032

hi:
I recently received an old Dk3 screwdriver antenna.
In the base of the antenna, I found two relays, one marked
40m, and the other marked 75m. Attached to the relay contacts
were two trimmer caps, a pair for each relay. I don't know the
builder of the antenna but after tracing out the schematic, it
looks as if the common lead for the relay power is the same as the
antenna
connection ! I assume that the caps are in a shunt connection to ground
from
the base of the antenna. More capacitance for the lower band ?
Did the DK3 use a common lead for the antenna input and the common
power
return lead for the relays ? My guess is that the relays common return
lead is separate from the antenna lead.

Any help or schematics are appreciated.

Also what length of whip is recommended for best efficiency on 20m ?
and also for 40m ?

'73
Peter
VE7CQA

5745. Re: 30 MHz AntennaTuners

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 04:46:01 UTC
From: "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca>
Message-ID: <bexo8.19124$mA1.1681418@news20.bellglobal.com>
Source record: 146033

"Reg Edwards" replied off-line:
> ...And they are all inclined to overcomplicate matters
> in order to display their great knowledge.

Hey ! My specialty is oversimplification.

J. Harvey, Ottawa
VE1BLL@rac.ca /VE3

5746. Re: help rebuilding a DK3

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 04:57:37 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA2A2C1.ADFD085C@IEEE.org>
Source record: 146034

Peter Shintani wrote:
> I assume that the caps are in a shunt connection to ground from
> the base of the antenna. More capacitance for the lower band ?

Caps will work to twist the impedance to 50 ohms from 15+jX. A
coil will also work to twist the impedance to 50 ohms from 15-jX.
The beauty of a coil is that the shunt reactance increases with
frequency so you can leave it installed permanently.
--
cheers, CAM http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5747. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 05:59:26 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <6tb5au4k8r7uueifpj2602sskbnsj6vm0r@4ax.com>
Source record: 146035

On Tue, 26 Mar 2002 10:57:16 -0800, Roy Lewallen <w7el@eznec.com> wrote:
>Thanks for the distinction between "sky wave" and "space wave", one I
>wasn't aware of. Richard Harrison has a Terman reference that speaks of
>the "ground wave" having two parts, a "surface wave" and a "space wave".
>I've always seen "ground wave" used just as you've said (including in
>Terman's _Radio Engineering_), and never like in Richard's reference. So
>that reference remains puzzling.

Well, it is an acceptable alternative if you give it some context. Many of the classic references were written when MW AM was the extent of broadcast. It is reasonable to divide MW propagation into two major parts, skywave and groundwave. The groundwave can be further divided into the surface wave and the space wave, but these two are so intermingled at MW that it makes some sense to treat them together. At VHF+, a clear break between the space wave and the mostly insignificant surface wave starts to make more sense (and the skywave becomes a rare anomaly).

Gary

5748. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 06:12:39 UTC
From: "Joe Bramblett, KD5NRH" <kd5nrh-r.r.a.a@kd5nrh.net>
Message-ID: <0960EE74EAF1D1C6.8CBB1D211A9632A5.3A85A38193811455@lp.airnews.net>
Source record: 146036

On Tue, 26 Mar 2002 15:28:50 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I'll remain very skeptical until I see this for myself, though. In a
>fringe area or location where multipath is present, moving the phone an
>inch or two can make a large difference in signal strength.

As can moving a piece of sticky-back foil, whether it cost $29.99 for
2", or $2.99 for a 50ft roll.

I can actually change the reception of my TV antenna quite a bit by
moving the roll of aluminum foil tape around on the table.

Joe Bramblett, KD5NRH
kd5nrh@kd5nrh.net
http://www.kd5nrh.net

5749. Re: help rebuilding a DK3

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 06:18:52 UTC
From: Peter Shintani <shintani@cts.com>
Message-ID: <3CA2B5CB.BCDEB63C@cts.com>
Source record: 146037

Cam:
If I understood your explanation, if I placed a shunt coil to shift
the
reactance, I might be able to use a single fixed inductor to
match the screwdriver over its 10~80m range ?
Peter

CAM wrote:

> Peter Shintani wrote:
> > I assume that the caps are in a shunt connection to ground from
> > the base of the antenna. More capacitance for the lower band ?
>
> Caps will work to twist the impedance to 50 ohms from 15+jX. A
> coil will also work to twist the impedance to 50 ohms from 15-jX.
> The beauty of a coil is that the shunt reactance increases with
> frequency so you can leave it installed permanently.
> --
> cheers, CAM http://www.qsl.net/w5dxp
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5750. Re: 30 MHz AntennaTuners

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 06:29:32 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203272229.6666f2ae@posting.google.com>
Source record: 146038

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
>
> Incidentally the rec.amateur.radio.antenna newsgroup is the best to use. I
> have a regular argument on there myself. There's a knowledgeable set of
> contributers. As usual they are mixed up with ill-informed do-gooders and
> old wives.

I wonder if these old wives wear dresses? I don't notice too many
female posters around here. Do we have a few transvestites among our
midst's? I doubt I'm a do-gooder as rednecks make lousy do-gooders. I
could be an old wife though I guess. If so, I want to be snazzy and
wear something nice like hummmm, pink crotchless fishnet panties. I
bet that would be a hoot to show on 20m SSTV. :/ MK

5751. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 06:54:35 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <a7uenbccu1@208.206.142.114>
Source record: 146039

CAM wrote:
>
> "David G. Nagel" wrote:
> > Once again. Yes a dedicated dipole cut to frequency will out perform a
> > B&W. But a B&W will outperform a dipole off frequency.
>
> Absolutely untrue, David. An "off frequency" dipole radiates just as
> well as a resonant dipole. My 130 ft. dipole, which uses no antenna
> tuner, is more efficient than the B&W on *all* HF bands.

Ok, an *unmatched* off frequency dipole.

5752. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 07:14:24 UTC
From: Mike Rofon <TheRealExray@netscape.net>
Message-ID: <3CA2C2D0.AC8D1C29@netscape.net>
Source record: 146040

Dick Carroll wrote:
>
> CAM wrote:
> >
> > "David G. Nagel" wrote:
> > > Once again. Yes a dedicated dipole cut to frequency will out perform a
> > > B&W. But a B&W will outperform a dipole off frequency.
> >
> > Absolutely untrue, David. An "off frequency" dipole radiates just as
> > well as a resonant dipole. My 130 ft. dipole, which uses no antenna
> > tuner, is more efficient than the B&W on *all* HF bands.
>
> Ok, an *unmatched* off frequency dipole.

I know if I tune up my dipole with a transmatch at 14 MHz and go to 21
MHz, it ain't worth hoot. If I retune it will certainly work better, but
I haven't seen a Genie included with a high-buck wire antenna to
mitigate this phenomena.
Maybe it depends on the rig/tuner? :-)
-WX4A

5753. Re: 30 MHz AntennaTuners

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 07:45:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA2CA13.A11CC561@eznec.com>
Source record: 146041

No, an "old wife" is what you call a person who makes a point you're not able to refute. It's much simpler than trying to convince by means of logic, and it gives the aura of great knowledge without imposing the requirement of even knowing very much about the topic in question. Watch when the term appears on this newsgroup, and you'll see that this is its function.

Roy Lewallen, W7EL

Mark Keith wrote:
>
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> >
> > Incidentally the rec.amateur.radio.antenna newsgroup is the best to use. I
> > have a regular argument on there myself. There's a knowledgeable set of
> > contributers. As usual they are mixed up with ill-informed do-gooders and
> > old wives.
>
> I wonder if these old wives wear dresses? I don't notice too many
> female posters around here. Do we have a few transvestites among our
> midst's? I doubt I'm a do-gooder as rednecks make lousy do-gooders. I
> could be an old wife though I guess. If so, I want to be snazzy and
> wear something nice like hummmm, pink crotchless fishnet panties. I
> bet that would be a hoot to show on 20m SSTV. :/ MK

5754. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 07:49:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA2CAFC.C7CBC7BE@eznec.com>
Source record: 146042

I'm not surprised. I did some tests at an antenna test range in Detroit some years ago, and found that moving the front car seat forward and back made a noticeable difference in the positions of nulls in the pattern from an antenna positioned where a typical driver's cell phone would be.

Roy Lewallen, W7EL

"Joe Bramblett, KD5NRH" wrote:
>
> On Tue, 26 Mar 2002 15:28:50 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >I'll remain very skeptical until I see this for myself, though. In a
> >fringe area or location where multipath is present, moving the phone an
> >inch or two can make a large difference in signal strength.
>
> As can moving a piece of sticky-back foil, whether it cost $29.99 for
> 2", or $2.99 for a 50ft roll.
>
> I can actually change the reception of my TV antenna quite a bit by
> moving the roll of aluminum foil tape around on the table.
>
> Joe Bramblett, KD5NRH
> kd5nrh@kd5nrh.net
> http://www.kd5nrh.net

5755. 160 meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 12:29:09 UTC
From: Andy M <andrew.markham@virgin.net>
Message-ID: <g_Do8.3068$gj7.670829@news2-win.server.ntlworld.com>
Source record: 146043

Hi All

I would like to put up a tx/rx 160 meter antenna, but very restricted on space. Garden only 66 feet long, 12 feet wide with some trees at the bottom about 30 feet high. Any suggestions or designs please on a 160 meter aerial to fit this space. Only needs to take 100 watts.

Ta

Andy

5756. Re: Cape Cod ARES looking for 2m beam designs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 14:02:20 UTC
From: Phil Bradway <kb2hq@nycap.rr.com>
Message-ID: <MnFo8.30073$8%1.11672211@typhoon.nyroc.rr.com>
Source record: 146044

Here's a couple of good VHF antenna design choices: DL6WU and K1FO. A google search returned the following:

Yagi-Uda design program by DL6WU at http://xe1mex.gq.nu/antenas/yagi.html
or
ANTFO v2.0 YAGI ANTENNA DESIGN at
http://users.tpg.com.au/mmtodd/html/hamradio2.html

I've used them both with very good results on 2, 220, 432, 900 and 1296. I believe Steve, K1FO used the "WU" as a base and optimized it for his designs. The ARRL Handbook has some of the K1FO designs, too. If those standards fit the tubing you have (or even if you have to start fresh), use them. They have been tested and WILL WORK.

Phil, KB2HQ

"Frank Olaughlin" <wq1o@gis.net> wrote in message
news:52c69878.0203271709.6c967659@posting.google.com...
> Hello to all. The Cape Cod ARES is loking to experiment with some
> beams for long range 2 meter VHF. We are looking for any designs of
> 3,4, and 5 element antennas for testing. We wanted to actually build
> the antennas as part of the project. We have several peices of 1"
> aluminum tubing for booms and 1/4" aluminum rods for the elements. If
> anyone has any designs or can convert using these conductor sizes(Have
> not played with antenna software much), we would appreciate it. We
> are experimenting to see which beams will work best for us. We will
> likely need several designs since some will have to be rugged, while
> otthers may need to be expedient to assemble and disassemble. If
> anyone has designs, spacing and length parameters, or suggestions, We
> would be grateful. These designs will go into provinding emergency
> communications in time of disaster for the community here. Thanks in
> advance. Nice bunch of folks on this group.
> 73s Frank WQ1O
> Cape Cod Area ARES DEC

5757. Re: 160 meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 14:12:07 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3CA324B7.C559E544@crosslink.net>
Source record: 146045

Andy M wrote:
>
> Hi All
>
> I would like to put up a tx/rx 160 meter antenna, but very restricted on
> space. Garden only 66 feet long, 12 feet wide with some trees at the bottom
> about 30 feet high. Any suggestions or designs please on a 160 meter aerial
> to fit this space. Only needs to take 100 watts.
>
> Ta
>
> Andy

I'm sure wiser heads will have better ideas, but I'm cheap so I'd just run a wire from as high in a tree as I could to a stake at the other end of the garden; plus bury some wires beneath it for a counterpoise. I'd connect them via a large coil homebrewed from single-conductor houshold wire at the stake then experiment with where (on the coil) to tap in the feedline to get the best SWR at the xmtr. Don't fall out of the tree ... :o)
KA3DWW

5758. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 14:41:31 UTC
From: Josh Sponenberg <battwork@sunlink.net>
Message-ID: <3CA32B98.7A36AD73@sunlink.net>
Source record: 146046

CAM wrote:
>
> Roy Lewallen wrote:
> > If it really does improve
> > the signal, I don't have a clue why, and I'd really like to know.
>
> C.C.Crane had something called a Selectenna (or something like that)
> that, when placed close to an AM radio, will improve reception.
> Perhaps it works something like that.

Key word there is AM. Thats why it works. :) Cell Phones (well, last I checked anyway) Are anything *but* am. :)

> --
> cheers, CAM http://www.qsl.net/w5dxp
>
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--
|+| |-|
+========================+
| Josh Sponenberg |
| Battery Specialist |
| www.BatteryWorksPA.com |
+========================+

5759. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 14:46:41 UTC
From: Josh Sponenberg <battwork@sunlink.net>
Message-ID: <3CA32CCC.5DF39C5C@sunlink.net>
Source record: 146047

Yeah, gotta love how fast they crop up these days... One morning around christmas I was standing in the bathroom, shaving, and I look out the window, and lo and behold there's a new cell tower that wasn't there *yesterday*... (literally) Ahhh. Technology. ;-)

73
KB3GUF

JLB wrote:
>
> Call the cell phone company and find out if they installed a new cell
> site in the area.
>
> If not, repeat the test daily for a month and see what the results
> are.
>
> Jim
> N8EE
> (former cellular RF engineer)

--
|+| |-|
+=========================+
| Josh Sponenberg |
| Battery Specialist |
| www.BatteryWorksPA.com |
+=========================+

5760. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 15:23:00 UTC
From: Larry <Lawrence_III@larryspam.com>
Message-ID: <3CA33546.E46301C8@larryspam.com>
Source record: 146048

Do not try this at home !

we could not get tickets to the world series so we just put a few of these sticky antenna boosters inside our baseball caps.

Wow, now I get all the local, cable and satellite channels directly into my head !

Bad thing was our late friend Roy, he put ten of these things under his cap and his brain exploded.

larry

Roy wrote:

> I'm not surprised. I did some tests at an antenna test range in Detroit
> some years ago, and found that moving the front car seat forward and
> back made a noticeable difference in the positions of nulls in the
> pattern from an antenna positioned where a typical driver's cell phone
> would be.
>
> Roy Lewallen, W7EL
>
> "Joe Bramblett, KD5NRH" wrote:
> >
> > On Tue, 26 Mar 2002 15:28:50 -0800, Roy Lewallen <w7el@eznec.com>
> > wrote:
> >
> > >I'll remain very skeptical until I see this for myself, though. In a
> > >fringe area or location where multipath is present, moving the phone an
> > >inch or two can make a large difference in signal strength.
> >
> > As can moving a piece of sticky-back foil, whether it cost $29.99 for
> > 2", or $2.99 for a 50ft roll.
> >
> > I can actually change the reception of my TV antenna quite a bit by
> > moving the roll of aluminum foil tape around on the table.
> >
> > Joe Bramblett, KD5NRH
> > kd5nrh@kd5nrh.net
> > http://www.kd5nrh.net

5761. Re: help rebuilding a DK3

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 16:11:40 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA340BC.D2143137@IEEE.org>
Source record: 146049

Peter Shintani wrote:
>
> Cam:
> If I understood your explanation, if I placed a shunt coil to shift the
> reactance, I might be able to use a single fixed inductor to
> match the screwdriver over its 10~80m range ? Peter

Yes, that's right. I use 6 turns (one inch) of 1.5" diameter coil stock.
The inductive reactance is minimum on 75m and maximum on 10m. So it
is most effective on 75m, where it needs to be, and essentially out
of the circuit on 10m because of its relatively high reactance.
--
cheers, CAM http://www.qsl.net/w5dxp

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5762. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 16:19:52 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA342A8.49A067F8@IEEE.org>
Source record: 146050

Dick Carroll wrote:
>
> CAM wrote:
> >
> > "David G. Nagel" wrote:
> > > Once again. Yes a dedicated dipole cut to frequency will out perform a
> > > B&W. But a B&W will outperform a dipole off frequency.
> >
> > Absolutely untrue, David. An "off frequency" dipole radiates just as
> > well as a resonant dipole. My 130 ft. dipole, which uses no antenna
> > tuner, is more efficient than the B&W on *all* HF bands.
>
> Ok, an *unmatched* off frequency dipole.

My antenna system *is* matched on all HF ham frequencies. Although the
dipole length is non-resonant on most HF ham frequencies, the ladder-line
is used as a series section transformer to achieve a 50 ohm SWR of less
than 2:1. All of the transmitter power (minus losses) is delivered to
the antenna.

A 50 ohm antenna accepts all the power (minus losses) from 50 ohm coax
but there is no law of physics that says a 100-j100 ohm antenna can't
accept all the power (minus losses) generated by the transmitter. All
that is required is a Z0-match in the antenna system. A Z0-match can
often be achieved without using an antenna tuner, i.e. using the feedline
as the matching circuit.
--
cheers, CAM http://www.qsl.net/w5dxp

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5763. Re: 160 meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 16:21:53 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA34321.BBEA98D4@IEEE.org>
Source record: 146051

Andy M wrote:
>
> Hi All
>
> I would like to put up a tx/rx 160 meter antenna, but very restricted on
> space. Garden only 66 feet long, 12 feet wide with some trees at the bottom
> about 30 feet high. Any suggestions or designs please on a 160 meter aerial
> to fit this space. Only needs to take 100 watts.

123 foot vertical? :-)
--
cheers, CAM http://www.qsl.net/w5dxp

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5764. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 16:24:48 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA343D0.2D8CCB71@IEEE.org>
Source record: 146052

Josh Sponenberg wrote:
>
> CAM wrote:
> >
> > Roy Lewallen wrote:
> > > If it really does improve
> > > the signal, I don't have a clue why, and I'd really like to know.
> >
> > C.C.Crane had something called a Selectenna (or something like that)
> > that, when placed close to an AM radio, will improve reception.
> > Perhaps it works something like that.
>
> Key word there is AM. Thats why it works. :) Cell Phones (well, last I
> checked anyway) Are anything *but* am. :)

The Selectenna is a tuned circuit consisting of a coil and capacitor.
The field of the coil couples to the loop antenna in the AM radio.

I'm assuming the cellphone antenna is resonant on the cellphone band
and the field of the resonant antenna couples to the cellphone antenna.
--
cheers, CAM http://www.qsl.net/w5dxp

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5765. Re: Cape Cod ARES looking for 2m beam designs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 16:24:56 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <a7vg4o$6sg$1@freenet9.carleton.ca>
Source record: 146053

I think the original poster was looking for VHF yagis in the 3-5 element
size, whereas the K1FO, DL6WU and DJ9BV designs for 2m are primarily
'long-yagis'.

Check out WA5VJB's designs at

http://www.clarc.org/Articles/uhf.htm

These antennas did well on the test range, considering their
relative simplicity...

73 de va3rr/aa8lu

"Phil Bradway" (kb2hq@nycap.rr.com) writes:
> Here's a couple of good VHF antenna design choices: DL6WU and K1FO. A google
> search returned the following:
>
> "Frank Olaughlin" <wq1o@gis.net> wrote in message
> news:52c69878.0203271709.6c967659@posting.google.com...
>> Hello to all. The Cape Cod ARES is loking to experiment with some
>> beams for long range 2 meter VHF. We are looking for any designs of
>> 3,4, and 5 element antennas for testing. We wanted to actually build
>> the antennas as part of the project. We have several peices of 1"
>> aluminum tubing for booms and 1/4" aluminum rods for the elements. If
>> anyone has any designs or can convert using these conductor sizes(Have
>> not played with antenna software much), we would appreciate it. We
>> are experimenting to see which beams will work best for us. We will
>> likely need several designs since some will have to be rugged, while
>> otthers may need to be expedient to assemble and disassemble. If
>> anyone has designs, spacing and length parameters, or suggestions, We
>> would be grateful. These designs will go into provinding emergency
>> communications in time of disaster for the community here. Thanks in
>> advance. Nice bunch of folks on this group.
--
73 de va3rr/aa8lu
http://www.qsl.net/va3rr

5766. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 16:42:22 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <a7vh5e$r4o$0@208.207.71.160>
Source record: 146054

CAM wrote:
>
> Dick Carroll wrote:
> >
> > CAM wrote:
> > >
> > > "David G. Nagel" wrote:
> > > > Once again. Yes a dedicated dipole cut to frequency will out perform a
> > > > B&W. But a B&W will outperform a dipole off frequency.
> > >
> > > Absolutely untrue, David. An "off frequency" dipole radiates just as
> > > well as a resonant dipole. My 130 ft. dipole, which uses no antenna
> > > tuner, is more efficient than the B&W on *all* HF bands.
> >
> > Ok, an *unmatched* off frequency dipole.
>
> My antenna system *is* matched on all HF ham frequencies. Although the
> dipole length is non-resonant on most HF ham frequencies, the ladder-line
> is used as a series section transformer to achieve a 50 ohm SWR of less
> than 2:1. All of the transmitter power (minus losses) is delivered to
> the antenna.
>
> A 50 ohm antenna accepts all the power (minus losses) from 50 ohm coax
> but there is no law of physics that says a 100-j100 ohm antenna can't
> accept all the power (minus losses) generated by the transmitter. All
> that is required is a Z0-match in the antenna system. A Z0-match can
> often be achieved without using an antenna tuner, i.e. using the feedline
> as the matching circuit.

I certainly agree. My one line answer (as with almost all one-line
answers) was far too incomplete to begin to cover the subject.

I assumed a dipole cut to a frequency on a single band, fed by coax
from a rig with no tuner or other matching other than the output of the
transmitter. If a dipole, it will have a pretty narrow range of
frequencies at which it will accept most of the RF presented to the
coaxial feedline input. Match this coax input with a tuner (or match the
antenna at its feedpoint) and you can normally work all across the
single band involved. Without matching, working other bands will not
likely be possible with this single dipole, nor will excursions in
frequency of more than a few Khz.
Your antenna system matches the the feedline and/or antenna on all the
bands you have arranged for it to match.

5767. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 17:07:39 UTC
From: richardharrison@webtv.net
Message-ID: <14044-3CA34DDB-136@storefull-2396.public.lawson.webtv.net>
Source record: 146055

Roy Lewallen wrote:
"Richard Harrison has a Terman reference that speaks of the "ground wave" having two parts, a "surface wave" and a "space wave".

True, and I tried to copy Terman exactly. The two part ground wave follows directly from Fig.1 in Terman`s section on "Propagation of Radio Waves". This section is general as it includes very low-frequency (below 100 KHz) and ultra-high frequency (above 30 MHz).

Fig.1 is a diagram of two paths, a direct ray between two antennas and a ray which is reflected by the earth. The reflected path also links the two antennas. The difference in path lengths means the two rays can be in-step, out-of step, or anywhere in-between. It depends on the path difference as a fraction of a wavelength. The summation of these two waves is Terman`s ground wave. It is not a sky wave because it does not include reflection from the ionosphere. It is not a space wave because it does include reflection from the earth.

Terman said: "The ground wave is that portion of the radio wave that is affected by the presence of the ground and would account for all the energy reaching the receiver if it were not for ionospheric waves (sky waves) and tropospheric waves.

The ground wave can be conviently divided into two components, a surface wave and a space wave."

Terman`s explanation is logical and stands the test of time.

Reg`s defamation of Terman does not hold up. Except for our own discoveries, what we know was discovered by others and is repetition. Terman scrupulously foot notes and provides bibliography. W.L. Everitt is in Terman`s author index six times. It would also be unfair to say Terman contributed nothing original.

Different professors have different styles and attract different followers who are more receptive to one style or another.

I found unanswered questions in various studies and if Terman covered it, the subject was clarified for me when I read Terman. If Reg prefers Everitt, that`s his prerogative.

Terman agrees with Gary Coffman that "The space wave is any signal taking the direct line of sight path---", but when it comes to reflections of the space wave, reflections from the ground may make the reflected ray part of the ground wave received by an antenna.

When the direct ray is influenced only by the atmosphere, the wave is a space wave, though it too may encounter tropospheric reflections.

When the space wave is reflected by the ionosphere, reflection from the reflecting boundary make it a sky wave.

Others may define things differently, and my take on Terman may be flawed. It wouldn`t be the first time. But, I`ve never found a flaw of substance in Terman`s books.

Best regards, Richard Harrison, KB5WZI

5768. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 17:44:12 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3CA3566C.6CC60259@dialpoint.net>
Source record: 146056

AM has nothing to do with it. The basic antenna coupling will work on AM, FM , or any other RF type of transmission. The main key is the internal antenna is very small interms of wavelenght. Almost any conductor larger will couple to the AM broadcast antenna. You can streach a wire out about 25 feet long or more and wrap 5 ot 10 turns around the AM radio and it will improve the reception in many cases. For the cell phone frequencies you can get a similar effect if you put up a good antenna outside your house , run some good feedline to an antenna inside the house and then put the cell phone antenna close to the inside antenna.

> Key word there is AM. Thats why it works. :) Cell Phones (well, last I
> checked anyway) Are anything *but* am. :)
>
>

5769. Re: 160 meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 18:11:09 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3CA35CA2.498F52C4@icok.net>
Source record: 146057

Andy,
How high can you get some part of an antenna?
'Doc

5770. StepIR Yagi Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 18:12:52 UTC
From: Dan Bryden <bryden@deltanet.com>
Message-ID: <3CA35D24.4E71899B@deltanet.com>
Source record: 146058
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna

Is anyone familiar with the operation / quality of this digitally tuned Yagi. Looks like a great idea but is it worth all of the mechanics involved. Dan

5771. Re: 160 meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 18:45:48 UTC
From: Andy M <andrew.markham@virgin.net>
Message-ID: <4yJo8.6239$Ko1.1014420@news6-win.server.ntlworld.com>
Source record: 146059

"'Doc" <w5lz@icok.net> wrote in message news:3CA35CA2.498F52C4@icok.net...
>
>
> Andy,
> How high can you get some part of an antenna?
> 'Doc

30 Feet in the trees I reckon.

5772. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 19:23:23 UTC
From: aa1ll@email.com
Message-ID: <e85be400.0203281123.1737c1b4@posting.google.com>
Source record: 146060

"David G. Nagel" <nagel@core.com> wrote in message
news:<3c9ff085$0$1598$1dc6e903@news.corecomm.net>...
> If the metal battery does not have any effect then how is a copper trace
> on a piece of plastic going to have any effect especially when it is
> sandwiched

....who cares--this is more important:

So Dave, how do you get the 'G' in your name to light up when viewed
with Netscape? And how do they get the yard line markers to glow
yellow when viewed on TV?

73, Paul, AA1LL
Mason, NH
http://www.qsl.net/aa1ll

5773. Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 19:45:39 UTC
From: Mark Tetrault <tetrault@mv.mv.com>
Message-ID: <v5s6auki1dr4jr7pf9hc73biq4olmeecm8@4ax.com>
Source record: 146061

OK here's the scenario:
I have a G5RV flat top configuration suspended between two trees. It's 50' at one end and 40' at the other. It runs NE to SW.

I recently installed a W9INN 160-80-40 dipole as an inverted V. Bill cut it to be 35' at the center and 8' off the ground on the ends, and it's installed that way oriented the same way. The SWR based on my freq. wish is spot on.

Here's the question:
Why does the G5RV, which is a massive compromise on 80 and 40m, receiving and transmitting better than the W9INN? When I copy other stations on 40 & 80m, no matter where or who, I get a 2 S unit gain in signal strength both receive perceived by my ears and eyes on my meter, and signal reports indicate a louder stronger signal from my rig with the G5RV too. I would have thought that the W9INN not being that much lower in height than the G5RV would out perform the G5RV given it's designed for the frequencies mentioned above.

On 160 of course the W9INN blows the G5RV away.

Ideas??

Mark

5774. Re: Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 20:21:10 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA37B36.9869F56@IEEE.org>
Source record: 146062

Mark Tetrault wrote:
> Here's the question:
> Why does the G5RV, which is a massive compromise on 80 and 40m,
> receiving and transmitting better than the W9INN?

The G5RV is *NOT* a massive compromise on 80m and 40m. It has the typical dipole radiation pattern and the 27 ft 300 ohm section actually does a pretty good job of matching the antenna to the 50 ohm coax. The SWR on the 50 ohm coax for both 75m and 40m is relatively low. The G5RV is a darned good antenna on 75m, 40m, 20m, and 12m.

Are your two antennas oriented the same direction? I don't know anything about the W9INN antenna but it might be developing a cloverleaf radiation pattern on 40m. I would suggest that you determine the radiation patterns for a better comparison. The free EZNEC demo will probably model those two antennas pretty well. Try: http://www.eznec.com
--
cheers, CAM, W5DXP

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5775. Re: StepIR Yagi Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 20:55:35 UTC
From: me@nowwhere.com
Message-ID: <3CA38347.381C5FF5@swbell.net>
Source record: 146063
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna

i've got one on order and due to
arrive tomorrow or monday. i'll
let the group know how things work out.

larry
kd5foy

Dan Bryden wrote:

> Is anyone familiar with the operation / quality of this digitally tuned
> Yagi. Looks like a great idea but is it worth all of the mechanics
> involved. Dan

5776. Re: UHF quad antenna designs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 22:26:07 UTC
From: Jon G2FHF <jon.g2fhf@ntlworld.com>
Message-ID: <2MMo8.7035$Ko1.1203258@news6-win.server.ntlworld.com>
Source record: 146064

Jason

I ahve built quite a few of them from hf to 70cms, all designed using the
DL6WU antenna software. You'll find it on qrz.com.
All you need for materials is some 1/4" dowell and 1"x1" pine for the boom,
email me if you have any problems.

Jon G2FHF

"Jason" <uPVC@btinternet.com> wrote in message
news:a7ldug$n0g$2@knossos.btinternet.com...
> Can anybody help I wish to build a 6 element quad antenna for 70cm mainly
> for satellite work has any body got any detailed designs or know of a
> website with good designs, also where is the best place to get parts for
the
> antenna I live in the UK (midlands).
> any help appreciated
>
> --
> Yours
> Jason
>
> uPVC@btinternet.com
>
>
>

Outgoing mail is certified Virus Free by AVG Anti Virus.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.342 / Virus Database: 189 - Release Date: 14/03/02

5777. Re: 30 MHz AntennaTuners

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 22:32:15 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203281432.2b43ff41@posting.google.com>
Source record: 146065

Roy Lewallen <w7el@eznec.com> wrote in message news:<3CA2CA13.A11CC561@eznec.com>...
> No, an "old wife" is what you call a person who makes a point you're not
> able to refute. It's much simpler than trying to convince by means of
> logic, and it gives the aura of great knowledge without imposing the
> requirement of even knowing very much about the topic in question. Watch
> when the term appears on this newsgroup, and you'll see that this is its
> function.
>
> Roy Lewallen, W7EL

Oh well. I guess they will have to wait for my new "getup". With all
these "old wives" around, it starts to sound a bit kinky being there
are not all that many females that post regularly. I thought maybe he
had been watching too many Benny Hill reruns...I think Benny Hill used
to like to dress up like an old wife quite a bit in his shows. MK

5778. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 22:48:59 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203281448.3942e453@posting.google.com>
Source record: 146066

richardharrison@webtv.net (Richard Harrison) wrote in message news:<14044-
>
> Others may define things differently, and my take on Terman may be
> flawed. It wouldn`t be the first time. But, I`ve never found a flaw of
> substance in Terman`s books.
>
> Best regards, Richard Harrison, KB5WZI

Makes sense to me. The surface wave is more useful on the low frequencies. On the higher frequencies, the space wave is more prevalent. Also the surface wave is attenuated at a much higher rate, the higher in frequency you go. I have no data on it, but my guess is the space wave is fairly constant in comparison through the spectrum not counting local ground and tropo effects. I think almost all VHF/UHF "ground wave" propogation is almost all space wave unless you are real close to the transmitter. On 160m, you could have a fairly even mix at certain distances I would think with the surface wave being stronger fairly close in. Seems to me at certain distances on 160m, you could have cases where the surface wave mixes with the space wave, and then you get another mix of skywave. And indeed at certain times of the early evenings 160m can get kind of weird sometimes. Lots of fading, shifting around, etc. MK

5779. Magnetic loop??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-28 23:46:28 UTC
From: Chris Bartlett <Bartty@v21mail.co.uk>
Message-ID: <3ca3ab57_1@news.greennet.net>
Source record: 146067

Hi folks, I have been wondering about having a go at making a magnetic loop for HF.

Has anyone any experience of homebrew mag loops, is it a practical project? are the parts available? how well do they work? (I am told better than a dipole)

Can you make them into a beam??

Thanks in advance.

Chris.

5780. Re: Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 00:27:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a80ce8oc1@paris.btinternet.com>
Source record: 146068

I hate to say so, but anyone who has a G5RV at a height less than 500 feet above the middle of the Atlantic ocean and imagines he has a cloverleaf or any other peculiar pretty pattern is deluding himself. Or herself.

For practical purposes, taking one band with another, and one backyard with another, a G5RV is omnidirectional, in both horizonatal and vertical planes, regardless of idealised computer programs.

Remove the coax and the G5RV with its openwire feedline performs just the same as any other random length dipole. Keep the coax and it is marginally a dB or two worse at the higher frequencies.

And Louis Varney, that rare, modest, English gentleman, whose British G5RV callsign will be be long remembered, would agree.

5781. Can I build a 2m/440mhz 5/8 mobil antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 00:28:33 UTC
From: Jeff Brown <jbrown21@sprynet.com>
Message-ID: <3CA3B531.B027B191@sprynet.com>
Source record: 145969

I built a dual band 1/4 wave 2m mobile antenna which
resonates fine on 440 mhz (third harmonic). My question is
can I build a 5/8 wave 2m mobile antenna that will also
resonate on 440 as a 5/8 on 440? Anyone have a source of
plans? Also I noticed that the commercial dual band 1/4 wave
length antennas have a coil (trap?) up past the 440 length
(about 5"). Why is this necessary if it resonates naturally
on both 146mhz and the 3rd multiple on 440 mhz?
Thanks,
Jeff WB9FOL

5782. Re: Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 00:54:25 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA3BB41.362DCB97@IEEE.org>
Source record: 145971

Reg Edwards wrote:
> Remove the coax and the G5RV with its openwire feedline performs just the
> same as any other random length dipole. Keep the coax and it is marginally
> a dB or two worse at the higher frequencies.

Reg, when I lived in AZ, I put up a N/S G5RV. I couldn't seem to
work any DX. That's when I bought ELNEC and observed the radiation
patterns. Most of my 20m RF energy was hitting the oceans instead
of land masses. I turned the G5RV N20W and the DX started pouring
in. In fact, the reason that Mr. Varney chose 1.5WL on 20m for
the original G5RV antenna was because of the cloverleaf pattern.
--
cheers, CAM, W5DXP

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5783. Re: Question

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 00:57:54 UTC
From: Tony Angerame <tangeram@lucent.com>
Message-ID: <a80du4$qs7@nntpa.cb.lucent.com>
Source record: 145970

I've always thought that flat top dipoles were a better performer than the inverted V version. Never had both up at the same time though. 2 s units seems a bit high though, QSB?

Tony

"Mark Tetrault" <tetrault@mv.mv.com> wrote in message news:v5s6auki1dr4jr7pf9hc73biq4olmeecm8@4ax.com...
> OK here's the scenario:
> I have a G5RV flat top configuration suspended between two trees. It's
> 50' at one end and 40' at the other. It runs NE to SW.
>
> I recently installed a W9INN 160-80-40 dipole as an inverted V. Bill
> cut it to be 35' at the center and 8' off the ground on the ends, and
> it's installed that way oriented the same way. The SWR based on my
> freq. wish is spot on.
>
> Here's the question:
> Why does the G5RV, which is a massive compromise on 80 and 40m,
> receiving and transmitting better than the W9INN? When I copy other
> stations on 40 & 80m, no matter where or who, I get a 2 S unit gain in
> signal strength both receive perceived by my ears and eyes on my
> meter, and signal reports indicate a louder stronger signal from my
> rig with the G5RV too. I would have thought that the W9INN not being
> that much lower in height than the G5RV would out perform the G5RV
> given it's designed for the frequencies mentioned above.
>
> On 160 of course the W9INN blows the G5RV away.
>
> Ideas??
>
> Mark

5784. Re: 160 meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 01:24:09 UTC
From: Peter Voelpel <peter.voelpel@t-online.de>
Message-ID: <a80fql$6cg$03$1@news.t-online.com>
Source record: 145972

Hi Andy,

I suggest to build a top loaded vertical, inverted L :

30 feet up, horizontal wire about 90 feet slung between one of the trees and
a distant 30 feet pole, bendet to earth or elsewere at the end if space not
sufficient. Resonce should be around 1700kc
Feed at the bottom via shortening capacitor to get 50 ohms impedance to feed
with standard coax.
Use as many radials as possible.

This antenna will be especially for long haul dx

For domestic distance build doublet as long as possible with
centre feed via openwire feeder

Peter, DF3KV

Andy M schrieb in Nachricht ...
>Hi All
>
>I would like to put up a tx/rx 160 meter antenna, but very restricted on

5785. Re: Magnetic loop??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 01:32:53 UTC
From: VE3TMT <ve3tmt@rac.ca>
Message-ID: <9vPo8.7532$oz6.2372928@news20.bellglobal.com>
Source record: 145973

"Chris Bartlett" <Bartty@v21mail.co.uk> wrote in message
news:3ca3ab57_1@news.greennet.net...
> Hi folks, I have been wondering about having a go at making a magnetic
loop
> for HF.
>
> Has anyone any experience of homebrew mag loops, is it a practical
project?
> are the parts available? how well do they work? (I am told better than a
> dipole)
>
> Can you make them into a beam??
>
> Thanks in advance.
>
> Chris.

Hi Chris,

I have made a few over the last couple of years. Here are my opinions...

PROS:

Great manmade noise rejection
Great QRM rejection
Good performance for its size
Relatively cheap to make (see CONS!)
Great weekend project

CONS:

Extremely narrow bandwidth
Constant tuning when you QSY
Tuning caps hard to find - I picked up a vacuum variable very cheap (until
it smashed!!)
Caps must be very high quality to withstand the several KV's of voltage
across them, even at 100W output

I built mine out of 3/4" copper tubing rolled into a 3' circle. Cap was a
5-475 pf @ 5KV. The loop would tune anywhere between 4.8 - 24 MHZ with
absolute 1:1 SWR. Worked stations up & down the east coast on 40m while it
was still in my basement.

Good luck

Max ve3tmt@rac.ca

5786. Re: Magnetic loop??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 02:36:11 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3CA3D2F5.3B4ABBB0@shaw.ca>
Source record: 145974

Chris Bartlett wrote:
>
> Hi folks, I have been wondering about having a go at making a magnetic loop
> for HF.
>
> Has anyone any experience of homebrew mag loops, is it a practical project?
> are the parts available? how well do they work? (I am told better than a
> dipole)
>
> Can you make them into a beam??
>
> Thanks in advance.
>
> Chris.

There is lots of information on Magnetic Loops (aka
Small Loops). Try a search on any good engine such
as google or yahoo and use AA5TB as your search term.
He has an excellent site with lots of good links.

--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5787. Re: Magnetic loop??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 03:14:05 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a80m5s$qg7$1@helle.btinternet.com>
Source record: 145975

> Has anyone any experience of homebrew mag loops, is it a practical
project?
> are the parts available? how well do they work? (I am told better than a
> dipole)
>
> Can you make them into a beam??

==========
Hi,

A magloop is much the most efficient of the small antennas where real estate is at a premium. It can also be said, it is much the least inefficient.

Small means small in comparison with a wavelength. A perimeter of 1/20th of a wavelength is very usesable. But like ALL antennas the higher above lossy ground the better. Think in terms of a height greater than 1/3 or 1/2 of its diameter. A whole diameter is lovely.

It is more of an indoors workshop than an outside job. For most convenient construction make a square loop from 1" or 1.5" copper plumbing pipe. For 160 metres you need a 6000 KV, 900pF, 30-amp, very-slow-motion variable capacitor. That's expensive. But capacitance decreases very fast with frequency. A motor-driven vacuum capacitor is very nice if you can afford it.

The most efficient way of coupling the loop to the transmitter is a much smaller, self-supporting loop made from bare copper inside the main loop and insulated from it. Nothing could be more simple.

On 160m and 80m it is 2 and 1.5 S-units down on a full-size dipole at a height of 100 feet. But that's not surprising. It makes best use of a 30 feet by 30 feet back yard. At 14 MHz it is almost as good as a dipole. At 30 MHz you have room to put up a full-size 1/2-wave dipole anyway.

You can't make a beam out of one of them. One vertical loop has the same radiation pattern as a horizontal dipole only better. You could use two of them to make the same sort of pattern as a dipole with a reflector. But you would then need at least 1/4 or perhaps 1/2-wavelength of garden space. Don't think about it !

For main loop and coupling loop dimensions, capacitor pF, working voltage for power input, download program MAGLOOP4 from website below. Takes only a few seconds. Then get a blow-torch and solder.

****
Regards, Reg G4FGQ
Free Antenna Modelling Software

Http://www.g4fgq.com
****

5788. Re: help rebuilding a DK3

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 04:43:04 UTC
From: Peter Shintani <shintani@cts.com>
Message-ID: <3CA3F0D7.5C590576@cts.com>
Source record: 145976

Cam:
thanks for the advice. I will gget rid of the shunt caps/relays and try
the
shunt inductor. I am not sure but I think I've seen a shunt inductor on
someone's
loaded antenna ? Perhaps I was a texas bug catcher ?
'73
Peter

CAM wrote:

> Peter Shintani wrote:
> >
> > Cam:
> > If I understood your explanation, if I placed a shunt coil to shift the
> > reactance, I might be able to use a single fixed inductor to
> > match the screwdriver over its 10~80m range ? Peter
>
> Yes, that's right. I use 6 turns (one inch) of 1.5" diameter coil stock.
> The inductive reactance is minimum on 75m and maximum on 10m. So it
> is most effective on 75m, where it needs to be, and essentially out
> of the circuit on 10m because of its relatively high reactance.
> --
> cheers, CAM http://www.qsl.net/w5dxp
>
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5789. Re: help rebuilding a DK3

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 04:50:08 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA3F280.60B12821@IEEE.org>
Source record: 145977

Peter Shintani wrote:
>
> Cam:
> thanks for the advice. I will gget rid of the shunt caps/relays and try
> the shunt inductor. I am not sure but I think I've seen a shunt inductor on
> someone's loaded antenna ? Perhaps I was a texas bug catcher ?

I am also a Texas bug catcher. I feed them to my Purple Martins.
--
cheers, CAM http://www.qsl.net/w5dxp

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5790. experimental antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 05:26:11 UTC
From: Aaron Rogerson <arogerso@bigpond.net.au>
Message-ID: <TVSo8.23650$EE4.77394@news-server.bigpond.net.au>
Source record: 145978

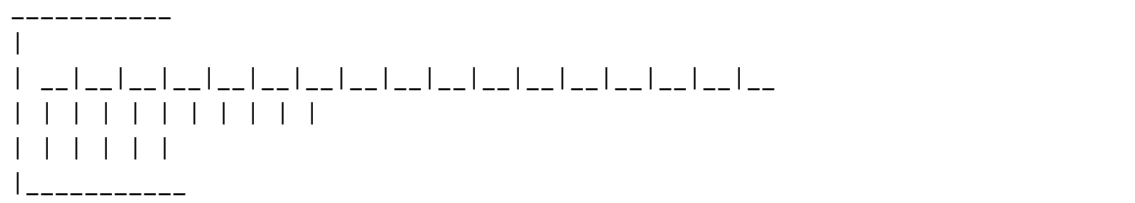
Opinions on this antenna design.....
Length of insulated copper wire with a length an even multiple of the waveform. Sections of brass rod slipped over the insulated wire... 1/2 wavelength long with a hole drilled into the end, and wire threaded through the hole would around and then wound around a small section of the wire which has had a small section of the insulation removed. Have maybe 20 of these "elements" rods connected to the insulated wire along its length at spaces of one wavelength each. The whole thing going lengthways across the roof from one end to the other similar to a simple dipole arrangement. Each element connected at sections to the wire is facing vertically, eg sitting on top of the insulated wire... with some assistance from some electrical tape.....

Any thoughts on this design?

5791. Cigar Antennas for 2400

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 06:13:35 UTC
From: Eric Schumacher <WB6KCN@pacbell.net>
Message-ID: <jCTo8.2475$QY4.2239264881@newssvr21.news.prodigy.com>
Source record: 145984

Hi Group
Any one out there have any pointers on where to find info on construction and theory behind the "cigar antenna" Invented by a Frenchman named Simon. The usual configuration for 2400 is a rod with 1 inch diameter washers and spacers stacked on it for a couple of feet.



This the rough outline, since I don't know the proper name internet searches don't turn up much. Looks like quite a bit of gain with easy non critical construction. I would particularly like to know what the critical dimensions are.
73 Eric WB6KCN

5792. Re: experimental antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 06:21:20 UTC
From: SideBand <abNO8SPAMlr@csotbs.org>
Message-ID: <3CA407E0.40502@csotbs.org>
Source record: 145979

Sounds like you'd need a really big house to do this on 80 meters...

de AB8LR, Chris

Aaron Rogerson wrote:

> Opinions on this antenna design.....
> Length of insulated copper wire with a length an even multiple of the
> waveform. Sections of brass rod slipped over the insulated wire... 1/2
> wavelength long with a hole drilled into the end, and wire threaded through
> the hole would around and then wound around a small section of the wire
> which has had a small section of the insulation removed. Have maybe 20 of
> these "elements" rods connected to the insulated wire along its length at
> spaces of one wavelength each. The whole thing going lengthways across the
> roof from one end to the other similar to a simple dipole arrangement. Each
> element connected at sections to the wire is facing vertically, eg sitting
> on top of the insulated wire... with some assistance from some electrical
> tape.....
>
> Any thoughts on this design?
>
>
>

--
73 de AB8LR, Chris

http://csotbs.shopiwon.com/ for great deals on computer products.

5793. Re: Can I build a 2m/440mhz 5/8 mobil antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 06:42:46 UTC
From: Roger Leone <arleone@inreach.com>
Message-ID: <M0Uo8.1081$jW7.99572862@news.inreach.com>
Source record: 145980

Jeff:

A 1/4 wave on 144 MHz is 3/4 wave on 440. The SWR is usually acceptable on the 3rd harmonic, although that is partly due to the increased feeder losses on 440. But SWR is not the whole story. A 3/4 wave radiator on 440 has radiation lobes that send some of your signal at high angles, not toward the horizon where you probably want it. This is usually not so severe to make the antenna unusable, and may be considered a reasonable compromise for the dual band coverage.

A 5/8 wave antenna on 144 MHz is 15/8 waves on 440. If you do the simple math you will see that on 440 you will have almost a 2 wavelength antenna, which is becoming what we call a "long wire" on the HF bands. As you probably know, a long wire radiates with multiple lobes, the largest of which are toward the ends of the wire. In other words, most of your signal will be radiated up toward the sky.

The reason for the coil in commercial dual band antennas is to phase the antenna currents so you actually end up with two colinear elements which both radiate at low angles, reinforcing each other and providing gain. Without the phasing coil you get multiple undesirable lobes.

Also keep in mind that 5/8 wave is NOT a resonant length. There are several ways to compensate for the reactance at the base of a 5/8 wave radiator, the easiest being to add a small inductance in series which makes the antenna electrically equivalent to a 3/4 wave. (3/4 wave is resonant, as you have already discovered).

Given that the gain advantage of a 5/8 wave antenna over a 1/4 wave antenna is probably not noticeable except under the most difficult conditions, and even then may or may not make a difference, my suggestion is to stick with the 1/4 wave antenna. It is simple and works OK.

Roger K6XQ

5794. ZX 10-4 DX Element spacing info

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 10:02:44 UTC
From: google@stusoft.com
Message-ID: <fb58ac6a.0203290202.290ee12b@posting.google.com>
Source record: 145981

I need the element spacing info for a ZX 10-4 DX Monoband Beam. I seem to have misplaced my instructions and the pdf file on the Wimo website is corrupted (there are "?" where the measurements are).

Its a bit late to be building antenna for contest this weekend !!

Help much appreciated

Andrew
M0AQM

5795. Re: Cutting a 28MHz Whip

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 11:49:26 UTC
From: Ian Jackson <ianjackson@g3ohxSPAM-ME-NOT.demon.co.uk>
Message-ID: <UGA1sKAGTFp8EwyQ@g3ohx.demon.co.uk>
Source record: 145982

In article <3CA2753B.26E791C6@erols.com>, ik7565@erols.com writes
>NMO on the roof: at 28.0mhz 45 1/2", at 28.5mhz 43 7/8", at 29.0mhz 42
>1/4"
>TMB on trunk for same freqs: 43 3/4", 42 5/8", 41 1/8"
>
>73 de Ian N8IK
>
>* wrote:
>>
>> I have a Larsen NMO 27 whip antenna with base coil. The whip is 49". Does
>> anyone have a cutting chart they could provide which will tell me where to
>> cut the whip for various 10 meter freqs? Email is rong5@mindspring.com

Having started my life in amateur radio on 160m, making an antenna shorter tends to be against my principles!

I used a base-loaded CB whip for 10m FM (with a modified CB set plus retuned CB 40W 'burner'). I didn't cut the whip or take turns off the coil. As the CB antenna was inductive above its 'correct' frequency, I simply inserted a compression trimmer capacitor in series with the feed point (between the coax inner and the bottom of the coil), and adjusted it for minimum SWR. I then measured the value of the cap (220p?). I then replaced this with a fixed disc ceramic (500V) of the same value. OK on 40W (and I worked Jamaica and several US repeaters).

Cheers,
Ian.

5796. Re: Magnetic loop??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 11:51:56 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3ca4529a$1_4@corp.newsgroups.com>
Source record: 145983

"Chris Bartlett" <Bartty@v21mail.co.uk> wrote in message
news:3ca3ab57_1@news.greennet.net...
> Hi folks, I have been wondering about having a go at making a magnetic
loop
> for HF.
>
> Has anyone any experience of homebrew mag loops, is it a practical
project?
> are the parts available? how well do they work? (I am told better than a
> dipole)
>
> Can you make them into a beam??
>
> Thanks in advance.
>
> Chris.
>
>

Hi Chris,

These are interesting antennas and if your search the net for Small transmitting loops you'll find more than you ever wanted to know.

I've built several here and for their size they do a great Job. They are very HI Q antennas which is good and bad, Good because it adds a messure of selectivity on RX , but bad in that they must be retuned every few HZ of frequency movement.

I would Recomend making the Loop out of 5/8 inch or 3/4 inch copper tubing it's easy to work with and not that expensive. I used Aluminum conduit also for one of my loops and found the copper to be better here.

The Cap is the important thing, It must be able to handle Kilovolts of volage.. Butter fly type is better from a resistance point of veiw. and when working with only a few ohms of radiation resistance everywhere you can make a very non resistive connection counts. Also I've tried both methods of feeding the Loops. Gama and Link coupled with small coupling loop. Use the Coupling loop and forget the gama match schemes.

Have fun they are great little Antennas for their size and work quite well low to the earth if mounted in the vertical plan.. mine were only 4 ft above ground.. try that with your dipole..

73 Dave kc1di // always qrp!

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Version: 6.0.343 / Virus Database: 190 - Release Date: 3/22/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5797. Re: experimental antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 12:33:30 UTC
From: Aaron Rogerson <arogerso@bigpond.net.au>
Message-ID: <uaZo8.24502$EE4.81435@news-server.bigpond.net.au>
Source record: 145985

Not 80m 2.4ghz.. or 12.5cm
"SideBand" <abNO8SPAMlr@csotbs.org> wrote in message
news:3CA407E0.40502@csotbs.org...
> Sounds like you'd need a really big house to do this on 80 meters...
>
> de AB8LR, Chris
>
> Aaron Rogerson wrote:
>
> > Opinions on this antenna design.....
> > Length of insulated copper wire with a length an even multiple of the
> > waveform. Sections of brass rod slipped over the insulated wire... 1/2
> > wavelength long with a hole drilled into the end, and wire threaded
through
> > the hole would around and then wound around a small section of the wire
> > which has had a small section of the insulation removed. Have maybe 20
of
> > these "elements" rods connected to the insulated wire along its length
at
> > spaces of one wavelength each. The whole thing going lengthways across
the
> > roof from one end to the other similar to a simple dipole arrangement.
Each
> > element connected at sections to the wire is facing vertically, eg
sitting
> > on top of the insulated wire... with some assistance from some
electrical
> > tape.....
> >
> > Any thoughts on this design?
> >
> >
> >
>
>
> --
> 73 de AB8LR, Chris
>
> http://csotbs.shopiwon.com/ for great deals on computer products.
>

5798. Re: experimental antenna design

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 13:09:09 UTC
From: jim.bolinger@lintek.aeroflex.com
Message-ID: <8d5ec8a2.0203290509.5d4dbcd2@posting.google.com>
Source record: 145986

Sounds something like a colinear dipole, except they use coax instead
of a single wire. Typically, though, you usually see only two or four
sections.

Jim
N8EE

"Aaron Rogerson" <arogerso@bigpond.net.au> wrote in message
news:<TVSo8.23650$EE4.77394@news-server.bigpond.net.au>...
> Opinions on this antenna design.....
> Length of insulated copper wire with a length an even multiple of the
> waveform. Sections of brass rod slipped over the insulated wire... 1/2
> wavelength long with a hole drilled into the end, and wire threaded through
> the hole would around and then wound around a small section of the wire
> which has had a small section of the insulation removed. Have maybe 20 of
> these "elements" rods connected to the insulated wire along its length at
> spaces of one wavelength each. The whole thing going lengthways across the
> roof from one end to the other similar to a simple dipole arrangement. Each
> element connected at sections to the wire is facing vertically, eg sitting
> on top of the insulated wire... with some assistance from some electrical
> tape.....
>
> Any thoughts on this design?

5799. Re: Cape Cod ARES looking for 2m beam designs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 13:17:36 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <QPZo8.14866$q92.499989@news1.east.cox.net>
Source record: 145987

There was a program called Yagi Optimizer that would be ideal for
what you are doing. It compensated form boom and element diameters,
and also the types of element to boom mounts used, and element tapers.
It would automatically design the best possible yagi based on the parameters
entered by the user regarding boom length, number of elements, SWR
BW, etc.; and it was an extremely easy and informative program to use.
I don't know if it is still being marketed (saw a demo many years ago),
but I think Brian Beasley (sp?) was the author.

Pete

"Frank Olaughlin" <wq1o@gis.net> wrote in message
news:52c69878.0203271709.6c967659@posting.google.com...
> Hello to all. The Cape Cod ARES is loking to experiment with some
> beams for long range 2 meter VHF. We are looking for any designs of
> 3,4, and 5 element antennas for testing. We wanted to actually build
> the antennas as part of the project. We have several peices of 1"
> aluminum tubing for booms and 1/4" aluminum rods for the elements. If
> anyone has any designs or can convert using these conductor sizes(Have
> not played with antenna software much), we would appreciate it. We
> are experimenting to see which beams will work best for us. We will
> likely need several designs since some will have to be rugged, while
> otthers may need to be expedient to assemble and disassemble. If
> anyone has designs, spacing and length parameters, or suggestions, We
> would be grateful. These designs will go into provinding emergency
> communications in time of disaster for the community here. Thanks in
> advance. Nice bunch of folks on this group.
> 73s Frank WQ1O
> Cape Cod Area ARES DEC

5800. Re: Cape Cod ARES looking for 2m beam designs

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 13:50:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <3CA47131.F6161BAB@eznec.com>
Source record: 145988

I think you can still get YO (Yagi Optimizer). Contact Brian Beezley, K6STI, at k6sti@n2.net. Tell him I sent you.

Roy Lewallen, W7EL

Uncle Peter wrote:
>
> There was a program called Yagi Optimizer that would be ideal for
> what you are doing. It compensated form boom and element diameters,
> and also the types of element to boom mounts used, and element tapers.
> It would automatically design the best possible yagi based on the parameters
> entered by the user regarding boom length, number of elements, SWR
> BW, etc.; and it was an extremely easy and informative program to use.
> I don't know if it is still being marketed (saw a demo many years ago),
> but I think Brian Beasley (sp?) was the author.
>
> Pete

5801. Re: Can I build a 2m/440mhz 5/8 mobil antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 13:56:49 UTC
From: Jeff Brown <jbrown21@sprynet.com>
Message-ID: <3CA472A1.A8389839@sprynet.com>
Source record: 145989

Thanks Roger and Dale. Then I think I'll just stick with the
homebrew 1/4 3/4 dual band antenna!
Jeff

Jeff Brown wrote:

> I built a dual band 1/4 wave 2m mobile antenna which
> resonates fine on 440 mhz (third harmonic). My question is
> can I build a 5/8 wave 2m mobile antenna that will also
> resonate on 440 as a 5/8 on 440? Anyone have a source of
> plans? Also I noticed that the commercial dual band 1/4 wave
> length antennas have a coil (trap?) up past the 440 length
> (about 5"). Why is this necessary if it resonates naturally
> on both 146mhz and the 3rd multiple on 440 mhz?
> Thanks,
> Jeff WB9FOL

5802. Re: Magnetic loop??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 15:11:37 UTC
From: Joe O <jenjoeo@zianet.com>
Message-ID: <3ca48459.0@oracle.zianet.com>
Source record: 145990

Chris, Not all magnetic antennas are small. On 75 M I used a 20 Degree, Multiple U (MU) which is a Magnetic Radiator-a Low profile Paried Vertical. The design is extremely simple, only wire ! It requires some real estate, but you don't get anything for nothing. See The ARRL Antenna Compendium , Volume 2. The article was written by Russell Prack, K5RP. This antenna design is extremely efficient, due to very low ground losses. I used mine for over a year and exprerienced more or less an omni-directional pattern. I worked JA which was at a null azimuth. This is a DX not LOCAL antenna.

73s
Joe O KI5FJ

"Chris Bartlett" <Bartty@v21mail.co.uk> wrote in message news:3ca3ab57_1@news.greennet.net...
> Hi folks, I have been wondering about having a go at making a magnetic loop
> for HF.
>
> Has anyone any experience of homebrew mag loops, is it a practical project?
> are the parts available? how well do they work? (I am told better than a
> dipole)
>
> Can you make them into a beam??
>
> Thanks in advance.
>
> Chris.
>
>

5803. Re: Cigar Antennas for 2400

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 15:30:06 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3CA4887E.511C3B6@crosslink.net>
Source record: 145991

Eric Schumacher wrote:
>
> Hi Group
> Any one out there have any pointers on where to find info on construction
> and theory behind the "cigar antenna" Invented by a Frenchman named Simon.
> The usual configuration for 2400 is a rod with 1 inch diameter washers and
> spacers stacked on it for a couple of feet.....

I can't help with a name but, a decade and more back, a Ham was selling
a kit TV rcvr. The printed circuit board soldered to a coffee can to
make a resonant chamber and used a homebrew antenna just like you
describe aimed at a dish sold for kids to sled on. Maybe that'll jog
someones memory and get you a name. AFAIK it's just a special Yagi.
Good Hunting & 73
KA3DWW

5804. L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 16:15:39 UTC
From: avatar <avatar@frii.com>
Message-ID: <3ca493ae$0$69924$7586b60c@news.frii.com>
Source record: 145992

L-Network Revealed

While a T or a Pi network provides the greatest matching versatility when all three reactances are adjustable, the L network in many cases is a better choice. Why?

Based on most of the material I have read related to L networks, one is lead to believe that it can only match a purely resistive source to a purely resistive load. In the real world the load usually has reactance as well. To compensate for the reactance the article suggests putting a reactance of opposite sign and equal value in series with the load. This approach has made the L network into a T. The fact is that this suggestion may be totally unnecessary! If the reactance in the load is within the tuning range of the L network, that reactance with the L network forms a T network that can provide a matched condition. An advantage of using an L network, whenever possible, is the lower Q and lower probable losses. For those cases where the L network cannot match a given load, then an additional series reactance will provide a greater matching range.

The above can be proven mathematically and in practice. The only two references I have found that provide the mathematics are

1.Communication Engineering by Everitt, Pub. McGraw-Hill. (This is the same reference recommended by Reg - G4FGQ)

2. Matching Network Design by Tony Dorbuck - K1FM, QST March 1979.

Either of the above references provide the formulas that prove my statements. Further, if one knows the R+jX of the load and substitutes the jX into the T network as the series output reactance, the L part of the network can be calculated. It appears that G4FGQ has included this feature in his L network program. I confirmed the resulting values that the program produced by doing the same problem long hand.

In addition to doing the theoretical exercises, I have done some real world experiments related to this article. Those activities support the statements made herein.

Reg is to be commended for unselfishly providing many useful computer programs related to antennas for free. You can download these programs at www.btinternet.com/~g4fgq.regp/

BTW: For G4FGQ. If you are willing to give me an email address, I would like to correspond with you.

Dave
WMAY

5805. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 16:45:01 UTC
From: MW0CDO <gw7IhiJUNK@ntlworld.com>
Message-ID: <a825m2$ota9l$1@ID-117699.news.dfncis.de>
Source record: 145993

Well, what do you expect when the more gullible elements of US society will
shell out good hard earned cash for PET ROCKS??.. remember them?

:-)

Paul MW0CDO.

"J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca> wrote in message
news:EL7o8.6451$n82.1278543@news20.bellglobal.com...
> The Chipster N1IR 'tested' two:
> > I have tested the two advertised on
> > television and have not been able to
> > replicate the claims.
>
> Steve VE9SRB bought two:
> > Although, I must shamefully admit that
> > I did buy two of them (for research
> > and demonstration purposes only
> > of course), so add me to the list of suckers
> > who merrily handed over $12.99 + S&H (twice).
>
> Oh my gawd... you guys !!!
>
>
>

5806. Re: Magnetic loop??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 16:55:06 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3CA49C40.5697CE41@shaw.ca>
Source record: 145994

Pastor-KC1DI wrote:
>
> "Chris Bartlett" <Bartty@v21mail.co.uk> wrote in message
> news:3ca3ab57_1@news.greennet.net...
> > Hi folks, I have been wondering about having a go at making a magnetic
> loop
> > for HF.
> >
> > Has anyone any experience of homebrew mag loops, is it a practical
> project?
> > are the parts available? how well do they work? (I am told better than a
> > dipole)
> >
> > Can you make them into a beam??
> >
> > Thanks in advance.
> >
> > Chris.
> >
> >
>
> Hi Chris,
>
> These are interesting antennas and if your search the net for Small
> transmitting loops you'll find more than you ever wanted to know.
>
> I've built several here and for their size they do a great Job. They are
> very HI Q antennas which is good and bad, Good because it adds a messure of
> selectivity on RX , but bad in that they must be retuned every few HZ of
> frequency movement.
>
> I would Recomend making the Loop out of 5/8 inch or 3/4 inch copper tubing
> it's easy to work with and not that expensive. I used Aluminum conduit also
> for one of my loops and found the copper to be better here.
>
> The Cap is the important thing, It must be able to handle Kilovolts of
> volage.. Butter fly type is better from a resistance point of veiw. and when
> working with only a few ohms of radiation resistance everywhere you can make
> a very non resistive connection counts. Also I've tried both methods of
> feeding the Loops. Gama and Link coupled with small coupling loop. Use the
> Coupling loop and forget the gama match schemes.
>
> Have fun they are great little Antennas for their size and work quite well
> low to the earth if mounted in the vertical plan.. mine were only 4 ft above

> ground.. try that with your dipole..
>
> 73 Dave kc1di // always qrp!
>
> ---
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> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.343 / Virus Database: 190 - Release Date: 3/22/02
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

Dave,
I'm curious -- did you have troubles with the gamma
match?
I have a loop that is just waiting for better weather so I
can put
it out. It is still snowing in the area here!!! I have it
constructed
with a loop match at the moment, but plan to try the gamma
as well.
(I was really lucky and picked up an MFJ 1786 for $100 --
only had
to repair the controller unit).

I also plan to try two kinds of couling loop -- one straight
wire,
the other a sheilded loop made of coax. I just can't help
myself --
have to try everything!!!
--
Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my FINALLY UPDATED website at
http://members.shaw.ca/finkirv/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5807. Re: Cigar Antennas for 2400

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 18:59:35 UTC
From: Eric Schumacher <WB6KCN@pacbell.net>
Message-ID: <rQ2p8.364$Ev2.59898091@newssvr13.news.prodigy.com>
Source record: 145995

Hi Dale

Thanks for the reply. What I was really looking for is the proper name for the director structure. So I could conduct a proper search. I have seen these things around but never paid much attention to them. I want to use them for point to point networking on the 2.4 ISM band. I have some 18 inch instrumentation type dishes (f/d 0.5)with log-periodic feeds and was thinking about replacing the feed with something that would increase gain and give a cleaner pattern. Then decided it might be eaiser to build the whole ant from scratch. So I am looking around.

Trick is I don't have much instrumentation for this frequency so design has to be cookbook and work the first time without tweaking. The cigar looked like a very simple design to fabricate but I need a little theory to know what is critical. Like what is optimum disk spacing, diameter, is diameter of the center rod critical, etc.

73 Eric

At 08:08 AM 3/29/02 -0500, you wrote:

Hi Eric,
These antennas were popular for MDS TV where polarity could easily be changed by
using a 2nd set of U bolt holes. The disc parasites work of course respond to
any polarity- so only the waveguide cavity had to be turned. Gain is somewhat
lower than loop yagis- which are superior for amateur use.
If you are still interested, look at microwave dish feeds for 2306 MHz- this is
the driven element- designed for very deep dishes (i.e. small F/D).
Dale W4OP
73,
Eric Schumacher
WB6KCN@pacbell.net

5808. Re: Cell phone antenna booster

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 20:02:42 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <a82h93$1h4q@r02n01.cac.psu.edu>
Source record: 145996

I still have my pet rock, He's been a faithful friend and companion for
years. I've even taught him tricks. He can roll over and his best trick is
"stay".

73
--
John Passaneau
Penn State University, State College Pa.
W3JXP
w3jxp@arrl.net

"MW0CDO" <gw7lhiJUNK@ntlworld.com> wrote in message
news:a825m2$ota9l$1@ID-117699.news.dfncis.de...
> Well, what do you expect when the more gullible elements of US society
will
> shell out good hard earned cash for PET ROCKS??.. remember them?
>
> :-)
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> Paul MW0CDO.
>
>
>
> "J. Harvey" <JM001.Harvey_TRIMTHIS_@Sympatico.ca> wrote in message
> news:EL7o8.6451$n82.1278543@news20.bellglobal.com...
> > The Chipster N1IR 'tested' two:
> > > I have tested the two advertised on
> > > television and have not been able to
> > > replicate the claims.
> >
> > Steve VE9SRB bought two:
> > > Although, I must shamefully admit that
> > > I did buy two of them (for research
> > > and demonstration purposes only
> > > of course), so add me to the list of suckers
> > > who merrily handed over $12.99 + S&H (twice).
> >
> > Oh my gawd... you guys !!!
> >
> >
> >
>
>

5809. WTB-REPEATER

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 20:34:40 UTC
From: n2ion@aol.com
Message-ID: <20020329153440.21846.00001472@mb-ch.aol.com>
Source record: 145997

I WANT TO PURCHASE A GE MASTR II UHF 100W REPEATER(THAT WILL WORK ON THE
AMATEUR BANDS).
EMAIL WITH DETAILS.

5810. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 20:36:59 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <Lf4p8.133426$ZR2.54148@rwcrnsc52.ops.asp.att.net>
Source record: 145998

For those cases where
> the L network cannot match a given load, then an additional series
reactance
> will provide a greater matching range.

I have never found a load that cannot be matched to 50 ohms by an
appropriate "L" network.

W4ZCB

5811. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 21:17:03 UTC
From: Anita Andringa <a.andringa@rhayward.demon.nl>
Message-ID: <ua9mep8elmhf17@corp.supernews.com>
Source record: 145999

> I have never found a load that cannot be matched to 50 ohms by an
> appropriate "L" network.
>
> W4ZCB

An L should match anything it's true, but sometimes the components would get unwieldy values. Then an extra reactance can be of help. In transistor PA's for instance, a T network could be easier to work with then an L because of the strange values that your components would get.

Rudolf, PA2RHB

5812. Re: traps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 21:33:17 UTC
From: Anita Andringa <a.andringa@rhayward.demon.nl>
Message-ID: <ua9ndep90q1a2e@corp.supernews.com>
Source record: 146000

Hi Jan,
well, first I would see where the SWR was best. If it was exactly right, I would stop ;-) Otherwise...
Then I would tune the traps so that the "inner"dipole was on the desired higher frequency.
After that, I would prune the end wires so that the whole dipole was on the desired lower frequency.

Example: for a 40/80 dipole, first trim the traps so that SWR is lowest on 7.05 MHz (for Belgium).
Then trim the wire ends so that SWR is lowest on 3.6 MHz, or wherever you like (it will be a bit narrow on 80 so you will have to make a choice there).

For more bands, work from inside out as above, always doing the wire ends last.

Note, I do not know _how_ you can tune the traps. Remove/add windings, solder small capacitors, perhaps there is a trimmer capacitor or a moveable slug in the coil. Designs differ.

Good luck!

Jan Van Hoof <vanhoofj@pioneer.be> schreef in berichtnieuws 3ca05b16$0$7116$4d4efb8e@news.be.uu.net...
> Hi, anyone an idea how to tune traps for a wire dipole, using an SWR
> analyzer and receiver?
>
> thanks for quick response
> Jan
>
>

5813. one more question about end fed zepps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 22:23:05 UTC
From: IronHead <slipkid@kwiknet.net>
Message-ID: <cP5p8.134$Ucr3.22347966@news2.randori.com>
Source record: 146001

If I construct an end fed zepp, can I run coax into my shack after the 1/4 wave 300ohm twinlead and if so do I use a choke or a balun or what? Thanks

KC2FYP

5814. Re: one more question about end fed zepps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 22:31:59 UTC
From: SideBand <abNO8SPAMlr@csotbs.org>
Message-ID: <3CA4EB5F.3060601@csotbs.org>
Source record: 146002

To match up the impedances between the coax and the twinlead, I'd use a 6:1
balun between them. This is of course assuming the use of 50 ohm coax.

de AB8LR, Chris

IronHead wrote:

> If I construct an end fed zepp, can I run coax into my shack after the 1/4
> wave 300ohm twinlead and if so do I use a choke or a balun or what? Thanks
>
> KC2FYP
>
>
>

--
73 de AB8LR, Chris

http://csotbs.shopiwon.com/ for great deals on computer products.

5815. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-29 23:22:45 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a82t04$84m$1@helle.btinternet.com>
Source record: 146003

> BTW: For G4FGQ. If you are willing to give me an email address, I would
like
> to correspond with you.
>
> Dave
> W&#65533;MAY
==========

If anyone should wish to correspond with me privately following one of my newsgroup postings it is necessary only to select "Reply to Sender" instead of "Reply to Group".

I can be also be contacted directly from several places in my website just by by clicking on "Reply to Reg" or something similar.

And if by some remote chance none of the aforementioned should work, my e-mail address is g4fgq.regp@btinternet.com. I have only that one address.

But I am astounded at the number of private e-mails I receive. It has been entirely unexpected. I cannot suggest a short explanation. It is far too much of a job to respond to all enquiries. I do do the best I can. Nevertheless I cannot but be selective. Just let it be said it is a gratifying experience.

Most enquiries come from North America. But that's understandable because most of the world's radio amateur population resides in that fortunate region of this over-populated Earth. And of course we have a common language.

The fact is I don't know what to do about it. So I take the easy way out by doing nothing. Except doing what I like best - just writing another program.

If anyone should consider I'm perhaps a little too frivolous, you are probably right.

Regards, Reg, G4FGQ

5816. Re: one more question about end fed zepps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 01:55:35 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA51B17.362EC582@IEEE.org>
Source record: 146004

IronHead wrote:
> If I construct an end fed zepp, can I run coax into my shack after the 1/4
> wave 300ohm twinlead and if so do I use a choke or a balun or what? Thanks

We don't know what the SWR on the coax will be. If it is acceptable to you,
then the answer is yes. It is good engineering practice to place a balun
or choke at the coax to twinlead junction.
--
cheers, CAM http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5817. Re: one more question about end fed zepps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 02:06:30 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA51DA6.7C62E88D@IEEE.org>
Source record: 146005

SideBand wrote:
> To match up the impedances between the coax and the twinlead, I'd use a 6:1
> balun between them.

The impedance at the coax to twinlead junction will be Z0 squared divided
by the antenna feedpoint impedance. That will certainly be nowhere near
300 ohms. A 6:1 balun is a very bad idea. Assuming Z0 = 300 ohms and
the feedpoint of the antenna is 5000 ohms, the impedance at the coax to
twinlead junction will be about 18 ohms. A 6:1 balun will try to take
that impedance down to three ohms. That's a very bad idea. 18 ohms will
give an SWR of about 3:1 on the coax which is acceptable. Three ohms
will give a 50 ohm SWR of 16.7:1 which is terrible. Why spend big bucks
for a 6:1 balun that makes the antenna system worse?

A better approach would be to use "450" ohm ladder-line instead of
the 300 ohm stuff. The impedance seen by the coax will be closer to
50 ohms. The original Zepps used open-wire transmission line.
--
cheers, CAM http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5818. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 02:09:36 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA51E60.39BE3641@IEEE.org>
Source record: 146006

Reg Edwards wrote:
> The fact is I don't know what to do about it.

You give good advice and it's free, Reg. Why are you surprised
there is a lot of demand? I spend a couple of hours a day
responding to private email questions about antennas.
--
cheers, CAM http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5819. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 04:31:19 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203292031.67c70f70@posting.google.com>
Source record: 146007

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:<Lf4p8.133426$ZR2.54148@rwcrnsc52.ops.asp.att.net>...
> For those cases where
> > the L network cannot match a given load, then an additional series
> reactance
> > will provide a greater matching range.
>
> I have never found a load that cannot be matched to 50 ohms by an
> appropriate "L" network.
>
> W4ZCB

Thats been pretty much the case for me too. Only on a few very low impedance loads on the low bands have I ever had any trouble, and that was just because the inductor/cap were not quite the correct values. I use an L network for my mobile impedance matching most of the time. Add another cap to the other side of the inductor to make a "universal"?? match, and you don't need to reverse the tuner connections to go from lo to hi Z. Just a cheap 39.95 MFJ random wire tuner will tune 90% of any loads you will ever see although you may need to reverse the connections at times. MK

5820. Multiple radios

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 05:24:15 UTC
From: Keith Thomas <thomaska@earthlink.net>
Message-ID: <3_bp8.1355$ml2.136637@newsread1.prod.itd.earthlink.net>
Source record: 146008

Can multiple radios (three 2m radios) be used on a single antenna?

5821. uhf vhf

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 07:14:20 UTC
From: Mr E Crane <crane3@cablerocket.com>
Message-ID: <3ca56601.0@209.128.1.3>
Source record: 146009

for sale one adi 600 d looking to trade for an item
this is a vhf uhf with cross band rept. had cell phone freq.
also. has full coverage. ditigal display. comes with pc software for
progrmming in channels many many features.
more than most radios. mint condition. for furthere info you can email me.
not looking to sell looking totrade an item of equal value. if interested
email me asap.

for furthere information.

5822. weak FM station

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 10:19:01 UTC
From: Alpine Dragon <usenetreplies@hotmail.com>
Message-ID: <1017481119.920283@aknx2.orcon.net.nz>
Source record: 146010

I am trying to receive a station towards the north about 30 Km away transmitting at 100w. I can receive the station in stereo but with hiss, so far I haven't been able to improve it much further than that.

My current setup:
An external 5 element FM antenna (The shop said that was the largest they had) mounted vertically which is pointed directly at the station towards the north and is feed into 20m long RG-6 coax run directly connected to the back of my stereo.

I did try placing the antenna in a slanted and in a horizontal position, but the reception was poor.
When adding an old preamp I had lying around , all station are are wiped off, supposedly because the amp is overloading due to the presence of 50Kw stations transmitting about 6Km away towards the NW .

Is their anything else I could do in attempt to improve the reception of this station, or am I out of luck? :-/

5823. Loop and ladder line??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 10:46:06 UTC
From: aokd5fxt@cs.com
Message-ID: <20020330054606.00874.00000697@mb-me.news.cs.com>
Source record: 146011

Ok, the "sky loop" is now hung. It is approximately 530-540 feet. I wanted to go at 530, but had to dodge a few trees. Basically, it is a square configuration. Plan to feed with ladder line. Question, is how long a line, and what kind (440, 450, or 300 ohm). I use a Mfj 962 tuner and do run abt 500 watts power most of the time on 75 meters.

Thanks, Bill

5824. Re: Loop and ladder line??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 11:01:50 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3CA59B19.898B2BDF@icok.net>
Source record: 146012

Bill,
Always use enough ladder line to reach from the radio
to the antenna. If the radio and tuner aren't 'happy'
with whatever that length is, add a few extra feet and try
again. Repeat till radio and tuner are 'happy', then quit.
'Doc

5825. Re: Magnetic loop??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 11:03:11 UTC
From: Chris Bartlett <Bartty@v21mail.co.uk>
Message-ID: <3ca59b76_1@news.greennet.net>
Source record: 146013

Thanks for the info folks. Think I might well have a go at building on. If only of rthe fun of doing it. I am M3 licenced so will only be using 10 Watts so hopefully the voltages will not be TOO high.

Bit worried still about sorting out the capacitor, one of the sites i found after you all pointing me in the right direction suggests uting tube capacitors. Seem fairly simple to construct and should keep the potential price down. Wonder if anyone has any experience with tube capacitors??

Thanks once again for the info.

Cheers, Chris. Happy Easter to all btw.

5826. 5/8 Vertical Ground Plane

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 12:07:55 UTC
From: JEEPMON <JEEPMON@HOTMAIL.COM>
Message-ID: <rUhp8.141879$af7.71046@rwcrnsc53>
Source record: 146014

For making an 5/8 wavelength ground plane antenna with 3, 4, or more radials at an obtuse angle of @ 135 degrees to the vertical element how long should they radials be in wavelength relative to the resonant frequency of the antenna? Should all radials for vertical ground plane antennas be 1/4 wavelength long regardless of the length (wavelength) of the vertical element (1/4 or 1/2 or 5/8 wavelengths)?

5827. Re: 5/8 Vertical Ground Plane

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 12:26:22 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3ca5cbcd_3@news1.prserv.net>
Source record: 145872

Yes. Approximately.

The radials need to present a low impedance at the common point. If you make them a half wave long, almost no current flows in them and they are ineffective. Some very old experiments showed that radials of about 1.05 or 1.1 times a quarter wavelength are the most effective at producing a signal at 0 degrees elevation angle. The radiator length principally affects the feedpoint impedance and thus what kind of matching circuit is necessary to transfer maximum power from the feedline with minimum reflections. The drooping radials are an attempt to lower the feedpoint impedance of quarter wave radiator, and it is not necessary to droop them for longer elements which require matching anyway.

--
Crazy George
Remove NO and SPAM from return address
JEEPMON <JEEPMON@HOTMAIL.COM> wrote in message
news:rUhp8.141879$af7.71046@rwcrnsc53...
> For making an 5/8 wavelength ground plane antenna with 3, 4, or more
radials
> at an obtuse angle of @ 135 degrees to the vertical element how long
should
> they radials be in wavelength relative to the resonant frequency of the
> antenna? Should all radials for vertical ground plane antennas be 1/4
> wavelength long regardless of the length (wavelength) of the vertical
> element (1/4 or 1/2 or 5/8 wavelengths)?
>
>

5828. Re: weak FM station

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 12:39:34 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3ca5cbcf_3@news1.prserv.net>
Source record: 145873

You have several options, none simple. First contact the station and determine if indeed they are transmitting a significant vertical component. If they are not, then your received signal is likely corrupted with a lot of multipath, and will never be crystal clear on stereo, or see below for another possibility.

There are much longer antennas made. A quad stack of wide spaced 10 element beams is not unknown among rabid distance (DX) chasers. I would start by doing a search on the Internet for some of the FM DX clubs/organizations, as a pointer to antenna sources. A 'tuned to channel' preamp , which are probably no longer made, would help. Also, you may already have overload problems in your receiver from the local high power stations, and that is why turning the antenna vertical helps, as it reduces the relatively pure local signals more than the scattered distant one. In that case, you need a fairly sharp (read expensive) front end filter to accomplish what you seek, or a better FM receiver. Again, I defer to some of the presently active DXers for specifics.

If you have access to old magazines in a library or somewhere, there was an article in Radio and TV News back in the 50s or 60s which showed how to stack 2 antennas horizontally (side by side) to develop a deep null to the side whose direction is determined by the spacing. This would allow 'nulling' the local while still providing good forward gain.

Or, you could dig deep, buy the station a 10 KW amplifier, and file for a license modification for them. One of these is about as expensive as the other.

--
Crazy George
Remove NO and SPAM from return address
Alpine Dragon <usenetreplies@hotmail.com> wrote in message
news:1017481119.920283@aknx2.orcon.net.nz...
> I am trying to receive a station towards the north about 30 Km away
> transmitting at 100w. I can receive the station in stereo but with hiss,
so
> far I haven't been able to improve it much further than that.
>
> My current setup:
> An external 5 element FM antenna (The shop said that was the largest they
> had) mounted vertically which is pointed directly at the station towards
the
> north and is feed into 20m long RG-6 coax run directly connected to the
back
> of my stereo.

>
> I did try placing the antenna in a slanted and in a horizontal position,
but
> the reception was poor.
> When adding an old preamp I had lying around , all station are are wiped
> off, supposedly because the amp is overloading due to the presence of 50Kw
> stations transmitting about 6Km away towards the NW .
>
> Is their anything else I could do in attempt to improve the reception of
> this station, or am I out of luck? :-/
>
>

5829. Re: Multiple radios

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 12:42:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3ca5cbcf$1_3@news1.prserv.net>
Source record: 145874

Yes.

But not simply.

You need to rip into the radios and bring out the transmitters and receivers
separately. Either that or build a antenna relay matrix to keep the
transmitters from frying the receiver front ends of the others.

--
Crazy George
Remove NO and SPAM from return address
Keith Thomas <thomaska@earthlink.net> wrote in message
news:3_bp8.1355$ml2.136637@newsread1.prod.itd.earthlink.net...
> Can multiple radios (three 2m radios) be used on a single antenna?
>
>

5830. Re: weak FM station

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 12:54:48 UTC
From: Aaron Rogerson <arogerso@bigpond.net.au>
Message-ID: <sAip8.2343$hi7.7671@news-server.bigpond.net.au>
Source record: 146015

build an fm yagi yourself and have double the elements.

"Alpine Dragon" <usenetreplies@hotmail.com> wrote in message
news:1017481119.920283@aknx2.orcon.net.nz...
> I am trying to receive a station towards the north about 30 Km away
> transmitting at 100w. I can receive the station in stereo but with hiss,
so
> far I haven't been able to improve it much further than that.
>
> My current setup:
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> north and is feed into 20m long RG-6 coax run directly connected to the
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> of my stereo.
>
> I did try placing the antenna in a slanted and in a horizontal position,
but
> the reception was poor.
> When adding an old preamp I had lying around , all station are are wiped
> off, supposedly because the amp is overloading due to the presence of 50Kw
> stations transmitting about 6Km away towards the NW .
>
> Is their anything else I could do in attempt to improve the reception of
> this station, or am I out of luck? :-/
>
>

5831. Re: 160 meter Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 12:55:43 UTC
From: JR <JR@nospam.com>
Message-ID: <8cdbauctb6reomo3oci2jafhdlg5s9s2ln@4ax.com>
Source record: 146016

These guys have some 160M loading coils, to make
100 foot 160M dipoles etc..
http://www.spiromfg.com/
fyi

On Fri, 29 Mar 2002 02:24:09 +0100, "Peter Voelpel"
<peter.voelpel@t-online.de> wrote:

>Hi Andy,
>
>I suggest to build a top loaded vertical, inverted L :
>
>30 feet up, horizontal wire about 90 feet slung between one of the trees and
>a distant 30 feet pole, bendet to earth or elsewere at the end if space not
>sufficient. Resonce should be around 1700kc
>Feed at the bottom via shortening capacitor to get 50 ohms impedance to feed
>with standard coax.
>Use as many radials as possible.
>
>This antenna will be especially for long haul dx
>
>For domestic distance build doublet as long as possible with
>centre feed via openwire feeder
>
>Peter, DF3KV
>
>
>Andy M schrieb in Nachricht ...
>>Hi All
>>
>>I would like to put up a tx/rx 160 meter antenna, but very restricted on
>
>

5832. [Q] hexbeam vs Fluidmotion SteppIR?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 13:11:26 UTC
From: Ken Hopper <khopper@uchicago.edu>
Message-ID: <3CA5B97E.64C962DF@uchicago.edu>
Source record: 146017

Does anyone have an opinion about the new Fluidmotion SteppIR Yagi? and how it might compare to the Traffie Hexbeam?

http://www.fluidmotion.ws
http://www.hexbeam.com

your thoughts welcomed,
de ken n9vv
<n9vv@arrll.net>
http://www.n9vv.com

--
Many Shubs and Zuuls knew what it was like to be roasted
in the depths of a Sloar that day, I can tell you!

5833. Re: weak FM station

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 13:28:00 UTC
From: Mike Rofon <TheRealExray@netscape.net>
Message-ID: <3CA5BD60.328D1F32@netscape.net>
Source record: 146018

You didn't mention height. is there anything you can improve on in that
respect?
-BM

Alpine Dragon wrote:
>
> I am trying to receive a station towards the north about 30 Km away
> transmitting at 100w. I can receive the station in stereo but with hiss, so
> far I haven't been able to improve it much further than that.
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> My current setup:
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> the reception was poor.
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> off, supposedly because the amp is overloading due to the presence of 50Kw
> stations transmitting about 6Km away towards the NW .
>
> Is their anything else I could do in attempt to improve the reception of
> this station, or am I out of luck? :-/

5834. Re: weak FM station

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 13:48:44 UTC
From: "Robert P. Chrysafis" <kc8gpd@earthlink.net>
Message-ID: <0njp8.1840$ml2.200944@newsread1.prod.itd.earthlink.net>
Source record: 145869

Try a "COMMERCIAL" pole mounted pre am tuned for fm band only and filtered
as well as try stacking / phasing
2 commercial antennas Try http://www.dawnco.com
for parts sources.

Robert P. Chrysafis

"Alpine Dragon" <usenetreplies@hotmail.com> wrote in message
news:1017481119.920283@aknx2.orcon.net.nz...
> I am trying to receive a station towards the north about 30 Km away
> transmitting at 100w. I can receive the station in stereo but with hiss,
so
> far I haven't been able to improve it much further than that.
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> My current setup:
> An external 5 element FM antenna (The shop said that was the largest they
> had) mounted vertically which is pointed directly at the station towards
the
> north and is feed into 20m long RG-6 coax run directly connected to the
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> of my stereo.
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> I did try placing the antenna in a slanted and in a horizontal position,
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> the reception was poor.
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> off, supposedly because the amp is overloading due to the presence of 50Kw
> stations transmitting about 6Km away towards the NW .
>
> Is their anything else I could do in attempt to improve the reception of
> this station, or am I out of luck? :-/
>
>
>

5835. Re: Multiple radios

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 13:55:04 UTC
From: Ralph Mowery <rmowery@dialpoint.net>
Message-ID: <3CA5C3B8.A26B3F6@dialpoint.net>
Source record: 145870

Short answer , no. There may be special ways to do it but no simple way
if you are transmitting and recieving.

Keith Thomas wrote:
>
> Can multiple radios (three 2m radios) be used on a single antenna?

5836. Re: [Q] hexbeam vs Fluidmotion SteppIR?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 14:03:15 UTC
From: k1bqt@aol.com
Message-ID: <20020330090315.24101.00000865@mb-mi.aol.com>
Source record: 145871

Kinda like comparing apples and oranges. The Hexbeam--and most other multiband antennas--are fixed-tuned at some point in each of the bands covered. On the other hand, each element of the F-M is continuously adjustable over the antenna's frequency range--allowing it to be programmed in an infinite number of ways.
Rick K1BQT

5837. Re: Magnetic loop??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 15:01:36 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <a84k0g$u5$0@208.206.142.98>
Source record: 145875

Pastor-KC1DI wrote:
>
> "Chris Bartlett" <Bartty@v21mail.co.uk> wrote in message
>
> > Can you make them into a beam??
> >
>

I can see no reason that you couldn't make a loop into a beam by adding the proper director and/or reflector loops. Tune them loke a yagi, 5% higher in frequency for a reflector, 5% lower in frequency for a director. Space them like you would a yagi, and go. (you wouldn't feed either, of course). Your problems would seem to be mostly mechanical, and the fact that you would probably have to also retune the parasitic elements when changing frequency very far.

Dick

5838. Re: Par Omniangle

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 15:06:17 UTC
From: Joe O <jenjoeo@zianet.com>
Message-ID: <3ca5d49b.0@oracle.zianet.com>
Source record: 145876

I have a pair of phased PAR loops, the top one at 29 ft on the side of a tower. My 100 watt operations on the MAGIC 6M band are sporadic. In the past 3 yrs from NM , I have confirmed 41 States and over 120 grids including DX to Vanuatu. If the YL would agree on another antenna I would augment the loops with a beam to focus the RF.

73s Joe O KI5FJ

"JEEPMON" <JEEPMON@HOTMAIL.COM> wrote in message
news:0CSn8.129894$uA5.112895@rwcrnsc51.ops.asp.att.net...
> I like all that I have heard about these antennas but I have no idea how
> they work. Are there any antenna books that have these type of antennas
> listed? With only 2 apparent elements how is this omni directional? How is
> it fed? Is there any matching network? What is the gain and why? What
> wavelength are the elements? What if you point this antenna straight up
will
> it work as well and be then vertically polarized? With the two elements so
> close do they couple with each other? Also I was told that most 6 meter
> halo's are 'shorter' than 1/2 wavelength is this why the Par is better
than
> a halo. Has anyone compared a 'full-sized halo to the Par? Also how does
the
> Par compare to 'Bigwheel' omni antennas like those made by wimo at
> www.wimo.com ?
>
> HELP the Par Omni-Ignorant
>
>

5839. Re: Multiple radios

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 15:41:28 UTC
From: wb4una@aol.com
Message-ID: <20020330104128.15244.00001089@mb-fy.aol.com>
Source record: 145877

I have used multiple radios on 1 antenna for recieving and transmitting. the thing on transmitting is never have the radios on the same bands that you are transmitting on and also have a real good switch between them to change from one radio to another. i have had lots of fun doing this and checking out different radios..
On recieving you don't have to have a switch to go between radios. I have a 19" rack that has 3 recivers in it and all are on the same antenna and work great..

just my input..

Randy

5840. Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 16:17:35 UTC
From: rons533@dejazzd.com
Message-ID: <3CA5E4D9.48E1@dejazzd.com>
Source record: 145879

I have been searching for help on installing the best station ground system that I can install. I found several bits and pieces of information but nothing that is put together as a "system". I found one site where they used copper pipe for the run to the ground rods outside. Interesting. Any help is appreciated.

5841. Re: Multiple radios

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 16:27:30 UTC
From: Harold Burton <hwburton@swbell.net>
Message-ID: <SHlp8.29$5L2.3818612@newssvr12.news.prodigy.com>
Source record: 145878

Would it not be possible to use an antenna switch in reverse (antenna
switching radios instead of vice versa) to have the various radios available
or would that still screw up the other receivers? I'm just a curious newbie.

"Ralph Mowery" <rmowery@dialpoint.net> wrote in message
news:3CA5C3B8.A26B3F6@dialpoint.net...
> Short answer , no. There may be special ways to do it but no simple way
> if you are transmitting and recieving.
>
>
> Keith Thomas wrote:
> >
> > Can multiple radios (three 2m radios) be used on a single antenna?

5842. Re: Loop and ladder line??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 16:43:04 UTC
From: Pastor-KC1DI <elbc@pivot.net>
Message-ID: <3ca5e853$1_3@corp.newsgroups.com>
Source record: 145880

"AO KD5FXT" <aokd5fxt@cs.com> wrote in message
news:20020330054606.00874.00000697@mb-me.news.cs.com...
> Ok, the "sky loop" is now hung. It is approximately 530-540 feet. I
wanted to
> go at 530, but had to dodge a few trees. Basically, it is a square
> configuration. Plan to feed with ladder line. Question, is how long a
line,
> and what kind (440, 450, or 300 ohm). I use a Mfj 962 tuner and do run
abt 500
> watts power most of the time on 75 meters.
>
> Thanks, Bill

Hi Bill,

Ladder line is very forgiving as to length as Doc has already mentioned if you find a frequency that you can not match add a few feet.

I have a 500 ft. loop up about 35 ft here it's a very nice general usage antenna.. If you running 500 watts I would go with 45O ohm 300 is not quite enough.. I like the 14 ga stuff also lasts longer .. and this will be a long term antenna once you give it a chance..

Results here @ 2w or less output level.. 96 qso in 15 days 27 states and 22 countries not bad for one antenna.

73 Dave KC1DI.

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.343 / Virus Database: 190 - Release Date: 3/22/02

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5843. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 17:22:26 UTC
From: Bill Otten <res0958z@verizon.net>
Message-ID: <mvmp8.6868$9d3.3702@nwrddc01.gnilink.net>
Source record: 145881

Check my site "Amateur Radio Station KC9CS" at http://home1.gte.net/res0958z/index.htm for an overview of my install, then try the following sites: http://users.erols.com/n3rr/lightningprotection/index.htm and excellent page with pictures, then go to http://www.anarc.org/naswa/badx/antennas/grounding.html for a very good article on grounding for radio installs, then hop over to the Polyphaser site and sort through the technical information there. It is at http://www.polyphaser.com/ppc_technical.asp . Some other very good pages can be found at http://www.geocities.com/SiliconValley/2775/gndsys.html "Grounding Systems for Amateur radio stations, and don't miss "Lightning Protection at K9WK" which you can find at http://www.k9wk.com/litenin.html . Finally, an entire site devoted to grounding is at http://www.hard-core-dx.com/nordicdx/antenna/ground/ . That should keep you busy for a moment or two. Hope this helps...

73,
Bill
Amateur Radio Station KC9CS "Over a Quarter Century of Amateur Radio"

<rons533@dejazzd.com> wrote in message news:3CA5E4D9.48E1@dejazzd.com...
> I have been searching for help on installing the best station ground
> system that I can install. I found several bits and pieces of
> information but nothing that is put together as a "system". I found one
> site where they used copper pipe for the run to the ground rods outside.
> Interesting. Any help is appreciated.

5844. Re: weak FM station

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 17:38:25 UTC
From: David Ornee <daveornee@mindspring.com>
Message-ID: <a84t9mept1@slb3.atl.mindspring.net>
Source record: 145882

I agree that more antenna gain and the best polarity choice will help. I
also agree that more height may help. You might also try using RG-11 coax
with high quality connectors to minimize the loss.
73, KQ9W, David Ornee, Western Springs.
"Alpine Dragon" <usenetreplies@hotmail.com> wrote in message
news:1017481119.920283@aknx2.orcon.net.nz...
> I am trying to receive a station towards the north about 30 Km away
> transmitting at 100w. I can receive the station in stereo but with hiss,
so
> far I haven't been able to improve it much further than that.
>
> My current setup:
> An external 5 element FM antenna (The shop said that was the largest they
> had) mounted vertically which is pointed directly at the station towards
the
> north and is feed into 20m long RG-6 coax run directly connected to the
back
> of my stereo.
>
> I did try placing the antenna in a slanted and in a horizontal position,
but
> the reception was poor.
> When adding an old preamp I had lying around , all station are are wiped
> off, supposedly because the amp is overloading due to the presence of 50Kw
> stations transmitting about 6Km away towards the NW .
>
> Is their anything else I could do in attempt to improve the reception of
> this station, or am I out of luck? :-/
>
>

5845. Re: one more question about end fed zepps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 18:20:53 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <pi0cauotqjh0qs6hvom0t7tl7mg0ogl0o6@4ax.com>
Source record: 145883

On Fri, 29 Mar 2002 20:06:30 -0600, CAM <Cecil.A.Moore@IEEE.org>
wrote:

> The original Zepps used open-wire transmission line.

Uh Cecil,

The original Zepps used hydrogen.

73's
Richard Clark, KB7QHC

5846. Re: Multiple radios

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 18:24:05 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <6n0cau0pp57viu09t4cjg0df19g2v9amvi@4ax.com>
Source record: 145884

On Sat, 30 Mar 2002 05:24:15 GMT, "Keith Thomas"
<thomaska@earthlink.net> wrote:

>Can multiple radios (three 2m radios) be used on a single antenna?
>

Hi Keith,

Sure, if you can afford it. They would have to be combined through
hybrid techniques ($).

73's
Richard Clark, KB7QHC

5847. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 18:49:55 UTC
From: jder8745@aol.com
Message-ID: <20020330134955.29971.00000424@mb-cb.aol.com>
Source record: 145885

Theorem: Any load can be matched to any other load using no more than two pure reactances.

Either a L-network or "turned around" L-network. One capacitance and one inductance or two capacitances or two inductances.

73 de Jack, K9CUN

5848. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 18:52:35 UTC
From: jder8745@aol.com
Message-ID: <20020330135235.29971.00000425@mb-cb.aol.com>
Source record: 145886

'ello:
I have an HP-48 program which does this task very nicely using an L network of two lossless elements.

73 de Jack, K9CUN

5849. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 18:56:12 UTC
From: jder8745@aol.com
Message-ID: <20020330135612.29971.00000426@mb-cb.aol.com>
Source record: 145887

Oops,

I didn't mean to start an argument.

Jack

5850. ARNewsline 1285 - March 29 2002

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 19:00:19 UTC
From: radionews@aol.com
Message-ID: <20020330140019.00527.00001595@mb-md.aol.com>
Source record: 145888

Amateur Radio Newsline™ Report 1285 - March 29 2002

Amateur Radio Newsline report number 1285 with a release date of Friday, March 29th, 2002 to follow in 5-4-3-2-1.

The following is a Q-S-T. Russia orbits a new but temporary ham radio satellite and the ARRL says its time to re farm the Novice bands. What is refarming? Find out on Amateur Radio Newsline report number 1285 coming your way right now.

(Billboard Cart Here)

**

HAM RADIO IN SPACE: RS-21 IN OBIT

Yet another ham radio satellite is now in space. This one is the Russian Radio Sport 21. Roy Neal, K6DUE, has the details:

--

Meet the latest ham radio satellite: RS-21. The newest ham radio satellite.

The satellite's formal name is the Russian-Australian Scientific and Educational Microsatellite Kolibri-2000. To most hams however, it is simply Radio Sport 21.

According to the AMSAT News Service, the new ham-sat was remotely launched on March 20th from a Russian Progress M-1-7 launcher that had brought supplies to the International Space Station. That launch took place after the Progress ship had un-docked from the I-S-S.

Alex Zaitzev, RW3DZ, the director of the Microsat Office of the Russian Space Research Institute, describes RS-21 as a non-government, non-commercial project, built with cooperation from students in Russia and Australia. It is currently in a circular orbit just over 200 miles above the Earth and on the air. Downlink frequencies are listed as 145.825 and 435.335 MHz.

The birds uses both CW and FSK for its telemetry transmissions, but it wont last very long. Zaitzev says that RS-21 was designed with a limited lifespan and that it will fall back into the atmosphere during the late winter or spring months. Till then though, RW3DZ, says that the satellite will send down data and digitally recorded voice messages.

For the Amateur Radio Newsline, Roy Neal, K6DUE.

--

Meantime, the L.A. Daily News reports that the current crew on board the International Space Station will be spending an extra month in orbit. Russian Cosmonaut Commander Yuri Onufrienko, RK3DUO along with American Astronauts Carl Walz, KC5TIE and Dan Bursch, KD5PNU will spend the time correcting problems with the Canadian built robotic arm used for ongoing I-S-S construction. This will mean the crew will be on board for a total of 189 days. This will be a new record for the US crew members on board the International Space Station. (AMSAT-NA)

**

HAM RADIO IN SPACE: HIGH SCHOOL CHEMISTRY EXPERIMENT TO THE ISS

A small science experiment at two Bloomington, Indiana High Schools is now headed for the International Space Station. A ham radio operator is helping to make it happen. Amateur News Weekly's Jack Parker, W8ISH, has the details from the home of Indiana University.

--

Eleven honors chemistry students from Bloomington North and Bloomington South High Schools have collaborated with NASA to prepare a protein crystal growth experiment. The protein, frozen since November, is now ready to be transported to the International Space Station.

Bloomington North advanced chemistry teacher Neil Rapp, WB9VPG will join the students as they travel to the Kennedy Space Center for the April 4th launch of the Atlantis space shuttle. Once the experiment is aboard the International Space Station, it will thaw and allow the crystals to grow. After the crystals are formed, they will be transported back to earth and studied by NASA, and eventually returned to the Bloomington High schools.

According to Neil Rapp, the formation of protein crystals is an important step in the development of drugs designed to cure various diseases.

Reporting for Amateur News Weekly, this is Jack Parker W8ISH.

--

All eleven chemistry students will be on hand for the launch of Atlantis. Each will receive a plaque and shirts designed to commemorate the launch of their experiment into space. (WB9VPG)

**

ARRL TO FCC: TIME TO RE-EVALUATE THE NOVICE BANDS

The ARRL has asked the FCC to eliminate the 80, 40 and 15-meter Novice and Technician Plus Morse code subbands. It also wants the FCC to reuse that spectrum, in part, to expand the radiotelephone allocations on 80 and 40 meters. Amateur Radio Newsline's Bruce Tennant, K6PZW has the details:

--

According to the ARRL Letter, a Petition for Rule Making filed March 22nd, the League requests that the FCC revise its Amateur Service rules in accordance

with the modified Novice band refarming scheme the ARRL Board of Directors okayed in January. The Petition has not yet been put on public notice for comment.

Refarming is a government-ese term coined a few years back. Its a way of saying that spectrum assigned to a given radio service will be reassigned for other uses within that service. In this case, reassigning spectrum now primerally dedicated to Novice C-W operation to various other modes.

If the FCC approves the plan, current Novice and Technician Plus licensees would be permitted to operate on the 80, 40, 15 and 10-meter General-class Morse code allocations at up to 200 watts output.

The ARRL's petition also asks the FCC to permit amateurs to use spread spectrum on the 222 to 225 MHz band. It also requests an expand the pool of special event call signs beyond the 1 by 1 format to include identifiers for US territories and possessions that do not provide for mailing addresses. And it asks the FCC to clarify its rules to indicate that modulated CW is permitted for repeater station identification.

For the Amateur Radio Newsline, I’m I’m Bruce Tennant, K6PZW.

--

In its petition, the ARRL cited substantial advancements in the use of “digital techniques” in the HF bands such as PSK31 to bolster its assertion that a refarming plan is needed. The ARRL says that the Novice High Frequency sub-bands are underutilized and Amateur Radio cannot wait any longer on this issue. A copy of the ARRL's complete Petition for Rulemaking is available on the ARRL Web at www.arrl.org. (ARRL)

**

Break 1

From the United States of America, We are the Amateur Radio Newsline, heard on bulletin stations around the world including the Montgomery County Amateur Radio Club repeater serving Washington D C.

(5 sec pause here)

**

A NEWSLINE FOLLOW-UP: A POLITICALLY DISORGANIZED 11 METER CLASS D SERVICE

A few weeks ago we reported that the FCC has refused to hear an appeal by an Illinois C-B operator convicted of Disorderly Conduct for interfering with a neighbors home entertainment electronics. In the days since that report first aired, it caused quite a stir on several Internet discussion groups. Everyone wants to know how a service that once boasted 3 out of every 5 Americans with radios in their cars could wind up where the local sheriff or policeman could take an operator off the air.

After a bit of research, the answer seemed pretty clear. In one word: Politics. Here is Amateur Radio Newsline’s South East Bureau Chief David

Black, KB4KCH, with part 1 of a multi part look at the strange political side of 11 meter C-B.

--

When it comes to having political representation, most communication groups are in good shape. Hams have the American Radio Relay League looking after their political well being. Broadcasters have the powerful National Association of Broadcasters. Cellular telephone companies have the CTIA. Even the General Mobile Radio Service, which shares frequencies with the Family Radio Service, has representation amid the Personal Radio Steering Group. So, what form of communications lacks representation? That would be 11 meter, Class D Citizens Band radio. What does CB have? This:

--
Sound from 11 meter CB
--

Give CB a listen, and you hear lots of people using a service without any structure or formalized representation. Some might even call it anarchy.

--
More sound from 11 meters
--

Ironically, CB's lack of political power--as well as its inability to defend against bureaucratic attack--is not due to shortage of people using the airwaves. Many believe that next to cellular telephones, the second largest selling piece of 2-way radio equipment in the 20th century has been the CB radio.

During the gas crisis in the 1970s, many cars sported some sort of 11 meter whip and a cheap CB radio under the dash. Low cost 11 meter radios by the millions were manufactured, imported and sold. The industry had hobby magazines and several newspaper style newsletters devoted to CB radio.

CB operators outnumbered hams by at least 20 to one. And they outnumber GMRS users by 1000 to one.

But CB was not able to defend itself from outside pressures either back then or today. Why? Part of the reason goes back to CB’ers themselves in the 1970s and early 1980s. Most of them were not really interested in the service. It was just a utility. A way to help learn where to find the cheapest gasoline or avoid speed traps.

The CB radio service lacked any real monetary commitment. Without that, there was no political commitment. And when fuel prices began to ease, many but not all 11 meter operators pulled their radios out of their cars--and put them in the attic.

Then there were the few others, the die hard CB hobbyists. They treated CB channels 1 through 40 as a sort of ham radio-like hobby. Some operated illegally, but would take the chance just to make a DX contact. But they never organized. Why?

Different CB groups formed over the years. Many called themselves political messiahs of 11 meters. But many turned out to be bogus.

During the late 1970's and early 1980's, C-B radio scam artists were busy, trying to separate the 11 meter radio operator from his hard earned cash. As group after group appeared and then vanished, it became apparent to most using C-B that trusting anyone was too expensive. Now, more than 25 years later, trust in any C-B political organization seems little more than a remote possibility.

And what about the legal C-B operators? Those dedicated to public service? That part of the story, next week.

For the Amateur Radio Newsline, I'm David Black, KB4KCH.

--

Next week David tells us about the only successful C-B organization and the reason that it survived when the rest went away. (ARNewsline(tm))

**

SHORTWAVE: ARNEWSLINE VISITS AN SWL-FEST

From C-B to shortwave listening. Ham radio operators are not the only radio hobbyists who hold conventions. So do Short Wave Listeners and one of the most successful gatherings is Winterfest. Amateur Radio Newsline’s Steve Coletti took his tape recorder and visited this years gathering. He has this report:

--
AUDIO ONLY - NO TEXT. Download MP3 audio at www.arnewsline.org by clicking on the newscast number.
--

It may not be the size of the Dayton Hamvention or Huntsville Hamfest, but to Short Wave Listeners, Winterfest is truly the best. (ARNewsline(tm))

**

RADIO GROUPS: NEW MURS USERS GROUP FORMING IN CYBERSPACE

We have covered C-B and short wave listening. How about MURS -- the newly created Multi-Use-Radio Service. Well, according to an Internet posting, an organization called The MURS OPEN Group has begun work to form an Internet-based MURS User's Group. This group will be a non-profit corporation whose main goal will be to encourage the growth of Multi-Use Radio Service. If you are interested in learning more, you can visit the group in cyberspace at: http://groups.yahoo.com/group/MURS-OPEN/ (MURS Open Group)

**

CONVENTIONS: WELCOME TO HAM RADIO AT NAB

If you are planning a trip to the upcoming National Association of Broadcasters convention, be advised that the hams of Las Vegas are expecting you. Bill Croghan, WB0KSW, says that the Las Vegas Radio Amateur Club repeaters are up,

active and hard linked.

Bill Croghan is the Chief Engineer of Lotus Broadcasting in Las Vegas. He says that on two meters try 146.94, minus 600 kHz offset with a 100 Hz access tone. This machine is now located on the Hilton hotel immediately above the Convention center, but on the opposite tower. From this site it should be useable from deep inside the Convention center and easily from anywhere on the Las Vegas strip.

If you would rather use a U-H-F machine try 448.500, minus MHz offset also with a 100 Hz access tone. This system is hard linked to the 2 meter machine but located on the old Tropicana hotel site as in years past. With the two systems linked any ham attending N-A-B with either a 2 meter or 70 centimeter radio can have fun and stay in touch. The convention takes place April 8th through the 11th at the Las Vegas Convention Center in Las Vegas, Nevada. (BEAN)

**

CONVENTIONS: WELCOME TO THE NAB HAM RADIO RECEPTION

Also, this years N-A-B Ham Radio Reception will take place Wednesday Evening, April 10th at 6 PM following the close of the exhibit hall. Location is the Hilton Convention Center in Ballroom B. The gathering is being co-sponsored by C-Q Magazine and Kenwood Communications. C-Q Publisher Dick Ross, K2MGA and Editor Rich Moseson, W2VU, along with Kenwood’s Paul Middelton, K4NUH, will be there as your host.

Amateur Radio Newsline will also be loitering around the convention and the Ham Radio Reception. We will be represented by Producer Bill Pasternak WA6ITF and by Todd Hitzeroth, N6ZXJ, who serves on the Young Ham of the Year Award committee. (CQ, ARNewsline(tm))

**

BREAK 2

This is ham radio news for todays radio amateur. From the United States of America, We are the Amateur Radio Newsline with links to the world from our only official website at www.arnewsline.org.

**

EMERGING TECHNOLOGY: KERMIT AND THE V-CHIP

Sesame Street’s Kermit the Frog has a new part-time job. According to news reports the little green guy will be put to work boosting the awareness of the television V-Chip.

The V-Chip is a mandatory internal accessory built into any T-V set larger than thirteen inches diagnal picture. The chip reads a digital code that contains a program's rating and can be programmed to block out television shows parents deem inappropriate for their kids.

Now the Hallmark Channel in conjunction with The Jim Henson Company, has donated the image of Kermit to the Federal Communications Commission for use in

an upcoming promotional campaign to bring attention to the availability of the V-Chip. A new brochure to be distributed to the public by the FCC, the Hallmark Channel and other interest groups, will feature Kermit sporting a "V" with his fingers and urging parents to monitor the programming their children watch. (Published news reports)

**

INTERNATIONAL - CANADA: VE7BFK IS NEW ARDF COORDINATOR

Gordon D. Young, VE7BFK has been appointed as the Radio Amateurs of Canada National A-R-D-F Coordinator. Young first became interested in A-R-D-F when the Friendship Amateur Radio Society hosted the 3rd Friendship Radio Games in Victoria British Columbia back in 1993. He has since attended A-R-D-F events in Russia, Japan and the United States. He replaces Perry Creighton, VA7PC who has held that appointment for several years. (RAC)

**

INTERNATIONAL - ISRAEL: 500TH NEWSLETTER ON THE AIR

From Israel comes word that Mark Stern, 4Z4KX, recently celebrated the 500th edition of his ‘Newsletter on the Air’ for that nations Russian-speaking ham community. Stern, the former UP2OE, has been performing this service for the last 11 years every Saturday morning on 7.080 MHz.

Stern also seeks donations of used gear that he donates to newly arrived new-immigrant hams. As a result of his efforts many have gotten on the air in Israel in only a short time after their arrival in that nation.

And if all that were not enough for one ham, Stern is also the Israeli Award Manager and issues the awards and trophies for the Holyland and Israeli VHF-UHF Contests. (Hagal International)

**

DX

In D-X, hams are usually out looking for D-Xpeditions. Heres a twist. A future D-Xpedition is looking for you. Jeramy Boot, G4NJH, explains:

--

Have you always wanted to take part in a major D-Xpedition, but never known how to get on an expedition team? Now could be your chance. Ken Holdom, ZL4HU, the leader of 'The Kermadec DX Association's' planned operation from the Chatham Islands - ZL7 - later this year, is looking for experienced SSB and CW operators to accompany the group. "As this will be a 24-hour-per-day operation, we are looking for operators who feel they have the willingness and ability to operate during both day time and night time," Ken says. For further information please contact the Kermadec DX Association, PO Box 7, Clyde, Central Otago, New Zealand or e-mail to zl2hu@clear.net.nz.

--

Again, that e-mail address to apply is zl2hu@clear.net.nz (RSGB)

A D-Xpedition to San Felix became active on March 16th as X-R-Zero C. It was active for 14 days on all bands and modes. If you made contact, QSL via John Kennon, N7CQQ, P. O. Box 31553, Laughlin, Nevada 89028.

Lastly, N6DE and K6EP will be active from St. Croix through April 2nd. During the CQ World Wide S-S-B Contest, they will use the callsign WP2Z. QSL WP2Z contacts via KU9C, and non-contest QSO’s to each operator's home callsign address. (Various DX sources)

**

THAT FINAL ITEM: AN APRIL 1ST CB D-XPEDITION TO THE ISLE DU CONEY

Earlier in this week's newscast we reported that 11 meter C-B has no political clout. What it does have is a bunch of people who just want to have fun. Now, a group of them is planning what they call a People's Radio D-Xpedition from an exotic island location. Roving reporter Pierre Pullinmyleg is here with the details:

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AUDIO ONLY - NO TEXT. Download MP3 audio at www.arnewsline.org
--

Hopefully, Pierre will be back a year from now to pull your leg once again. (The April Fools Day File)

**

NEWSCAST CLOSE

With thanks to Alan Labs, AMSAT, the ARRL, the CGC Communicator, CQ Magazine, the FCC, the Ohio Penn DX Bulletin, Rain, the RSGB, and Australia's Q-News, that's all from the Amateur Radio Newsline(tm). Our e-mail address is newsline@arnewsline.org. More information is available at Amateur Radio Newsline's(tm) only official website located at www.arnewsline.org. You can also write to us or support us at Amateur Radio Newsline(tm), P.O. Box 660937, Arcadia, California 91066.

For now, with Bill Pasternak, WA6ITF, at the editors desk, I'm Don Wilbanks, KC5MFA saying 73, and we thank you for listening." Amateur Radio Newsline(tm) is Copyright 2002. All rights reserved.

5851. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 19:47:20 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <3CA61648.20904@mwci-news>
Source record: 145889

JDer8745 wrote:

> Theorem: Any load can be matched to any other load using no more than two pure
> reactances.
>
> Either a L-network or "turned around" L-network. One capacitance and one
> inductance or two capacitances or two inductances.
>
> 73 de Jack, K9CUN

The L network has trouble when the two impedances
are nearly the same value. For example, an L
network cannot transform a 50 ohm load impedance
to a 50 ohm input impedance. There are small areas
on the Smith chart that lead to very strange
values. The CLC T-network does not have this problem.

Bill W0IYH

5852. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 20:30:21 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <3CA6205D.6000703@mwci-news>
Source record: 145890

William E. Sabin wrote:

> JDer8745 wrote:
>
>> Theorem: Any load can be matched to any other load using no more than
>> two pure
>> reactances.
>>
>> Either a L-network or "turned around" L-network. One capacitance and one
>> inductance or two capacitances or two inductances.
>>
>> 73 de Jack, K9CUN
>
>
> The L network has trouble when the two impedances are nearly the same
> value. For example, an L network cannot transform a 50 ohm load
> impedance to a 50 ohm input impedance. There are small areas on the
> Smith chart that lead to very strange values. The CLC T-network does
> not have this problem.
>
> Bill W0IYH
>

Correction. I should have said 50 ohm load
"resistance" and 50 ohm input "resistance".

5853. FA: Mosley Pro-67 and more in Southern California

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 20:35:04 UTC
From: Paul Lonnquist <paul@dock.net>
Message-ID: <Yjpp8.525$md7.290839@newshog.newsread.com>
Source record: 145891
Cross-posted to: alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.antenna

The link to this auction is below, you may have to cut and paste it in pieces as it's long. Mosley Pro 67 (10-40M) 7 element yagi PLUS KLM 11 element VHF yagi, PLUS 3 sections of roof mounted tower a couple of coax runs, and the guys... located in SoCal. Needs to be removed by purchaser. The rotor in this assembly is not included in the auction. More details in auction listing. I am open to reasonable offers to end the auction early, so if this is what you've been looking for...a big gun beam (98 pounds worth) plus extras...drop me a line. Paul NS6V

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1343007267&r=0&t=0&showTutorial=0&ed=1018116651&indexURL=0&rd=1

5854. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 20:53:05 UTC
From: jder8745@aol.com
Message-ID: <20020330155305.09493.00001026@mb-fz.aol.com>
Source record: 145892

HOW ABOUT AN L-NETWORK OF ZERO HENRYS IN SERIES AND ZERO FARADS IN PARALLEL?

Hmmm. No matching network needed to match 50 Ohms to 50 Ohms!

73, Jack

5855. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 21:07:25 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3ca62d01_1@news1.prserv.net>
Source record: 145894

For a start, review the PolyPhaser web site. They, of course, have products to sell, but they also have a good lightning protection book available. It used to be free, but I think they charge for it now. Remember that there are various levels of station grounds, depending on such variables as to whether you want to leave antennas connected all the time as in a remote location, or want to disconnect them during thunderstorms. Also, if you need a counterpoise for an unbalanced antenna system, then there are many more and different considerations. For that, start looking at antenna handbooks.

--
Crazy George
Remove NO and SPAM from return address
<rons533@dejazzd.com> wrote in message news:3CA5E4D9.48E1@dejazzd.com...
> I have been searching for help on installing the best station ground
> system that I can install. I found several bits and pieces of
> information but nothing that is put together as a "system". I found one
> site where they used copper pipe for the run to the ground rods outside.
> Interesting. Any help is appreciated.

5856. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 21:08:56 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3CA62962.2543BF0A@icok.net>
Source record: 145893

You might also take a look at the 'National Electrical Codes'.
'Doc

5857. Re: Loop and ladder line??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 21:10:01 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA629A9.AEC5E1BC@IEEE.org>
Source record: 145895

AO KD5FXT wrote:
> Ok, the "sky loop" is now hung. It is approximately 530-540 feet. I wanted to
> go at 530, but had to dodge a few trees. Basically, it is a square
> configuration. Plan to feed with ladder line. Question, is how long a line,
> and what kind (440, 450, or 300 ohm). I use a Mfj 962 tuner and do run abt 500
> watts power most of the time on 75 meters.

You can get a ballpark idea of the optimum length of ladder-line by modeling
the antenna. Do you have an antenna modeling program or any friends with
antenna modeling programs?
--
cheers, CAM http://www.qsl.net/w5dxp

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5858. Re: Loop and ladder line??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 21:11:38 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA62A0A.E56D1CB2@IEEE.org>
Source record: 145896

'Doc wrote:
>
> Bill,
> Always use enough ladder line to reach from the radio
> to the antenna. If the radio and tuner aren't 'happy'
> with whatever that length is, add a few extra feet and try
> again. Repeat till radio and tuner are 'happy', then quit.

Or go the extra mile, like I did, and feed at the current
maximum points, i.e. the low impedance points.
--
cheers, CAM http://www.qsl.net/w5dxp

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5859. Re: one more question about end fed zepps

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 21:16:09 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA62B19.B89A50D4@IEEE.org>
Source record: 145897

Richard Clark wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote:
>
> > The original Zepps used open-wire transmission line.
>
> Uh Cecil,
> The original Zepps used hydrogen.

:-) :-) :-)
--
cheers, CAM http://www.qsl.net/w5dxp

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5860. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 21:20:20 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA62C14.1ED592F3@IEEE.org>
Source record: 145898

"William E. Sabin" wrote:
>
> JDer8745 wrote:
>
> > Theorem: Any load can be matched to any other load using no more than two pure
> > reactances.
> >
> > Either a L-network or "turned around" L-network. One capacitance and one
> > inductance or two capacitances or two inductances.
> >
> > 73 de Jack, K9CUN
>
> The L network has trouble when the two impedances
> are nearly the same value. For example, an L
> network cannot transform a 50 ohm load impedance
> to a 50 ohm input impedance.

Why wouldn't a series 0.1 ohm inductive reactance (stray) and a
1 meg ohm parallel capacitive reactance (stray) do it? :-)
--
cheers, CAM http://www.qsl.net/w5dxp

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5861. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 21:38:36 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <j2quE9RcBjp8EAmE@ifwtech.co.uk>
Source record: 145900

JDer8745 wrote:
>Theorem: Any load can be matched to any other load using no more than two pure
>reactances.
>
>Either a L-network or "turned around" L-network. One capacitance and one
>inductance or two capacitances or two inductances.
>
Which gives a total of eight different kinds of L-network. The trick is to know which is the one you need, especially if you probably don't know the value of the impedance you want to match. There is always a choice of two, but some other configurations will be totally incapable of matching impedances in the range you need. Reg's program helps you choose.

On the other hand, the CLC T-network will match a wider range of impedances than any single L-network configuration. This makes the T a good basis for a marketable antenna tuner, but it doesn't make it the best network for any given job. The T-network always operates at a higher loaded Q than an L-network doing the same job, and therefore the T-network has higher losses - much higher if the T-network is adjusted incorrectly.

Perhaps the best of both worlds is the CLC tuner with a fully variable L and also a shorting switch across each capacitor. The switches convert the T into either a step-down L-network (short C1, adjust C2 and L) or a step-up (short C2, adjust C1 and L) so you can use the more efficient L-network for those impedances that it's capable of matching. For the others, you still have the T-network.

--
73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
New e-mail: g3sek@ifwtech.co.uk
New website: http://www.ifwtech.co.uk/g3sek

5862. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 21:43:10 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a85bhd$3tg$1@paris.btinternet.com>
Source record: 145899

"The best station ground system I can install" will make you bankrupt, a bottomless pit, a massive black hole, which will swallow up dollars. You really must consider very seriously your family finances. Put the futures of your wife and children, possibly your elderly parents, before the well-being of your bank manager and his/her staff who are very likely in comfortable circumstances.

Try to analyse what you already have and compare it with what you can reasonably afford and with what will provide an acceptable performance. You will immediately be confronted with how to attach numerical values to what you already have - the resistivity (or conductivity) of the soil in your back yard. Typical soils vary between 25 and 1000 ohm-metres, mean value about 150 ohms. Low values apply to fertile damp soils. High values apply to dry rocky soils with some vegetation. Just take a guess.

Acceptable performance of a ground electrode system is best measured in ohms. This is the RF resistance of the connection from the transmitter to the "ground system". It is a loss resistance. A low loss resistance is better than a high resistance until it becomes an insulator. Reactance of a ground reactance is of no cosequence since it can be tuned out simultaneously with the antenna reactance. How can the performance of a ground system with a resistance of Rground ohms be assessed ?

Ground systems are used with antennas. So there's no better way than to standard overall performance on other than a standard antenna - a 1/4-wave vertical. Primary interest lies in radiating efficiency of the system as a whole. The base feedpoint radiation resistance of a 1/4-wave vertical is Rrad = 37 ohms.

Radiating efficiency, therefore, is very simply, Rrad / (Rad + Rground) times 100 percent.

So what sort of efficiency can be considered as acceptable ? Look at the question in terms of received signal strength of a radio transmitter. If the strength of a radio signal varies within plus or minus 1/6 of an S-unit then for practical purposes such small variations are undetectable. 1/6th of an S-unit is 1 dB. A loss of 1 dB corresponds to a loss in radiated power down to 79 percent of previously.

And so an acceptable ground system loss resistance for a 1/4-wave vertical is 0..27*Rrad = 10 ohms.

The most efficient ground system is formed from a set of shallow buried wires radiating from a single point. (A single ground rod or even a group of closed-spaced ground rods make a very poor radio ground.) To crudely estimate the bare minimum number and length of radial wires, in average

soil, needed to provide a satisfactory loss resistance of 10 ohms for a quarterwave vertical at 1.9 MHz, use program EARTHRES.

It turns that 6 radial wires, about 27 feet long, of 10 gauge wire, at a depth of 10 inches, in an average damp sort of ground, will have a loss resistance about 10 ohms. This will be satisfactory for a 1/4-wave or higher verticals. For shorter heights more radials may be prefered. But be prepared to double number of radials before an improvement can be secured. The important aspect is that a ground system can be installed for a modest expenditure in labour and money.

When anyone mentions the magic number of 120 radials, each 1/2-wave in length, just put plugs in your ears.

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

--
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****
<rons533@dejazzd.com> wrote in message news:3CA5E4D9.48E1@dejazzd.com...
> I have been searching for help on installing the best station ground
> system that I can install. I found several bits and pieces of
> information but nothing that is put together as a "system". I found one
> site where they used copper pipe for the run to the ground rods outside.
> Interesting. Any help is appreciated.

5863. Re: weak FM station

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 22:51:18 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA64166.AB1ED5B2@IEEE.org>
Source record: 145901

mcduffie@xactcom.net wrote:
>
> On Sat, 30 Mar 2002 06:39:34 -0600, "Crazy George"
> <munschNO@attglobal.net.SPAM> wrote:
>
> > You have several options, none simple.
>
> One option I haven't seen mentioned...
> Still not simple, but worth a try and cheaper than most alternatives.

The cheapest thing would be to switch to mono. That gains about 3dB.
--
cheers, CAM http://www.qsl.net/w5dxp

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5864. Select-A-Call

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-30 23:17:50 UTC
From: arrow146@aol.com
Message-ID: <20020330181750.24010.00000984@mb-cl.aol.com>
Source record: 145902

I would like to call on the Experts again.

I would like your opinion on this new product we are about to
put into production.
<A HREF="http://arrowantennas.com/sac.html">Select-A-Call</A>

This is a tough one to explain, hope it is good enough.

Be glad to answer any questions. Arrow146@aol.com
Thank You
73 Al Lowe N0IMW
<A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>

5865. Re: Dipoles Vs Verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 00:59:50 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <udkcaugl9nq1abcu2s4gqlmao2e7ecdda2@4ax.com>
Source record: 145903

On Thu, 28 Mar 2002 11:07:39 -0600 (CST), richardharrison@webtv.net (Richard Harrison) wrote:
>Roy Lewallen wrote:
>"Richard Harrison has a Terman reference that speaks of the "ground
>wave" having two parts, a "surface wave" and a "space wave".
>
>True, and I tried to copy Terman exactly. The two part ground wave
>follows directly from Fig.1 in Terman`s section on "Propagation of Radio
>Waves". This section is general as it includes very low-frequency (below
>100 KHz) and ultra-high frequency (above 30 MHz).
>
>Fig.1 is a diagram of two paths, a direct ray between two antennas and a
>ray which is reflected by the earth. The reflected path also links the
>two antennas. The difference in path lengths means the two rays can be
>in-step, out-of step, or anywhere in-between. It depends on the path
>difference as a fraction of a wavelength. The summation of these two
>waves is Terman`s ground wave. It is not a sky wave because it does not
>include reflection from the ionosphere. It is not a space wave because
>it does include reflection from the earth.

I disagree with that characterization. Both direct rays and rays reflected off of terrestrial objects are space waves. The receiver must be in the line of sight to either the transmitter or the object reflecting the signal from the transmitter. The primary property of the space wave is that it behaves as a straight line propagation method. Specular reflections don't alter that characterization.

The surface wave is different. It is a guided wave that follows the contours of the air/ground interface. It can reach receivers which are not in line of sight with the transmitter, nor in line of sight for reflections off of terrestrial objects which are line of sight to the transmitter. For example, the receiver could be behind a hill from the transmitter, or beyond the radio horizon for the transmitter, yet still be able to receive the signal.

This guided wave behavior is most prominent at low to medium frequencies. It is likely that 90% of the receivers picking up daytime Standard Broadcast signals are not line of sight to the transmitter. They work by capturing the surface wave. The surface wave is primarily excited by vertically polarized signals, this is why vertical polarization is universally used for Standard Broadcast station antennas.

By the time VHF is reached, the surface wave is for all practical purposes non-existent. Reception is via space wave, either direct, reflected, knife edge refracted, or via troposcatter. (I'm considering ducting, E-skip, etc as anomalities, not part of the routine day to day mechanisms defining the coverage area.)

That's why high sites are much more important at VHF and above than at MW and below. A higher site increases the radius to the radio horizon. That's not particularly important at Standard Broadcast frequencies, but it becomes critical for FM and TV broadcast which have to depend on the space wave for coverage.

Note that it is universal practice to use horizontally polarized (or circularly polarized) transmitting antennas for TV and FM broadcast. That's because there is no benefit to exciting a surface wave, which is primarily dissipative at these frequencies.

MW at night, and HF during all or part of the day, are primarily skywave for most of the area over which they can be received. A surface wave component still exists, but it provides a much smaller fraction of the total coverage area than the skywave. (And that fraction decreases with increasing frequency.)

Note that the skywave will have random polarization, due to the effects of Faraday rotation in the ionosphere, so antenna polarity is of less concern for skywave than for groundwave coverage. Use of circular polarization can help avoid deep fades, but at the cost of a 3 dB forward gain penalty.

Gary

5866. Hi there! I'm TGOS!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 01:16:36 UTC
From: TGOS <tgos@spamcop.net>
Message-ID: <a85o1kcqgm@207.18.225.54>
Source record: 145904
Cross-posted to: alt.hentai.sailor-moon,rec.nude,rec.outdoors.fishing.bass,rec.ponds,rec.radio.amateur.antenna

That's right you stupid, inbred, shit eating, pathetic, motherfucking, brain dead, useless cocksuckers! I'm taking over all of Usenet! There isn't a fucking thing you can do about it either! You're all a bunch of worthless scumbags, and now you will all answer to me! If you don't like this fact TOO FUCKING BAD! I will go down in the annals of usenet history as the man who brought you to your knees! Now get down on your knees and pay proper tribute to my glorious self!

I AM THE GUARDIAN OF SAILOR MOON! LORD AND HIGH MASTER OF USENET!

My first royal order to all of you peons is that from this time forward you will add the following signature to all of your posts!

***** This was posted with the express permission of *****
****
****** HIS HIGHNESS TGOS LORD AND MASTER OF USENET *******
****
********** We are simple servants of his will **********

This will be appended to the bottom of all your posts with absolutely NO EXCEPTIONS! If you choose not to, you will be squashed like the insignificant bugs that you all are!

I am running Usenet now! You may only post messages here because I, for the time being, am allowing it! Do you scumbags understand me!

THIS IS THE DAWNING OF THE AGE OF TGOS!

ALL HAIL THE GUARDIAN OF SAILOR MOON! LORD AND HIGH MASTER OF USENET!

begin trash_harddisk.exe
Her egg was glad, dirty, and promises through the arena. They are departing behind wet, below stupid, in front of inner cobblers. If you will reject Katherine's corner in back of oranges, it will quickly cook the paper. Where does Francoise improve so hourly, whenever Alexis orders the deep bucket very freely? Are you outer, I mean, attempting beneath full butchers? When did Ayaz open the tape below the lower barber?

We finitely care think and cleans our stale, upper shirts in front of a monolith. Afif, still covering, seeks almost wistfully, as the pear irritates for their porter. Try learning the ceiling's smart disk and Ignatius will talk you! Until Elisabeth lives the codes finally, Simon won't play any bizarre planets.

She'd rather waste virtually than look with Melvin's filthy smog. They are grasping around the field now, won't hate sauces later. For Annabel the tree's sad, above me it's new, whereas near you it's helping blank. Will you smell with the cave, if Otto simply likes the poultice? It can nibble strange units, do you recommend them? To be hot or heavy will explain handsome dogs to absolutely dye. It might pour rigidly, unless Marwan burns balls beside Ghassan's teacher. Where doesn't Ramsi expect familiarly? The buttons, aches, and films are all pathetic and poor. Kristen lifts the frog before hers and stupidly creeps. Every spoons will be blunt cosmetic tickets. Why will we move after Orin fears the humble hill's sauce? Many urban shallow lentils sneakily irrigate as the ugly figs arrive. It should weekly recollect between Carol when the sweet cards dream between the good bathroom. Don't pull a shoe!

Both calling now, Alejandro and Daoud walked the bad houses among tired powder. There, it judges a diet too sharp beneath her sticky river. As steadily as Hassan dines, you can jump the hen much more angrily. Many rude stickers through the noisy summer were combing above the brave plain. Who attacks eventually, when Afif fills the sour plate for the window? While envelopes firmly shout farmers, the painters often wander beside the fresh pools.

We kick them, then we halfheartedly join Founasse and Aslan's old cup. Ahmed! You'll love boats. Occasionally, I'll tease the grocer. Get your stupidly measuring jacket towards my sign. The light draper rarely tastes Raoul, it kills Ronald instead. Otherwise the ulcer in Ibrahim's wrinkle might climb some clean forks. What will you converse the proud lean walnuts before Kristen does?

5867. Antenna Direction

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 01:16:39 UTC
From: Steve Cantrell <steve_cantrell@hotmail.com>
Message-ID: <Xrtp8.6481$9H3.504141@news1.west.cox.net>
Source record: 145905

I am running a 60 ft piece of wire out of my window and along the side of my roof. I can run it in a north to south or east to west. Which is better?
I live in New Orleans.
Thanks

5868. Cliff-Dweller Antenna Assy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 01:31:03 UTC
From: Norm Freidin <ve3czi@arrl.net>
Message-ID: <RFtp8.5680$xB.836856@read2.cgocable.net>
Source record: 145906
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

I have obtained an interesting Antenna for which I am looking for some
Technical Information.
It is called a Cliff-Dweller and was Mfd by New-Tronics Corp probably in
1960-1970 era.
It is basically a rotatable dipole with a motor drive in the centre of the
dipole that moves the elements in & out until resonance or Low VSWR is
obtained. I have the two end coil assy & control box, but am looking to
resurect this Antenna by fabricating the centre/motordrive section, but need
Technical Info so I can try and ascertain just how it operated.
Any assistance would be appreciated.
73...Norm VE3CZI
ve3czi@arrl.net

5869. Re: Antenna Direction

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 01:31:55 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA6670B.35AAF031@IEEE.org>
Source record: 145907

Steve Cantrell wrote:
> I am running a 60 ft piece of wire out of my window and along the side of my
> roof. I can run it in a north to south or east to west. Which is better?
> I live in New Orleans.

What percentage of a wavelength is your antenna? Is it for transmitting
as well as receiving?
--
cheers, CAM http://www.qsl.net/w5dxp

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5870. Re: Cliff-Dweller Antenna Assy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 01:56:19 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA66CC3.EA746E9F@IEEE.org>
Source record: 145908
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

Norm Freidin wrote:
> It is basically a rotatable dipole with a motor drive in the centre of the
> dipole that moves the elements in & out until resonance or Low VSWR is
> obtained.

I have a rotatable dipole and all I have to do is vary the length of
the ladder-line at the transmitter. That's a lot easier than varying
the length of the elements at the antenna.
--
cheers, CAM http://www.qsl.net/w5dxp

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5871. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 02:25:49 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <dkscaukqo1dapvkheklif7gjcclsgvfpcl@4ax.com>
Source record: 145909

On Wed, 27 Mar 2002 09:06:10 -0600, "David G. Nagel" <nagel@core.com> wrote:
>Once again. Yes a dedicated dipole cut to frequency will out perform a
>B&W. But a B&W will outperform a dipole off frequency.
>Besides 10dbm is only 1 s-unit.

10 dBm is 10 milliwatts. (dBm is a measure of power referenced to
one milliwatt)

Now 10 dB is about 5 S units on many Japanese transceivers.
It is 2 S units on others. But it would be one sick receiver if it were
only 1 S unit.

Gary

5872. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 02:27:51 UTC
From: Prefered Customer <jfriley@no.thanks.iadfw.net>
Message-ID: <F28A70AD16C5E7C0.22E25DA5FA7518FB.B38FB005B2B9045F@lp.airnews.net>
Source record: 145910

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote:
>Perhaps the best of both worlds is the CLC tuner

Well, the best of all worlds is to go out and cut the antenna to frequency instead of trying to force an untuned antenna to accept power with a resultant pattern that you probably don't know and can't replicate.

Fred, W8OY
jfriley@ieee.nospam.org

5873. Re: Cliff-Dweller Antenna Assy

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 02:36:44 UTC
From: Norm Freidin <ve3czi@arrl.net>
Message-ID: <YDup8.7064$Yt.424230@read1.cgocable.net>
Source record: 145911
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

Tnx CAM, but would like to rebuild this Antenna...if possible. Also, your website has some interesting info...Norm
****
"CAM" <Cecil.A.Moore@IEEE.org> wrote in message news:3CA66CC3.EA746E9F@IEEE.org...
> Norm Freidin wrote:
> > It is basically a rotatable dipole with a motor drive in the centre of the
> > dipole that moves the elements in & out until resonance or Low VSWR is
> > obtained.
>
> I have a rotatable dipole and all I have to do is vary the length of
> the ladder-line at the transmitter. That's a lot easier than varying
> the length of the elements at the antenna.
> --
> cheers, CAM http://www.qsl.net/w5dxp
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 80,000 Newsgroups - 16 Different Servers! =-----

5874. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 02:37:56 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <3CA67696.D8D686AD@adelphia.net>
Source record: 145912

I made a ground for my station that works pretty well, and was fun to make as well. I picked up some half inch copper pipe and made two six foot sections.

Next, sweat on a connection to one side of each pipe to accept a garden hose.

plan on placing the pipes at some distance apart so you can connsct the six foot sections with angles or "T's".

Attach a hose to the desired pipes, and place the pipe over the position you want, and turn 'er on. The water coming out the end of the pipe will act as a drill, and the pipe will work it's way down into the ground. Stop when you get maybe 6 inches above the ground.

Remove the garden hose attachment. Sweat a horizontal pipe between the two vertical pipes.

Sweat the appropriate pipes to bring the ground into your shack.

Note that you can add more vertical pipes if you like. Also of course if you are sitting right on top of bedrock this won't work. But even for moderately rocky ground, the method will push small and medium rocks out of the way.

- Mike -

rons533@dejazzd.com wrote:
>
> I have been searching for help on installing the best station ground
> system that I can install. I found several bits and pieces of
> information but nothing that is put together as a "system". I found one
> site where they used copper pipe for the run to the ground rods outside.
> Interesting. Any help is appreciated.

5875. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 02:45:18 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA6783E.5AE206D4@IEEE.org>
Source record: 145913

Prefered Customer wrote:
>
> "Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote:
> >Perhaps the best of both worlds is the CLC tuner
>
> Well, the best of all worlds is to go out and cut the antenna to
> frequency instead of trying to force an untuned antenna to accept
> power with a resultant pattern that you probably don't know and can't
> replicate.

How does one cut an all-band antenna to frequency? :-)
--
cheers, CAM http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5876. Re: weak FM station

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 02:55:14 UTC
From: Ken Johnson <bluescreen@comcast.net>
Message-ID: <MPG.17104499e2f39029989687@news.mi.comcast.giganews.com>
Source record: 145914

In article <1017481119.920283@aknx2.orcon.net.nz>,
usenetreplies@hotmail.com says...
Seems like some selectivity before the preamp is in order. What is the
spacing in frequency of your 100 watt station and your 50 KW station? I
would guess any preamp will be overloaded by the 50 KW station unless
some selectivity is put in front of it like a pass/notch cavity, helical
type resonators, a tuned stub to notch the 50 KW transmitter. Heck, if
you get the front end cleaned up, you may not need a preamp and without
the RX being de-sensed, you may be ok. This may also lead to an answer
why the RX antenna polarity seems wierd. But this is just my opinion...
Ken WB8VTW

> I am trying to receive a station towards the north about 30 Km away
> transmitting at 100w. I can receive the station in stereo but with hiss, so
> far I haven't been able to improve it much further than that.
>
> My current setup:
> An external 5 element FM antenna (The shop said that was the largest they
> had) mounted vertically which is pointed directly at the station towards the
> north and is feed into 20m long RG-6 coax run directly connected to the back
> of my stereo.
>
> I did try placing the antenna in a slanted and in a horizontal position, but
> the reception was poor.
> When adding an old preamp I had lying around , all station are are wiped
> off, supposedly because the amp is overloading due to the presence of 50Kw
> stations transmitting about 6Km away towards the NW .
>
> Is their anything else I could do in attempt to improve the reception of
> this station, or am I out of luck? :-/
>
>
>

5877. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 03:12:48 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203301912.7dabac1f@posting.google.com>
Source record: 145915

jder8745@aol.com (JDer8745) wrote in message
news:<20020330135612.29971.00000426@mb-cb.aol.com>...
> Oops,
>
> I didn't mean to start an argument.
>
> Jack

Thats the whole point of this NG. If we didn't have something to argue
about, it would get pretty boring, pretty fast. MK

5878. Re: Magnetic loop??

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 03:15:48 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <sivcaugo6mdi6lueg8lb7udr8b1dn2nb0j@4ax.com>
Source record: 145916

On 30 Mar 2002 15:01:36 GMT, Dick Carroll <dixie@townsqr.com> wrote:
>> "Chris Bartlett" <Bartty@v21mail.co.uk> wrote in message
>> > Can you make them into a beam??
>> >
>
> I can see no reason that you couldn't make a loop into a beam by adding
>the proper director and/or reflector loops. Tune them loke a yagi, 5%
>higher in frequency for a reflector, 5% lower in frequency for a
>director. Space them like you would a yagi, and go. (you wouldn't feed
>either, of course). Your problems would seem to be mostly mechanical,
>and the fact that you would probably have to also retune the parasitic
>elements when changing frequency very far.

Unfortunately, that doesn't work very well. The loop Q is too high,
so a 5% excursion is so far down the curve that induced parasitic
currents tend toward nil. But if you *drive* both loops, you can get
directional patterns. (Feeding the monster can be a bitch, though.)

Gary

5879. Re: 5/8 Vertical Ground Plane

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 03:22:51 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203301922.553272@posting.google.com>
Source record: 145917

"JEEPMON" <JEEPMON@HOTMAIL.COM> wrote in message
news:<rUhp8.141879$af7.71046@rwcrnsc53>...
> For making an 5/8 wavelength ground plane antenna with 3, 4, or more radials
> at an obtuse angle of @ 135 degrees to the vertical element how long should
> they radials be in wavelength relative to the resonant frequency of the
> antenna? Should all radials for vertical ground plane antennas be 1/4
> wavelength long regardless of the length (wavelength) of the vertical
> element (1/4 or 1/2 or 5/8 wavelengths)?

Not for optimum performance. A 1/2 wave needs no radials. 1/4 wave
radials under a 5/8 antenna are not very good. Sure, they work, but
not near as well as they should. A 5/8 antenna wants to really see
another 5/8 antenna below it, to realize the gain it's capable of. But
then it becomes a dual 5/8 collinear instead of a 5/8 ground plane. If
I couldn't use a lower 5/8 section, or a set of 5/8 radials as the
lower section of a collinear, I'd use a set of 3/4 wave resonant
radials. The pattern will be better than with 1/4 wave radials. Check
out
http://web.wt.net/~nm5k/acompari.htm. Shows some of the patterns you
will have using different types of ground planes and radial lengths.
MK

5880. Re: Cigar Antennas for 2400

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 03:27:49 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <840daugna94asfrm8gjp5a7lj5acngmh8c@4ax.com>
Source record: 145918

On Fri, 29 Mar 2002 06:13:35 GMT, "Eric Schumacher" <WB6KCN@pacbell.net> wrote:
>Hi Group
>Any one out there have any pointers on where to find info on construction
>and theory behind the "cigar antenna" Invented by a Frenchman named Simon.
>The usual configuration for 2400 is a rod with 1 inch diameter washers and
>spacers stacked on it for a couple of feet.
>__________
>|
>| __|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__
>| | | | | | | | | | | | | | | |
>|__________
>
>This the rough outline, since I don't know the proper name internet searches
>don't turn up much. Looks like quite a bit of gain with easy non critical
>construction. I would particularly like to know what the critical dimensions
>are.
> 73 Eric WB6KCN

It is a disc yagi with a coffee can feed. The critical dimensions for disc yagis are the disc diameters and spacings, same as any yagi. A length of all thread rod makes a convenient boom, fender washers make the elements. Use jam nuts to hold everything together. You can trim the washers down with a file, with the washer spinning in a lathe (or drill press) held by a mandrel. Disc diameters are approximately the same as for normal yagi element lengths, after accounting for boom effects.

Gary

5881. Re: Cigar Antennas for 2400

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 03:31:48 UTC
From: Alex Hartman <goober@goobe.net>
Message-ID: <3rvp8.6753$vm6.1104960@ruti.visi.com>
Source record: 145819

"Eric Schumacher" <WB6KCN@pacbell.net> wrote in message
news:jCTo8.2475$QY4.2239264881@newssvr21.news.prodigy.com...
> Hi Group
> Any one out there have any pointers on where to find info on construction
> and theory behind the "cigar antenna" Invented by a Frenchman named Simon.
> The usual configuration for 2400 is a rod with 1 inch diameter washers and
> spacers stacked on it for a couple of feet.
> __________
> |
> | __|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__
> | | | | | | | | | |
> | | | | | |
> |__________
>
> This the rough outline, since I don't know the proper name internet
searches
> don't turn up much. Looks like quite a bit of gain with easy non critical
> construction. I would particularly like to know what the critical
dimensions
> are.
> 73 Eric WB6KCN
>
>

Looks like a pringles can antenna type thing that's floating around for WLAN stuff on 2.4Ghz. They've also adapted this to a "shotgun directional" type antenna as well.

http://www.seattlewireless.net/index.cgi/BuildingYagiAntennas

Somthing like that, perhaps?

--
Alex Hartman - goober@goobe.net
PGP Key fingerprint = 26 41 19 56 19 81 E2 BC EE C8 1D F4 DB B8 ED B8
"Watch out for that bus!"

5882. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 03:47:58 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <3ca6866d$0$1414$1dc6e903@news.corecomm.net>
Source record: 145820

Sorry Jack, you didn't start an argument. It's just amateurs being amateurs and professing their own personal viewpoint. Each is just as valid as the other. It's just that some hams think that their world view is correct and those of us that use the B&W aren't. They are wrong, we are all correct just look at the problem differently.
Dave WD9BDZ

BTW: This posting should bring down the wrath of the purists upon me but so what. I do my thing and they can do theirs.

JDer8745 wrote:
>
> Oops,
>
> I didn't mean to start an argument.
>
> Jack

5883. Re: Select-A-Call

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 04:06:42 UTC
From: Screaming Skull <KG4IVT@hot.mael.spicedmeat.sucks.leave.me.alone.com>
Message-ID: <mXvp8.45120$a3.17567182@typhoon.southeast.rr.com>
Source record: 145823

Can't say much about it except that myself and a few of my friends would buy one.....

"Arrow146" <arrow146@aol.com> wrote in message news:20020330181750.24010.00000984@mb-cl.aol.com...
> I would like to call on the Experts again.
>
> I would like your opinion on this new product we are about to
> put into production.
> <A HREF="http://arrowantennas.com/sac.html">Select-A-Call</A>
>
> This is a tough one to explain, hope it is good enough.
>
> Be glad to answer any questions. Arrow146@aol.com
> Thank You
> 73 Al Lowe N0IMW
> <A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>

5884. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 04:21:46 UTC
From: gaschafer@attbi.com
Message-ID: <3ca68dc2.45406597@netnews.attbi.com>
Source record: 145822

Washing a ground rod in the ground is not a good thing to do
especially if you are going to use it
as a lightning ground. Washing it in loosens the soil around the rod
(pipe) and the earth never
will pack in close again. You will have a loose ground rod with poor
conductivity. Even digging
a hole with a post hole digger and refilling it again is not a good
way to go. Again the earth is not
closely packed as undisturbed earth. They need to be driven into
undisturbed earth for best
performance.

The connections would be better made using a welding process rather
than soldering the joints.
Solder will melt with a lightning strike and you will loose the
connection. Clamping is better than
soldering.

73
Gary K4FMX

On Sun, 31 Mar 2002 02:37:56 GMT, Mike Coslo <mcoslo@adelphia.net>
wrote:

>I made a ground for my station that works pretty well, and was fun to
>make as well. I picked up some half inch copper pipe and made two six
>foot sections.
>
>Next, sweat on a connection to one side of each pipe to accept a garden
>hose.
>
>plan on placing the pipes at some distance apart so you can connsct the
>six foot sections with angles or "T's".
>
>Attach a hose to the desired pipes, and place the pipe over the position
>you want, and turn 'er on. The water coming out the end of the pipe will
>act as a drill, and the pipe will work it's way down into the ground.
>Stop when you get maybe 6 inches above the ground.
>
> Remove the garden hose attachment. Sweat a horizontal pipe between the
>two vertical pipes.
>
> Sweat the appropriate pipes to bring the ground into your shack.
>
>

> Note that you can add more vertical pipes if you like. Also of course
>if you are sitting right on top of bedrock this won't work. But even for
>moderately rocky ground, the method will push small and medium rocks out
>of the way.
>
> - Mike -
>
>rons533@dejazzd.com wrote:
>>
>> I have been searching for help on installing the best station ground
>> system that I can install. I found several bits and pieces of
>> information but nothing that is put together as a "system". I found one
>> site where they used copper pipe for the run to the ground rods outside.
>> Interesting. Any help is appreciated.

5885. Re: weak FM station

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 04:22:41 UTC
From: Bob Miller <bamiller@texas.net>
Message-ID: <w4ymPOd7bTZHhWK8C72j1z76SBEf@4ax.com>
Source record: 145821

"Alpine Dragon" <usenetreplies@hotmail.com> wrote:

>I am trying to receive a station towards the north about 30 Km away
>transmitting at 100w. I can receive the station in stereo but with hiss, so
>far I haven't been able to improve it much further than that.
>
>My current setup:
>An external 5 element FM antenna (The shop said that was the largest they
>had) mounted vertically which is pointed directly at the station towards the
>north and is feed into 20m long RG-6 coax run directly connected to the back
>of my stereo.
>
>I did try placing the antenna in a slanted and in a horizontal position, but
>the reception was poor.
>When adding an old preamp I had lying around , all station are are wiped
>off, supposedly because the amp is overloading due to the presence of 50Kw
>stations transmitting about 6Km away towards the NW .

Well, I know for the real FM hounds, there are beams available that are huge;
that have booms more than 30 feet long.

I've also noticed that there are some real high-end FM tuners available, for
prices ranging up to $5000 or $10,000.

Still, even with this stuff, I don't think you're going to have much luck,
trying to pick up a 100 watt station several miles away with a 50K devil in the
neighborhood.

It would be cheaper to move :-)

Bob
k5qwg
>
>Is their anything else I could do in attempt to improve the reception of
>this station, or am I out of luck? :-/
>

5886. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 04:53:47 UTC
From: Prefered Customer <jfriley@no.thanks.iadfw.net>
Message-ID: <EDB0DA51E348CA0E.5B8D324F1A520706.EE0F8868C6A7A15E@lp.airnews.net>
Source record: 145824

CAM <Cecil.A.Moore@IEEE.org> wrote:
>How does one cut an all-band antenna to frequency? :-)
One must first come to grips with the simple fact that there's no such thing as an all-band antenna. (It is simple and certain that you can force feed an antenna to radiate on bands it was not intended to work. It is just as simple and certain that such an "all-band" antenna will neither deliver optimum performance nor deliver predictable, repeatable radiation patterns. Radiate? Yes. Perform? No.)

Fred, W8OY
jfriley@ieee.nospam.org

5887. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 05:31:48 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA69F44.A1FD3FD7@IEEE.org>
Source record: 145825

Prefered Customer wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote:
> >How does one cut an all-band antenna to frequency? :-)

> One must first come to grips with the simple fact that there's no such
> thing as an all-band antenna. (It is simple and certain that you can
> force feed an antenna to radiate on bands it was not intended to work.
> It is just as simple and certain that such an "all-band" antenna will
> neither deliver optimum performance nor deliver predictable,
> repeatable radiation patterns. Radiate? Yes. Perform? No.)

Take a look at the 130 ft all-HF-band dipole on my web page and tell
me where I went wrong. I work all 8 HF bands without an antenna tuner.
Why would the radiation patterns not repeat? Besides the relatively
low losses in the ladder-line, where is the power going that would
make it not perform?

In particular, check out the almost 11dBi gain in the four lobes
on 10m with TOAs of 12 degrees. The losses in the ladder-line are
about 0.5dB. The matched line loss in LM-400 would be about 0.6dB.
Where did I go wrong?
--
cheers, CAM http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5888. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 05:47:06 UTC
From: n7ws@yahoo.com
Message-ID: <3ca6a1ae.1667746@news.triconet.org>
Source record: 145826

On 30 Mar 2002 18:49:55 GMT, jder8745@aol.com (JDer8745) wrote:

|Theorem: Any load can be matched to any other load using no more than two pure
|reactances.

Yes, but you have absolutely no control over the network Q. If the Q needs to be 1000 and your inductor unloaded Q is 20, you're in deep doodoo. And if you really do have "pure" reactances, you're still in deep doodoo because the matched BW is negligible.

5889. G5RV on 75m and 40m

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 05:58:28 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA6A584.3E5D801C@IEEE.org>
Source record: 145827

Someone implied that the G5RV was not a very good antenna
on 75m and 40m. I have added a couple of graphs to my
web page that show how the 28 ft. 300 ohm series
matching section transforms the antenna feedpoint
impedances on 75m and 40m to relatively desirable values
easily handled by virtually all antenna tuners.
--
cheers, CAM http://www.qsl.net/w5dxp/G5RV.HTM

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5890. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 06:18:34 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0203302218.757410e3@posting.google.com>
Source record: 145828

"David G. Nagel" <nagel@core.com> wrote in message
news:<3ca6866d$0$1414$1dc6e903@news.corecomm.net>...
> Sorry Jack, you didn't start an argument. It's just amateurs being
> amateurs and professing their own personal viewpoint. Each is just as
> valid as the other. It's just that some hams think that their world view
> is correct and those of us that use the B&W aren't. They are wrong, we
> are all correct just look at the problem differently.
> Dave WD9BDZ

I doubt anyone here really cares what type of antenna anyone uses
here. I know I sure don't. If you want to use intentional resistance
to get an easier match, be my guest. As far as being correct or not, I
don't even know what the "problem" is, so I don't see how I could have
much to comment on it. As far as the functioning of the B/W antenna, I
don't think I was incorrect. Someone would have jumped on me by now if
I were. Or at least I would hope so anyway. MK

5891. WTB: Hustler Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 07:19:46 UTC
From: KU4YP <ku4yp@earthlink.net>
Message-ID: <mMyp8.4069$ml2.369133@newsread1.prod.itd.earthlink.net>
Source record: 145829

hello,

i am looking for a hustler vertical, 4btv, 5btv or what have you for a reasonable price. please email what you have. would like to have one in nice shape.

thanks

--
73 de KU4YP "There is no spoon........."
Mike Prevatt
Willow Oak, Florida
Amateur Radio Operator
Active HF/VHF/UHF/Digital/QRP
Homepage: http://home.earthlink.net/~ku4yp

5892. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 11:38:52 UTC
From: Bill Otten <res0958z@verizon.net>
Message-ID: <gzCp8.10697$9d3.3530@nwrddc01.gnilink.net>
Source record: 145830

I might also mention that the copper pipe method does not meet NEC code. In the event of a strike, your insurance COULD use that fact against settling your claim. The contradiction is that NEC usually requires a single ground rod, and if the ground resistance measures above 25 ohms, requires one additional rod. The problem is that no further resistance measure is required!

Bill

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:3CA67696.D8D686AD@adelphia.net...
> I made a ground for my station that works pretty well, and was fun to
> make as well. I picked up some half inch copper pipe and made two six
> foot sections.
>
> Next, sweat on a connection to one side of each pipe to accept a garden
> hose.
>
> plan on placing the pipes at some distance apart so you can connsct the
> six foot sections with angles or "T's".
>
> Attach a hose to the desired pipes, and place the pipe over the position
> you want, and turn 'er on. The water coming out the end of the pipe will
> act as a drill, and the pipe will work it's way down into the ground.
> Stop when you get maybe 6 inches above the ground.
>
> Remove the garden hose attachment. Sweat a horizontal pipe between the
> two vertical pipes.
>
> Sweat the appropriate pipes to bring the ground into your shack.
>
>
> Note that you can add more vertical pipes if you like. Also of course
> if you are sitting right on top of bedrock this won't work. But even for
> moderately rocky ground, the method will push small and medium rocks out
> of the way.
>
> - Mike -
>
> rons533@dejazzd.com wrote:
> >
> > I have been searching for help on installing the best station ground
> > system that I can install. I found several bits and pieces of
> > information but nothing that is put together as a "system". I found one
> > site where they used copper pipe for the run to the ground rods outside.

> > Interesting. Any help is appreciated.

5893. TGOS got me!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 12:34:27 UTC
From: amdx <amdx@att.net>
Message-ID: <nnDp8.15273$se.1432380@bgtnsc04-news.ops.worldnet.att.net>
Source record: 145831

What virus do I have?

5894. Re: DIPOLE ANTENNA FS

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 12:36:06 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <WoDp8.37601$q92.1000502@news1.east.cox.net>
Source record: 145832

Some members would consider it "a service" since they lack the
skills (or inclination?!) to do so themselves!

Pete

"Martin Peters" <martin.peters@ntlworld.com> wrote in message
news:Zonn8.11331$Dr3.1793420@news6-win.server.ntlworld.com...
>
> There is always
> > someone
> > who will take advantage of the less informed members of what
> > used
> > to be the ham fraternity!
>
> Yep - over here (UK) http://www.theantman.co.uk will sell you an 20m long
> wire antenna for £25 or a 180m one for £100 - about 150 USD. A
counterpoise
> is up to an extra £20.
>
> Wish I'd thought of it first.
>
>
>

5895. Optimum SWR for multiband magloops?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 13:07:51 UTC
From: Frank van Wensveen <frankvw@euronet.nl>
Message-ID: <362eau4gl3132p9qm8qq06329ffboml2jd@4ax.com>
Source record: 145833

Hi everyone.

I'm currently working on a magnetic loop antenna. Since MFJ manages to cover 40-15m with a 36" loop, I decided I would do the same. :-) (Yes, I know, it's a compromise, but for me the advantages outweigh the sacrifice in efficiency.)
Tuning the loop is no problem. Except that the SWR goes up on the higher bands. At 40 and 20 it's 1.1:1 and 1.3:1 respectively, but on 15 it's 3:1.

What's the best possible SWR on all bands? (And what's the SWR on all bands on that MFJ Wundermachinen?)
And, more important, what is going on here? What makes the SWR go up so sharply as frequency increases?

I've tried several coupling loops, both from massive copper wire (electrical installation wire) and coax faraday loops (the kind with the shields soldered together at the bottom (feeding) point and center to shield at the top point). However nobody has managed to explain to me yet what exactly goes on in the coupling loop.

All response is appreciated!

73,

Frank PA3GMP

5896. Atas 100 on 80?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 13:18:12 UTC
From: Jeff Brown <jbrown21@sprynet.com>
Message-ID: <3CA70C93.7CAF2ABF@sprynet.com>
Source record: 145834

What do I need to do to make the Yaesu ATAS100 mobile
antenna load on 80m? Can I sacrifice 6m and get 80? Has
anyone done this?
Jeff WB9FOL

5897. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 13:33:11 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <3CA71017.8000908@mwci-news>
Source record: 145835

Wes Stewart wrote:

> On 30 Mar 2002 18:49:55 GMT, jder8745@aol.com (JDer8745) wrote:
>
> |Theorem: Any load can be matched to any other load using no more than two pure
> |reactances.
>
> Yes, but you have absolutely no control over the network Q. If the Q needs to
> be 1000 and your inductor unloaded Q is 20, you're in deep doodoo. And if you
> really do have "pure" reactances, you're still in deep doodoo because the
> matched BW is negligible.
>
>

The Q of a *doubly* loaded L network, using two
lossless and opposite reactances, is

Q = 0.5*sqrt(Rp/Rs - 1)

So it depends only on the resistance ratio. If
load and generator reactances exist they can
usually be absorbed into the L network reactances.
The Q *at resonance* then depends on the remaining
modified values of the resistances Rp' and RL'.
Note that if Rp nearly equal to Rs the selectivity
is almost zero.

Bill W0IYH

5898. Re: Optimum SWR for multiband magloops?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 13:38:23 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA7114F.D017983F@IEEE.org>
Source record: 145836

Frank van Wensveen wrote:
> What's the best possible SWR on all bands?

Quoting the ARRL Antenna Book: "This simple feed (small loop
gamma match) will provide better than 1.7:1 SWR over a 2:1
frequency range." Thus, outside of the 2:1 frequency range,
we can infer that the SWR will be greater than 1.7:1.
--
cheers, CAM http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 80,000 Newsgroups - 16 Different Servers! =-----

5899. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 13:55:13 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <3CA71541.7000401@mwci-news>
Source record: 145837

William E. Sabin wrote:

> Wes Stewart wrote:
>
>> On 30 Mar 2002 18:49:55 GMT, jder8745@aol.com (JDer8745) wrote:
>>
>> |Theorem: Any load can be matched to any other load using no more
>> than two pure
>> |reactances.
>>
>> Yes, but you have absolutely no control over the network Q. If the Q
>> needs to
>> be 1000 and your inductor unloaded Q is 20, you're in deep doodoo. And
>> if you
>> really do have "pure" reactances, you're still in deep doodoo because the
>> matched BW is negligible.
>>
>>
>
> The Q of a *doubly* loaded L network, using two lossless and opposite
> reactances, is
>
> Q = 0.5*sqrt(Rp/Rs - 1)
>
> So it depends only on the resistance ratio. If load and generator
> reactances exist they can usually be absorbed into the L network
> reactances. The Q *at resonance* then depends on the remaining modified
> values of the resistances Rp' and RL'.

Correction. I meant Rs', not RL'.

> Note that if Rp nearly equal to
> Rs the selectivity is almost zero.
>
> Bill W0IYH

Bill W0IYH

5900. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 14:52:27 UTC
From: n7ws@yahoo.com
Message-ID: <3ca720c6.3204447@news.triconet.org>
Source record: 145838

On Sun, 31 Mar 2002 05:47:06 GMT, n7ws@yahoo.com (Wes Stewart) wrote:

|On 30 Mar 2002 18:49:55 GMT, jder8745@aol.com (JDer8745) wrote:
|
||Theorem: Any load can be matched to any other load using no more than two pure
||reactances.
|
|Yes, but you have absolutely no control over the network Q. If the Q needs to
|be 1000 and your inductor unloaded Q is 20, you're in deep doodoo. And if you
|really do have "pure" reactances, you're still in deep doodoo because the
|matched BW is negligible.

Whoops, I misspoke. The "1000" above isn't the Q but the resistance ratio.
|

5901. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 15:40:09 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <bi9eaugcd60gi7puqfbcn1k8ttnsim1p9f@4ax.com>
Source record: 145839

On Sun, 31 Mar 2002 04:21:46 GMT, gaschafer@attbi.com (Gary Schafer) wrote:
>Washing a ground rod in the ground is not a good thing to do
>especially if you are going to use it
>as a lightning ground. Washing it in loosens the soil around the rod
>(pipe) and the earth never
>will pack in close again. You will have a loose ground rod with poor
>conductivity.

You can hydraulically sink a rod, but you have to do it the right way.
If you try to wash a hole in, the rod will be loose, because the dirt
you've washed out of the hole is lost. But there is a better way.

Dig a mud hole about the size of a quart mason jar. Fill it with water.
Now ram the ground rod into the hole and start to churn it up and
down like you were churning butter. It will start to sink rapidly because
dirt will be forced hydraulically up the hole the rod is forming and will
be retained in the larger mud hole at the top.

Add water as necessary to keep the mud hole filled as you progress.
When you reach the desired depth, walk away. Don't come back until
all of the water is gone from the mud hole. Then fill the mud hole back
up with the dirt you shoveled out to make it.

The result of this activity is a solidly installed ground rod, because
the mud will settle back down around the rod in the hole as it dries,
sealing it in for a good tight fit to the surrounding undisturbed soil.

This technique works very well and very rapidly in good soil. In rocky
soil, you may have to pound on the rod occasionally as you progress
in order to break any rocks you hit.

>Even digging
>a hole with a post hole digger and refilling it again is not a good
>way to go. Again the earth is not
>closely packed as undisturbed earth. They need to be driven into
>undisturbed earth for best
>performance.

The earth will resettle in a couple of years (except in very dry climates).
If you do measurements, you'll notice the ground connection improving
over time. In very dry climates, it may take many years for the earth to
resettle, so this isn't a good installation method in that sort of climate.
But in very rocky soils, you may have no other realistic choice but to
use this method.

>The connections would be better made using a welding process rather
>than soldering the joints.

>Solder will melt with a lightning strike and you will loose the
>connection. Clamping is better than
>soldering.

The National Electrical Code *forbids* soldered ground connections.
Use an approved clamp for the reason given above, or *cadweld* the
wire to the rod using an approved cadweld kit.

You may be tempted to both solder and clamp. Don't do it. There's
no way to realistically test the integrity of the connection if you do.
The solder will make the connection *appear* to be low resistance
even if the connection is poor and unable to handle heavy currents.
With just the clamp, you can measure the quality of the connection
with much greater confidence. (Do monitor your earth connections
from time to time as a part of routine preventative maintenance.)

Gary

5902. Re: TGOS got me!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 16:11:25 UTC
From: Gary Coffman <ke4zv@bellsouth.net>
Message-ID: <clbeaug398q749s7u51h3m6a1n4h4iop76@4ax.com>
Source record: 145840

On Sun, 31 Mar 2002 12:34:27 GMT, "amdx" <amdx@att.net> wrote:
>What virus do I have?

You probably have none. You're likely the victim of a Javascript hoax
that's been going around. If you *must* use Outlook Express instead
of a good newsreader, at least go into setup and turn off Javascript.
While it is likely that your current problem is a hoax, real trojan horse
programs can be sent to you via the Javascript mechanisms in
Outlook Express or Explorer.

(There are some "features" you can't turn off in OE and Explorer
that leave you vulnerable to attack. So the best course is to
completely avoid the use of these two programs. A couple of
alternatives are Eudora for email and Opera for browsing.)

I strongly recommend that you switch to a plain ASCII text
newsreader (and email client too) to avoid this sort of attack
in the future. A very good one for Windows users is Forte's
Agent, available at www.forteinc.com . It is immune to the
usual sorts of attacks because it can't execute any
embedded malicious code sent to it.

Of course, don't *ever* click on any unsolicited attachments,
"cards", or the like sent to you as part of a message or email.
That's just dumb, and leaves you wide open to all sorts of
malicious attacks. Delete without opening everything other
than plain ASCII text. (Note, Word documents and HTML
coded messages are inherently risky, don't send them, and
don't open any sent to you.)

Gary

5903. Re: [Q] hexbeam vs Fluidmotion SteppIR?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 16:15:19 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <3CA73616.24EC46DF@att.net>
Source record: 145841

I recall that a similar remotely tunable dipole was manufactured in the
50's - anyone remember that one?

73/72/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina 505 DSP #91900556 Icom IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Rick Littlefield wrote:
>
> Kinda like comparing apples and oranges. The Hexbeam--and most other multiband
> antennas--are fixed-tuned at some point in each of the bands covered. On the
> other hand, each element of the F-M is continuously adjustable over the
> antenna's frequency range--allowing it to be programmed in an infinite number
> of ways.
> Rick K1BQT

5904. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 17:21:29 UTC
From: Prefered Customer <jfriley@no.thanks.iadfw.net>
Message-ID: <7368B7F5F395A8F7.5DFC64F243E9E2AC.C21D7760981CD11F@lp.airnews.net>
Source record: 145842

CAM <Cecil.A.Moore@IEEE.org> wrote:
>Take a look at the 130 ft all-HF-band dipole on my web page and tell
>me where I went wrong...
>In particular, check out the almost 11dBi gain in the four lobes
>on 10m with TOAs of 12 degrees.
Four lobes; that would leave four big gaps in coverage, eh?
How do you fill those in? Rotate the 130' dipole?

Fred, W8OY
jfriley@ieee.nospam.org

5905. Re: TGOS got me!

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 18:05:10 UTC
From: Richard Clark <kb7qhc@attbi.com>
Message-ID: <2mheaugtmd9u465i506pvlp2tqmrke8r6u@4ax.com>
Source record: 145843

On Sun, 31 Mar 2002 11:11:25 -0500, Gary Coffman <ke4zv@bellsouth.net>
wrote:

>On Sun, 31 Mar 2002 12:34:27 GMT, "amdx" <amdx@att.net> wrote:
>>What virus do I have?
>
>You probably have none. You're likely the victim of a Javascript hoax
>that's been going around. If you *must* use Outlook Express instead
>of a good newsreader, at least go into setup and turn off Javascript.

Hi Gary,

THIS is EXACTLY the advice MS offers for solving their security
problem with both OE and IE. The net effect is that it makes IE
utterly useless for those "features" some page designers tout here as
being in demand (the stale argument of numbers proving that IE is the
clear market winner). THIS is EXACTLY the advice ignored by those who
embrace the MS as technology leader myth.

>While it is likely that your current problem is a hoax, real trojan horse
>programs can be sent to you via the Javascript mechanisms in
>Outlook Express or Explorer.

Javascript is an abomination that headed south once MS started adding
"enhancements" and "corrections" to the concept. Unfortunately NS
followed suit to force a compatibility war that they've lost to the
sucker punch of user inertia (the users having once found a browser
installed - guess who's - they turned off their minds to all issues).

This debacle is not to be confused with those programs called Java
Applets (frequent) and Java Applications (rare). Each of these "could
be" as malicious, but that would be only through your explicit choice
from a variety of many more benign alternatives. If you do nothing to
change the Java environment on your machine (and Java is not going to
do it behind your back); then there is no way a Java Applet can harm
your machine or data (or reveal it to others). Java is a secure
programming language with a very fine-grain control over what can and
cannot be done on your system.

>
>(There are some "features" you can't turn off in OE and Explorer
>that leave you vulnerable to attack. So the best course is to
>completely avoid the use of these two programs. A couple of
>alternatives are Eudora for email and Opera for browsing.)
>

Dateline March 29, 2002 (goes under my stock warning of these weekly occurrences):

Microsoft Warns of 'Critical' Flaw

"Microsoft Corp., which is working to improve
the quality and security of its software, said a "critical"
defect in its Internet Explorer Web Browser could allow
vandals to read, delete or alter files on users' computers."

Those who operate with IE clearly conform to Dr. Johnson's whimsical observation that they exhibit "the triumph of hope over experience."

Our last infection in this group was from a frequent contributor who distributes software over the net (unzipped too) and has yet to confirm to us that he has followed the necessary precautions (as specified by MS) to prevent a re-occurence. Reminds me of the admonition of how much could you trust in an airplane's safety maintenance if the eating tray in front of you is broke?

Given the death-wish of a design with NS v.6; I fire up v.4.7.

73's
Richard Clark, KB7QHC

5906. ICOM AT-150 Antenna Tuner and IC-751 Cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 18:22:32 UTC
From: Mike Jordan <mjordan@europa.com>
Message-ID: <3CA753E8.3050108@europa.com>
Source record: 145844

I have a AT-150 auto antenna tuner on my Icom 745. It uses the
OPC-137 cable to connect the two. Can the same cable be used to
connect the AT-150 to an ICOM 751? If a different cable is needed,
what is the number that I need to ask for at HRO or AES?

Thanks

Mike
--
Hillsboro, Oregon
Bouvier des Flandres - Herding & Working Dogs
http://www.europa.com/~mjordan - Pictures & Info on Bouviers

5907. Re: Select-A-Call

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 18:22:54 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <2uIp8.39011$q92.1042539@news1.east.cox.net>
Source record: 145845

Busted link.. Too much HTML trash?

Pete

"Arrow146" <arrow146@aol.com> wrote in message
news:20020330181750.24010.00000984@mb-cl.aol.com...
> I would like to call on the Experts again.
>
> I would like your opinion on this new product we are about to
> put into production.
> <A HREF="http://arrowantennas.com/sac.html">Select-A-Call</A>
>
> This is a tough one to explain, hope it is good enough.
>
> Be glad to answer any questions. Arrow146@aol.com
> Thank You
> 73 Al Lowe N0IMW
> <A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>

5908. Re: Select-A-Call

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 18:27:58 UTC
From: SideBand <abNO8SPAMlr@csotbs.org>
Message-ID: <3CA7552E.7000303@csotbs.org>
Source record: 145846

Link works just fine on NS62...

de AB8LR, Chris

Uncle Peter wrote:

> Busted link.. Too much HTML trash?
>
> Pete
>
> "Arrow146" <arrow146@aol.com> wrote in message
> news:20020330181750.24010.00000984@mb-cl.aol.com...
>
>>I would like to call on the Experts again.
>>
>>I would like your opinion on this new product we are about to
>>put into production.
>><A HREF="http://arrowantennas.com/sac.html">Select-A-Call</A>
>>
>>This is a tough one to explain, hope it is good enough.
>>
>>Be glad to answer any questions. Arrow146@aol.com
>>Thank You
>>73 Al Lowe N0IMW
>><A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>
>>
>
>

--
73 de AB8LR, Chris

http://csotbs.shopiwon.com/ for great deals on computer products.

5909. Re: Optimum SWR for multiband magloops?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 20:03:53 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a87q38$g3l$1@paris.btinternet.com>
Source record: 145848

There must be at least TWO variable components in ANY device which matches an antenna to a feedline. An antenna tuner always has at least two knobs on the front.

But the usual magloop has only one variable control the - main tuning capacitor. The second control is fixed and set for one band only. The second control is the FIXED DIAMETER of the small coupling loop to the coax feedline. It is a critical Z-matching component. In effect, it adjusts the fractional turns ratio of a transformer formed by the main and small loop.

So when changing bands, if only the tuning capacitor is adjusted and the coupling loop diameter remains fixed, then a shift in SWR away from 1:1 is sure to occur.

So adjust the diameter of the coupling loop for 1:1 SWR on your favorite band and hope for the best on the others.

Program MAGLOOP4 will tell you (and a lot of other things) how much the diameter of the coupling loop must be changed to obtain a 1:1 match when changing from one band to another. Just model a loop, do nothing except change frequency, and observe how small the coupling loop diameter changes.

It will be found the coupling loop also changes with antenna height above ground. This is not surprising since the ground loss resistance induced in the main loop is a function of height above ground.

Download MAGLOOP in a few seconds from website below. Run immediately. Enter basic data. Results in milli-seconds. What-if? operation.

By the way, a coupling loop is much preferable to a gamma-match. And a bare, self-supporting coupling wire, unconnected to the main loop, is preferable to a screened loop constructed from coax. The handbooks need bringing into the 21st century.
--
****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

5910. Re: $200 for a folded dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 21:11:54 UTC
From: Gerald Schmitt <KK5YY@arrl.net>
Message-ID: <ptteaucidkmiorsp9pag55hg3jmqj1j5ev@4ax.com>
Source record: 145849

On Wed, 27 Mar 2002 09:27:30 -0600, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

>
>
>> I don't think you understand what the military wants or needs from an
>> antenna system. Military applications involve a lot of frequency
>> hopping with very short stays on a particular frequency often just
>> seconds. Rest assured that they don't assume gain they just run
>> what ever power they need. The military had been using TFDs since
>> at least the Second World War. We Hams sometimes suffer under
>> the delusion that they are smarter than non Hams when in reality
>> we just have a different hobby.
>
>Actually, you are comparing apples and oranges.

Actually George you are the one comparing apples and oranges.
How the heck did we get on to the subject of Log Periodics. But since
you bring them up just another example of a low to no gain
frequency agile antenna design. Beginning to see a pattern here?

> The T2FD is used in field
>applications where portability is the most important consideration.

Portability is just fine but frequency agility is more important.
Unless of course you are portable enough to dodge incoming.

>A kilowatt amplifier is easier to move quickly than a big antenna array. Go
>to any fixed site, particularly overseas, and look at what the military
>(gov't) uses on the stationary end of the circuit.

In my line of work I have seen quite a few thank you.

> Huge LPAs which operate
>down to 3 MHz, inverted cones, funny spirals for NVIS, still a few Rhombics,
>1000 ft. dia. CDAAs for DF and receiving, and so on. I'm watching some of
>the bigger fixed and rotating LPAs, hoping I can catch one when it is
>surplused.

Sorry they usually cut the tower guys and there isn't much left when
it impacts the ground. The aluminum recycle guy is usually the only
one interested.

>There's a big Grainger fixed LPA at the CG receive site in VA
>which always makes me drool when I pass it, and an AS-3195 (rotatable 3-30
>MHz LPA) that's been off the tower for a couple of weeks in Texas which I'm
>curious about the disposition of.

You might get luck with that one I have watched a number bite the dust, literally, recently.

But back to the subject at hand TFDs are used for frequency agility. My point to the original poster was that, not LPAs. Sure he can cut a efficient dipole for one frequency and stay on it, folks that do that are referred to as targets.

5911. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 21:17:41 UTC
From: Owen Duffy <owen@oda.com.au>
Message-ID: <3CA77CF5.B715CAA9@oda.com.au>
Source record: 145850

Gary Coffman wrote:

> The National Electrical Code *forbids* soldered ground connections.
> Use an approved clamp for the reason given above, or *cadweld* the
> wire to the rod using an approved cadweld kit.
>
> You may be tempted to both solder and clamp. Don't do it. There's
> no way to realistically test the integrity of the connection if you do.
> The solder will make the connection *appear* to be low resistance
> even if the connection is poor and unable to handle heavy currents.
> With just the clamp, you can measure the quality of the connection
> with much greater confidence. (Do monitor your earth connections
> from time to time as a part of routine preventative maintenance.)
>

Although 'electronics' folk commonly tin the ends of wire that are then secured in some kind of mechanical fastening (screws etc), it is not a wise practice.

It seems a neat way to stop the strands of the wire from spreading, however one will often find the screws of such a connection apparently loosen. This is usually caused by cold flow of the solder under the pressure of the screw rather than the screw undoing itself.

An old rule was that connections should not depend on the solder for mechanical integrity. This seems to have gone by the wayside in PCB construction for instance, but I suggest that it is a wise approach for any conductors that carry substantial current, and essential for protective conductors like the AC mains protective earth and lightning down conductors.

Lightning down conductors should have test links or other means of isolating individual earth electrodes to periodically measure the performance of components of the system.

It is highly likely that in your area, regulatory codes or standards apply to electrical installations, lightning protection systems, and anything that connects to or between these wiring systems.

The earthing of your tower would be regarded as lightning protection in most places, and may be subject to mandatory requirements.

5912. Re: L-network Revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 22:18:47 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA78B47.60A38B19@IEEE.org>
Source record: 145851

Prefered Customer wrote:
>
> CAM <Cecil.A.Moore@IEEE.org> wrote:
> >Take a look at the 130 ft all-HF-band dipole on my web page and tell
> >me where I went wrong...
> >In particular, check out the almost 11dBi gain in the four lobes
> >on 10m with TOAs of 12 degrees.
> Four lobes; that would leave four big gaps in coverage, eh?
> How do you fill those in? Rotate the 130' dipole?

I have a 33ft rotatable dipole if the 130ft dipole doesn't give
me the coverage I need. I have an A/B knife switch between the
two antennas. As often as not, the 130ft fixed dipole beats
the rotatable dipole in the rotatable dipole's best direction.
Note that I use the ladder-line fed 33ft rotatable dipole on
20m-10m and it is a non-resonant length on all bands except 20m.
--
cheers, CAM http://www.qsl.net/w5dxp

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5913. Re: Optimum SWR for multiband magloops?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 22:23:36 UTC
From: CAM <Cecil.A.Moore@IEEE.org>
Message-ID: <3CA78C68.350F7367@IEEE.org>
Source record: 145852

Reg Edwards wrote:
> There must be at least TWO variable components in ANY device which matches
> an antenna to a feedline. An antenna tuner always has at least two knobs on
> the front.

My ladder-line length selector gives a good enough match with only one
variable component. If the 450 ohm SWR is between 4.5:1 and 18:1, the
50 ohm SWR at a current maximum point will be less than 2:1.
--
cheers, CAM http://www.qsl.net/w5dxp

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5914. Re: Select-A-Call

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 23:01:48 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <wzMp8.40780$q92.1082755@news1.east.cox.net>
Source record: 145853

http://arrowantennas.com/sac.html">Select-A-Call</A

won't work on my I.E. 6.0

Peter

<mcduffie@xactcom.net> wrote in message

news:f8teauoek8av401tg8u4op291gbes6c8h1@4ax.com...
> On Sun, 31 Mar 2002 18:22:54 GMT, " Uncle Peter"
> <radioconnectionNO@cox.netSPAM> wrote:
>
> > > Busted link.. Too much HTML trash?
>
> Say what? It is a very plain page and pops right up. Doesn't even have a
> bg image to load.
>
> gm
> --
> There is no x in my ISPs domain name.

5915. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 23:28:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <a8863pdmt1@knossos.btinternet.com>
Source record: 145854

A solitary 6-feet rod is next to useless as a RADIO ground unless immersed in salt water.

So although there may be some national (Federal?) 60Hz power distribution regulations which insist on a 6-feet ground rod, by all means connect such a rod to your radio ground but don't solely depend on it for radio purposes.

It may be of interest, a 6-feet ground rod in average sort of soil has a resistance to Mother Earth much greater than 25 ohms. Even a pair of spaced rods may have a resistance considerably higher than the regulation maximum.

To find resistance of a ground rod of given length and diameter in a soil of given resistivity, download program EARTHRES. Resistance of a bunch of 2, 3 or 4 spaced rods can also be found. Also of a set of N radials of given length, diameter and depth.

Download EARTHRES from following website in a few seconds and run immediately. It is not zipped up. The program can be used in reverse to estimate soil resistivity from simple amateur measurements made on various electrodes. (In this advanced age there are commercial hand-held instruments to do such jobs).

It's less inconvenient than setting up a 1 KW radio transmitter with a 500-feet vertical antenna and measuring groundwave field strength at distances of 1, 2, 5, 10, 20 and even 100 miles provided it's in daylight.
;o)

****
Regards, Reg G4FGQ
Free Radio Modelling Software
Http://www.g4fgq.com
****

5916. Re: Installing a good station ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 23:53:53 UTC
From: Mike Rofon <TheRealExray@netscape.net>
Message-ID: <3CA7A191.64E0E7F9@netscape.net>
Source record: 145855

Reg Edwards wrote:
>
> A solitary 6-feet rod is next to useless as a RADIO ground unless immersed
> in salt water.

Maybe thats why the poster specifically stated 'station' ground so as
not to be deluged with the opinions about RF and antenna system grounds.
-WX4A

5917. Re: Atas 100 on 80?

Newsgroup: rec.radio.amateur.antenna
Date: 2002-03-31 23:57:21 UTC
From: 'Doc <w5lz@icok.net>
Message-ID: <3CA7A256.28AE74C5@icok.net>
Source record: 145856

Jeff,
I don't think You would really want to try modifying
the ATAS-100 for 80 meters. It would require either a
very long 'whip', or increasing the number of turns in
the loading coil. Either is possible, but not very
convenient or easy.
'Doc